

Technical Collection: Practical Ideas

Technical Collection: Practical Ideas

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August 28, 2011

Do Not Edit

Do Not Convert to
Another File Format

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Chapter 1

First Things

1.1 License

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1.2 Introduction

And I will restore to you the years that the locust hath eaten, the cankerworm, and the caterpillar, and the palmerworm, my great army which I sent among you. And ye shall eat in plenty, and be satisfied, and praise the name of the LORD your God, that hath dealt wondrously with you: and my people shall never be ashamed.

1

In that day, saith the LORD, will I assemble her that halteth, and I will gather her that is driven out, and her that I have afflicted; And I will make her that halted a remnant, and her that was cast far off a strong nation: and the LORD shall reign over them in mount Zion from henceforth, even for ever.

2

Behold upon the mountains the feet of him that bringeth good tidings, that publisheth peace!

1Joel 2:25-26

2Micah 4:6-7

My last 13 years of experience with computers are partially expressed in the following articles. My computer work is mostly graphic design (specialties are web and book design), with Apple products and Open Source products.

This collection contains information on: how computers work; design and archival philosophy (including accessibility); security philosophy; how to apply Biblical ethics to computers, computer history and future trends, how technology consumers and technology companies interact with the computer industry, its products, and each other; software compatibility; recommended software; and design techniques.

Some of the re-occurring themes, that unite my theory, include: platform independence, open file formats, data integrity, consistency (both ethically and with graphic design), quality of graphics, and organizational and planning skills.

This book, *Technical Collection: Practical Ideas*, includes practical advice and techniques exclusively.

The articles in the first section, *Technical Help*, explain how all users can access my website, explain how PC users can access my website, explain how Apple users can access my website, explain how disabled users can access my website, and provide alternative ways to access my website.

The articles in the second section, *General Tech Challenges*, explain how to keep your data safe, general file concepts, and I provide more detailed instructions on specific programs or types of programs, but only require programs that are free, or similar techniques will work in a variety of different software titles. The command line techniques work similarly on Mac OS X as they do on Linux, although downloading and installing them is different.

The articles in the third section, *PC Challenges*, explain why Microsoft Office is a bad choice and how to make PDFs from Microsoft Office files, help you decide whether to use Linux or not, and tell about some popular Linux applications and how to get them up and running.

The articles in the fourth section, *Apple Challenges*, explain why Macs cost more, how to choose Mac hardware, and recommend Mac design programs, explain what the iPad and iPod Touch do and what they do not do well, and introduce the Apple TV.

This book plus many more books, free graphics content, my Budget Mac Software Links, and my Recommended iPad and iPod Touch Software are available, for free download, at my website www.benjamin-newton.com

Chapter 2

Technical Help

by Ben Huot

2.1 Help for All Users Accessing my Website

My website works with most electronic devices, with newer web browsers, including: Windows XP SP2 and higher, Mac OS X 10.4 and higher, iPhones, iPod Touches, iPads, recent Linuxes, newer Nintendo and Sony Playstation devices, and most newer mobile smart phones. Some of these devices will only work on my mobile section.

2.1.1 Not All Browsers are Equal

Incredible to Pitiful

Many products advertise that they have a web browser, but their support for websites ranges from incredible to pitiful. The part of the web browser, that is important for website compatibility is the rendering engine. The 4 major rendering engines are Trident (best known in Internet Explorer), Gecko (best known in Firefox), Webkit (best known in Apple Safari, Google Chrome, iPhone and iPad browsers), and Presto (which is best known for Opera).

Best Rendering Engines

The two best engines are Webkit and Gecko. Gecko is an older engine, that is more resource intensive than Webkit, but also has many more features, like a platform independent development environment. Webkit is almost exclusively used for advanced mobile platforms like: Apple iPod Touch, iPhone, iPad, Google products like Chrome, Android, and Chrome OS, as well as Palm and Nokia's mobile devices.

Webkit

Webkit has lead the development of CSS 3 and other next generation web technologies, that allow us to do things one requiring advanced programming, or the use of Flash. There are some subtle differences between the different Webkit implementations, based on which company's version and what product version is being compared. Google's Chrome uses a different Javascript engine than Apple and Google Chrome sometimes disables certain features, for security reasons, like web fonts. Apple's mobile Safari only supports one type of web font, which is an unusual font format, and has restrictions on the amount of time Javascript can run, on its mobile devices. The effectiveness of anti-aliasing (making graphics smooth) in Webkit varies widely by platform.

Presto

Presto varies widely, from the advanced features of the desktop version of Opera, to the Opera Mini version, which reformats website, seemingly randomly and has serious problems, with rendering most sites, even legibly. Presto is also used in several Nintendo products, like the Wii and DS. No one else uses Presto, other than Opera, or those who pay for it, because Presto is not open source, like Gecko and Webkit.

Opera Mini Popularity

Opera Mini has as many users as Opera on the desktop. Opera mini is popular on cell phones, that cannot run a full featured web browser, or for people with slow connections, like 2G cell phones. Opera Mini's main feature is that it does the rendering on Opera' Server and then compresses the web page and the images, to make it load faster, but this causes problems with interactivity, security, and readability.

Defects of Opera Mini

The compression of images is particularly atrocious, because web graphics are generally as compressed, as they can be, without being unrecognizable. The layout, in terms of columns or headers and footers, is also compromised as well. Fonts are also only rendered in one typeface, one size, and one style.

Solutions to Opera Mini Defects

Another problem with Opera is that formatting could be specified, to be simpler for Opera, without dumbing it down, for the other more advanced web browsers. This could be done by just disabling images and stylesheets, or using the handheld stylesheets, specified by the site designer. Then, instead of pages becoming unreadable, they could just show a simpler version, of the website, for Opera Mini.

Trident

Microsoft uses Trident in its Internet Explorer and Internet Explorer Mobile browsers, but the mobile one is generally several versions behind the desktop version. Microsoft's Mac products have often used an entirely different rendering engine called Talisman. Internet Explorer 6-8 does not render websites correctly, so some hacks have to be used if you want precise layout and the other option is to give up precise positioning and allow your website's white space to vary between Internet Explorer 6-8 and other browsers.

Worst Web Browsers

There are other less known web browsers, based on different rendering engines, including the web browser that comes with Sony Playstation and the one used in the Blackberry mobile phones. These browsers can hardly even render text properly, and should disable images and stylesheets. In addition, the Blackberry web browser also is terribly slow as well. And the testing software for Blackberry is written in Java, but is so poorly written, that it only runs, under Java, on Windows.

Why Upgrade Browsers?

Keeping up with the latest version of your web browser also helps protect you from Internet based worms, spyware, adware, scams, and identity theft. I am also very aware of the kind of features being used by other web designers and have factored that in, so if you stick with what software I recommend, for my website, you will be in good shape, for the best experience, at most other cutting edge websites, as well. Newer browsers generally give better performance including being much faster on the slowest websites and make better use of the hardware your computer has like RAM and GPU.

Internet Explorer 9

Microsoft has just released version 9, of Internet Explorer, to the public, as it has made it through testing. I have been able to test it today, on my website, through a web browser testing service. The simple design, which is mostly yellow and one column works fine, with every version of Internet Explorer version 7 and higher. If you have Windows Vista or Windows 7, then you can upgrade Internet Explorer, to version 9. My website looks fine, in the advanced version, with Internet Explorer 9. It renders the fonts, layered backgrounds, transparency, angled backgrounds, rounded corners, and drop caps very well, but it does not support the text shadow, on the headings. I was unable to test the audio, that works, without requiring another program, on the virtual machine I used.

Another thing to check is the performance of Internet Explorer 9. If you can run Windows 7, with all its special effects, without any lag or slow downs, then it probably will work well, but if you bought a cheap laptop (or netbook), then it is likely that it will be slow (much slower than even the previous versions). One way to get it faster relatively cheaply is to add more RAM. I would recommend that you check the websites, that you frequent, to make sure they are compatible, as this browser has had a complete overhaul. Also the 64 bit version has much worse performance, to the point of being almost unusable, and should be avoided.

Security is improved greatly and the interface is now much more minimalistic - the controls are smaller, which gives you more space, for the web pages. If you use tabs, then you will likely have trouble using more than a few of them at once, because of Microsoft wanting to give extra space, for web pages. Search is now built into the address bar, so that would make me concerned about how the web browser knows, if you are typing in an address, or a search term, without having to type in special commands. The fonts look much smoother, but some people with poor eyesight will find the text harder to read. Things have also been changed significantly, for accessibility features, used by those who are sight impaired, so they might need to update screen readers, for this new version of Internet Explorer.

New Developments: Don't Do Anything

I have learned some new things, after: finding some good design magazines online, having invested in some more software/services, and that some new techniques are now available, that have matured recently. The result of these new developments is, that I was able, to get the custom fonts and many of the special effects, on my website, to work, with Internet Explorer 6-8.

The performance appears fine software wise, but I don't know how much RAM, or how fast a processor is necessary, for reasonable/usable performance. The custom fonts look much better, on Internet Explorer 7, or higher. I was able to come close, to making the ideal design available, similarly to how it appears, in most of the more popular new browser, in Internet Explorer 6-8, but the performance suffers noticeably, as well as there being 2 many layers, for all the background designs, to show up correctly.

I can now fully test, for every major version of Internet Explorer, from 6 on, and can now support most, of the modern features, on these versions. I still recommend upgrading your browser to a better one, because of the security and performance benefits alone.

2.1.2 Help for All Users: Simple Explanation

Trouble seeing things? - Simplest Answer

Then download the free Google Chrome and the free Foxit PDF Reader. This only applies to PC users using desktops, laptops, or netbooks (Windows Users). Google Chrome is faster, takes less memory, has more capabilities for web designers, is the standard for smartphones and tablets, works better on netbooks than Firefox, keeps your browser and Flash Player plugin up to date automatically, and includes a simple built in PDF viewer. Foxit PDF Reader includes everything necessary to view even the most advanced PDF with all their features, but is much faster, more efficient, more reliable, and more secure than Adobe Reader and is also free.

Keeping up with the latest version of your web browser, PDF viewer, Flash Player, and Flash blocker also helps

protect you from Internet based worms, spyware, adware, scams, and identity theft. I am also very aware of the kind of features being used by other web designers and have factored that in, so if you stick with what software I recommend, for my website, you will be in good shape, for the best experience, at most other cutting edge websites, as well. Newer Internet software generally give better performance including being much faster on the slowest websites and make better use of the hardware your computer has like RAM and GPU.

Visitors using Macs, Apple iPhones, iPod Touches, or iPad tablets (with iOS 4.0 or higher) will already have an ultimate experience with the included web browser. The same applies for other phones that are in that league including Google branded phones and Palm's latest phones. Blackberry before OS 6 and Windows Mobile before OS 7 users will have a very bad experience and would do best to download Opera Mini and just visit my mobile section. Other users need to see what applies to their device as described in the other devices section.

For the Ultimate Experience

For a whole new fully immersive experience beyond just the new font and built in audio, use Internet Explorer 9 (for Windows Vista and 7 users), Firefox 4.0, Google Chrome 5.0 (stable channel version), SRWare Iron 5.0 (stable channel version), or Apple's Safari 5.0

The latest browsers will provide stunning visual effects involving high impact graphics shapes, light and shadow, and conditional formatting tricks, like: angled rounded corners on images, headings, quotes pages, and select paragraphs; image, page, quote rotation; text drop shadows on headings; drop shadows on images, quotes, select paragraphs; stylized drop caps for quotes; alternating colors for featured links; featured links going to a different website, going to another one of my websites, and on the same page marked as such; featured links to zip files marked as such; faded featured previously visited links; and background gradients.

This is all done without any plugins (including Flash Player), without any additional graphics or slower download times, it keeps the website just as accessible as before, and only needs to be edited in one place to change or update the entire website. Mac OS X 10.4 and higher (with all free updates installed) and Apple iPad (with iOS 4.2 and higher) and higher users have this out of the box, without installing anything.

Everything Already in Newer Apple Products

Mac OS X 10.4 and higher (with all free updates installed) has this functionality (included in Firefox and Seamonkey) plus PDF viewing (equivalent to Adobe Reader) and audio playing (either open source friendly or Apple and standard versions) built in without installing anything else.

iPhones and iPod Touches (with iOS 4.0 and higher) can see and hear everything fine, but you will see a different design. You will have no need to install anything.

Windows Users Ready for a Good Experience

For a basic or minimal experience, Windows users will need Internet Explorer 7 or 8, PDF viewer, and iTunes for my audio content. Most Windows XP and higher users already have all this installed.

Importance

These are all free and are used prominently throughout the web, so if you don't have them installed, you are missing out on a lot, so install them for free now.

See what browser you have currently and what your other options are. Google's Youtube is stopping support for Internet Explorer 6 and other older browsers, as of 13 March 2010.

Internet Explorer 9

Microsoft has just released version 9, of Internet Explorer, to the public, as it has made it through testing. I have been able to test it today, on my website, through a web browser testing service. The simple design, which is mostly yellow and one column works fine, with every version of Internet Explorer version 7 and higher. If you have Windows Vista or Windows 7, then you can upgrade Internet Explorer, to version 9. My website looks fine, in the advanced version, with Internet Explorer 9. It renders the fonts, layered backgrounds, transparency, angled backgrounds, rounded corners, and drop caps very well, but it does not support the text shadow, on the headings. I was unable to test the audio, that works, without requiring another program, on the virtual machine I used.

Another thing to check is the performance of Internet Explorer 9. If you can run Windows 7, with all its special effects, without any lag or slow downs, then it probably will work well, but if you bought a cheap laptop (or netbook), then it is likely that it will be slow (much slower than even the previous versions). One way to get it faster

relatively cheaply is to add more RAM. I would recommend that you check the websites, that you frequent, to make sure they are compatible, as this browser has had a complete overhaul. Also the 64 bit version has much worse performance, to the point of being almost unusable, and should be avoided.

Security is improved greatly and the interface is now much more minimalistic - the controls are smaller, which gives you more space, for the web pages. If you use tabs, then you will likely have trouble using more than a few of them at once, because of Microsoft wanting to give extra space, for web pages. Search is now built into the address bar, so that would make me concerned about how the web browser knows, if you are typing in an address, or a search term, without having to type in special commands. The fonts look much smoother, but some people with poor eyesight will find the text harder to read. Things have also been changed significantly, for accessibility features, used by those who are sight impaired, so they might need to update screen readers, for this new version of Internet Explorer.

New Developments: Don't Do Anything

I have learned some new things, after: finding some good design magazines online, having invested in some more software/services, and that some new techniques are now available, that have matured recently. The result of these new developments is, that I was able, to get the custom fonts and many of the special effects, on my website, to work, with Internet Explorer 6-8.

The performance appears fine software wise, but I don't know how much RAM, or how fast a processor is necessary, for reasonable/usable performance. The custom fonts look much better, on Internet Explorer 7, or higher. I was able to come close, to making the ideal design available, similarly to how it appears, in most of the more popular new browser, in Internet Explorer 6-8, but the performance suffers noticeably, as well as there being 2 many layers, for all the background designs, to show up correctly.

I can now fully test, for every major version of Internet Explorer, from 6 on, and can now support most, of the modern features, on these versions. I still recommend upgrading your browser to a better one, because of the security and performance benefits alone.

2.1.3 Help for All Users: Levels of Support

Why Upgrade to Latest Version?

Keeping up with the latest version of your web browser also helps protect you from Internet based worms, spyware, adware, scams, and identity theft. I am also very aware of the kind of features being used by other web designers and have factored that in, so if you stick with what software I recommend, for my website, you will be in good shape, for the best experience, at most other cutting edge websites, as well. Newer browsers generally give better performance including being much faster on the slowest websites and make better use of the hardware your computer has like RAM and GPU.

Level 1 Support: Ultimate Experience

For the ultimate experience, I recommend using Internet Explorer 9 (for Windows Vista and 7 users), Firefox 4.0 (released in March 2011), Seamonkey 2.1 (released in June 2011), Google Chrome 5.0 (stable channel version) (Chrome autoupdates itself to the latest version), SRWare Iron 5.0 (stable channel version), Apple Safari 5.0 (plus iTunes - just for Safari users) (released in June 2010). This allows you to see my website as intended. Most of this is extra formatting is not necessary for my website to function.

Problem with Firefox 3.6 and Safari 4

The ultimate experience also allows, for zooming in, indefinitely, on the important text, on each page, due to my design making use, of real text, with custom fonts (designed to be readable at small sizes) and vector graphics, for backgrounds, to allow optimum navigation, on a portable device, or for people, who need, to zoom in, on the page, to read it. This also makes the text crisp and clear, as possible, on a device, with a higher, than normal resolution, like the iPhone and iPod Touch 4 and higher, while still having the pages load fast.

There are also 5 different designs, for different contexts: 2 for small screens, depending on device orientation, one for print, and 2 for advanced browsers with big screens, depending on device orientation, as well as a separate mobile site, for even less capable phone browsers. This way, even after zooming in, the text and graphics are crisp and clear, with no distortion, even, at the highest level, of magnification.

Unfortunately, this made my website unreadable in Firefox 3.6 and look horrible in Safari 4.0, due to bugs, in

these browsers. Firefox and Safari, in previous, and later versions, works fine. The only way to fix this, without slowing my website down, on mobile devices, and/or having, to update, every page, of my website, would make it incompatible, with Internet Explorer 6-8. As long as you have Firefox 4.0 or Safari 4.1 or higher (comes with iOS 4.0, or higher, and Mac OS X 10.4, or higher, with free all updates applied), you will be able, to take advantage, of these new features.

Ultimate Experience: Apple Users

Mac OS X 10.4 and higher with all updates, Apple iPad with iOS 4.2 or higher (released in November 2010) give their users an ultimate experience on my website.

iPhone and iPod Touch users can see all the ultimate level of formatting with iOS 4.0 or higher (released in June 2010), and the experience is ultimate, but the specific design is different, because the size is so different.

Ultimate Experience: Linux Users

Ubuntu Linux 10.04 and openSUSE Linux 10.4 give their users an ultimate experience on my website with no updates needed.

Ultimate Experience: PC Users

There are now 4 total (related) ways to upgrade your Internet experience for Windows Users. There is also another popular browser, that will very likely give an ultimate experience, on Windows: Maxthon 3 in Ultra Mode (but I cannot test for it currently).

Windows users need to install Adobe Reader 5.0 (released in May 2001), Foxit Reader 3.0, or Sumatra PDF reader. For Windows users, most brand name PCs that came with Windows XP and higher already have a new enough version of Adobe Reader already installed on your computer. Keeping up with the latest version of your PDF reader also helps protect you from Internet based worms, spyware, adware, scams, and identity theft.

Level 2 Support: Good Experience

For most of the main features of the website, Internet Explorer 7 (released in October 2006) and 8 (released in March 2009) and higher will work great. There is also another popular browser, that will very likely give an good experience, on Windows: Maxthon 1 (released in 2003) and higher. With one of these browsers, you will see the special fonts and many of the special effects.

Firefox 3.6 and Safari 4 users will not be happy with my ideal website design. I recommend they make the window smaller, until they see the failsafe website design

Windows users need to install Adobe Reader 5.0 (released in May 2001), Foxit Reader 3.0, or Sumatra PDF reader. For Windows users, most brand name PCs that came with Windows XP and higher already have a new enough version of Adobe Reader already installed on your computer.

Level 3 Support: Basic or Minimal Experience

For the basic features of my website, you can use Firefox 2.0-3.0 (released in October 2006) Seamonkey 1.1 (released in January 2007), or K-meleon 1.1-1.5 (released in May 2007). You will not see the more advanced features of the website and you will need plugins for hearing the audio on my site like iTunes or VLC player.

Windows users need to install Adobe Reader 5.0 (released in May 2001), Foxit Reader 3.0, or Sumatra PDF reader. Most Windows XP, Vista, or Windows 7 or higher users will likely have this already installed. Safari 3.1 (released in March 2008) and Opera 8 (released in April 2005) and higher support the same level of experience.

This is the same level experience supported on the Nintendo Wii and DS. RISC OS and BeOS are at this level currently, but will likely move up to ultimate experience in the next couple of years.

Totally Unsupported

Internet Explorer 6 (released in August 2001) and lower and all versions of Netscape (final version released in October 2007) and Mozilla (superseded by Seamonkey in January 2006) are not supported.

Consumer Software Choice is Morally Neutral

Even though I don't like older software or Internet Explorer 6-8, you need to make the decision that is right for you.

There is nothing wrong with being satisfied with a basic or minimal web experience. Whichever choice you make, be happy that you still do have a choice. That is the beauty of the web and open standards: you are never locked in or out because of a lack of compatibility. That is why I keep all my work in open file formats.

Nobody has the time to be an expert in everything. For some people, it may not be worth the time to learn what a web browser is. It is not your fault that Microsoft refused to make Internet Explorer 6-8 compatible with the web and it should have never been necessary for you to concern yourself with what browser you use, but that is the situation today. That is why I look forward to new consumer electronics from Apple and web based Google and Microsoft software, because with Apple, Google, and the latest Microsoft products you do not need to concern yourself with things like this.

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2.1.4 Help for All Users: More Complex Explanation

Audio and Video Playing Built into Latest Web Browsers

Google Chrome 3.0 and higher supports all the types of audio you will find on my website, including the standard, open source friendly, and Apple/iPod/iTunes versions.

Unfortunately you see that different browsers support different audio formats, which makes things more complicated, than necessary. This will likely not change, because of licensing fees and fears of being sued for using someone's unknown patents and these issues will not be resolved for many years, if ever. I have made listening to

my songs and readings on my website simpler and less technical, for my visitors, by setting up my audio, to auto detect the correct version, for your web browser. If you use one of the above browser listed versions or higher, the audio on my website will automatically determine the correct file format, that works best, with your web browser.

Google Started a New Format War

Google has now removed the Apple/iPod/iTunes version support from Chrome now to force its users to use its own new format (WebM) or use Flash for video. This was designed to make trouble for the entire consumer electronic industry and its users.

Google is making trouble for Apple and its users, because Apple has decided not to allow Flash on its iPhones, iPod Touches, and iPads due to it radically lowering battery life, to not populate its store with poor performing widget apps, and because it was only available several years after the iPhone and iPod Touch were released.

Google's newly preferred format (WebM) likely has patents on it, opening up those who use it on websites to likely but unknown liabilities, without any patent pools like, in the Apple/iPod/iTunes format, and has no hardware acceleration support in most devices, unlike the Apple friendly format, so it would destroy battery life as well. Google has also refused to pay potential patent royalties, for users of its new format, when the inevitable patent lawsuits begin.

Ironically this Apple friendly format is not owned by Apple or Microsoft (and both pay more for using the patents in software than they get from them) and every major consumer electronics manufacturer (including Google and many of its phone manufacturer partner companies) had not just agreed to it, but actually funded its development (and they all cross license each other as they are the patent holders).

Microsoft has recently added a free add-on to Google Chrome, that adds back in this removed video format support.

Other Web Browser and PDF Viewer Compatibility

For using secondary browsers, based on the Firefox Gecko or the Safari Webkit renderers, either use the latest version or a version that uses Gecko 1.8.1 or higher (released October 2006) which should provide a basic or minimal experience and Gecko 2.0 or higher (released March 2011) or Web Kit 533.16 or higher (released June 2010) which should provide an optimum experience. Note: some lesser known Web Kit browsers on Linux and the cross-platform Arora browser do a poor job of rendering my website.

And for third party PDF viewers, they must support PDF 1.4 (Adobe Reader 5.0) or higher. The PDF viewers do not have to be able to handle transparency. If you have Mac OS X 10.4 or higher or a recent version of Linux, you already have a PDF reader included that works better than any version of Adobe Reader for any of my PDFs (and most other PDFs you will find on the Internet). For Windows users, most brand name PCs that came with Windows XP and higher already have a new enough version of Adobe Reader already installed on your computer.

The only reason you should run into PDFs that won't work with these PDFs readers is if they use Flash for PDF portfolios, but most of those PDF files will be in the ballpark of 50 MB and up, or you are working with PDFs produced by professional designers or for professional design uses.

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search term, without having to type in special commands. The fonts look much smoother, but some people with poor eyesight will find the text harder to read. Things have also been changed significantly, for accessibility features, used by those who are sight impaired, so they might need to update screen readers, for this new version of Internet Explorer.

New Developments: Don't Do Anything

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I can now fully test, for every major version of Internet Explorer, from 6 on, and can now support most, of the modern features, on these versions. I still recommend upgrading your browser to a better one, because of the security and performance benefits alone.

2.2 Help for PC Users Accessing my Website

My website works with PC computers that run Windows XP SP2 and higher (released in August 2004) and later. This includes Windows Vista and Windows 7 and includes desktop, laptop, netbook, and tablet devices.

Firefox 3.5/3.6 users will not be able, to read my website, so I recommend users stick, with Firefox 3.0, or upgrade, to Firefox 4.0.

2.2.1 Why Not Use Internet Explorer 6-8?

Why Upgrade to Latest Version?

Keeping up with the latest version of your web browser also helps protect you from Internet based worms, spyware, adware, scams, and identity theft. I am also very aware of the kind of features being used by other web designers and have factored that in, so if you stick with what software I recommend, for my website, you will be in good shape, for the best experience, at most other cutting edge websites, as well. Newer browsers generally give better performance including being much faster on the slowest websites and make better use of the hardware your computer has like RAM and GPU.

Dealing with Internet Explorer 6-8

If you use a browser other than Internet Explorer 6-8, you will get much less spyware. Using another browser will help web designers because it is hard to get web pages to work with Internet Explorer 6-8. This is because Internet Explorer 6-8 is flawed in its design. This makes designing websites that work in Internet Explorer 6-8 plus all other browsers requires 2x the work for each version of Internet Explorer 6-8 you support plus all the hassles with testing.

Why Avoid Flash even with Internet Explorer?

The main reason why I ever used Flash is Internet Explorer 6-8 incompatibilities with Javascript and lack of support for CSS (which all the other major browsers support) which used to make it a nightmare, to do anything interactive, that needed to work with Internet Explorer 6-8 (even with having the great Javascript libraries like JQuery and Moo Tools). 3rd party Javascript libraries are now very free, easy to use, and do not require any programming skills, so they often are easier and cheaper than Flash, and even the performance in Flash Player is often worse, than Internet Explorer 6-8, for many things.

I no longer see the need, for Flash, for almost any reason: you just give up too much performance, compatibility with new Apple and Google devices, and CSS, HTML, SVG, and Javascript all work together better than before (but it is hard, to fully leverage them, with Flash because Flash kind of lives in its own parallel world). When you start trying, to update the formatting, on every page, of large sites, in one place, you will quickly see how useful CSS is and how many problems it fixes. In the future, we will be able to gradually fade out excessive Javascript, like we are

now, with Flash, as CSS becomes more and more powerful and SVG support becomes more common.

Supporting and Testing for Internet Explorer 6-8

Designing a web page to be compatible with more than one version of Internet Explorer 6-8 requires you to be able to test every version of Internet Explorer 6-8 that you support, because you have to use different hacks for each version of Internet Explorer 6-8. This is because Internet Explorer 6-8 deviates from the commonly accepted ways of interpreting standards every other major browser was able to abide by (with much less money even though all the other major browsers are designed with completely different software).

Not only does Internet Explorer 6-8 not abide by the standards, but they have various levels of incompatibility (with these standard ways of doing things in web pages) with each version of Internet Explorer 6-8. Another limitation is that you have to pay for and deal with the security problems and the instability and maintenance just to test for Internet Explorer as it is Windows only. And the final difficulty is that you can only install one version of Internet Explorer on any one installation of Windows.

The way I deal with this, is to allow extra space in my web page layout, so I am not able to get precise positioning of elements like you can in any desktop publishing software or PDFs. The only reason why this website works in Internet Explorer 6-8 is due to specific direction from my Uncle Clive. I could not have figured out how to get past the complex and confusing bugs in Internet Explorer 6-8 without him telling me exactly what to do to make my layout work. I test for Internet Explorer 6, 7, 8, 9 in a virtual machine from an online testing service, so I don't need to manage a real PC for testing.

Best of Both Worlds

There is now a solution, for Internet Explorer 6-8 users, who are uncomfortable using a browser other than Internet Explorer 6-8, for whatever reason, including not wanting to learn how to use another browser. You can download and install something called Google Chrome Frame. What it does is allow website owners, who specifically ask for it, to use the Google Chrome web browsing engine, so there are no compatibility problems, with broken web sites who need Internet Explorer 6-8 or advanced sites, that use new web page features. This gives the best of both worlds.

It works on Internet Explorer 6-8 on Windows XP, Vista, and Windows 7. Once you install Google Chrome Frame, just use the version of Internet Explorer 6-8 like you usually do. The only thing you will notice is that many web sites look better and work faster. Chrome Frame is made by Google is free and has no spyware or viruses in it. Google collects no more information from you than is collected, when you use any search engine, like Google, Bing, or Yahoo.

The only downside is for people who are visually impaired will not be able to take advantage of accessibility features like screen readers. In this case, I recommend downloading and using Firefox.

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2.2.2 Which Version of Internet Explorer?

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Internet Explorer 6-8 Compatibility

This website has been tested and works on all major versions of Internet Explorer: from 7 to 9. Internet Explorer 7 (released in October 2006), comes as a free update to Windows XP and is the default browser that comes with Windows Vista. Internet Explorer 8 is the default browser that comes with Windows 7 and is a free update for Windows XP and Vista. Version 8 and later of Internet Explorer work with my website fine too. This site will likely work with Internet Explorer 6 (with Windows XP SP2 or higher), too as I am not doing anything that will change the compatibility. Now I can test my website compatibility, every major version of Internet Explorer 6-9. You would do a favor for yourself and every web designer, if you downloaded and used a browser other than Internet Explorer 6-8.

Upgrading Old Computers and Old Software

You more than likely have Internet Explorer 8 already. Internet Explorer 8 has been listed as a critical security update for Windows XP and higher since April 2009. If you have Windows set up to automatically update, you already have version 8. You can even apply the update on stolen/pirated versions. The only reason you might not have it is because you are accessing the Internet at work (and your employer is still using a very old and poorly designed application that requires it) or you are using a version of Windows that is over 9 years old.

Most PCs bought, since Windows XP was released, are only designed to last 3 years, so if your computer is that old, you have likely spent more money upgrading it, than it would cost to buy a new one. Even a cheap netbook will outperform a five year old computer, even a top of the line one. If you are unwilling to buy a computer new every 5 years, than it would be better for you to just not use a computer. You can tell it is time for you to buy a new computer, when the latest version of your web browser no longer supports the Windows operating system that came with your computer (as most people are not able to perform Windows OS upgrades) or your computer's hardware specifications.

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Another thing to check is the performance of Internet Explorer 9. If you can run Windows 7, with all its special effects, without any lag or slow downs, then it probably will work well, but if you bought a cheap laptop (or netbook), then it is likely that it will be slow (much slower than even the previous versions). One way to get it faster relatively cheaply is to add more RAM. I would recommend that you check the websites, that you frequent, to make sure they are compatible, as this browser has had a complete overhaul. Also the 64 bit version has much worse performance, to the point of being almost unusable, and should be avoided.

Security is improved greatly and the interface is now much more minimalistic - the controls are smaller, which gives you more space, for the web pages. If you use tabs, then you will likely have trouble using more than a few of them at once, because of Microsoft wanting to give extra space, for web pages. Search is now built into the address bar, so that would make me concerned about how the web browser knows, if you are typing in an address, or a search term, without having to type in special commands. The fonts look much smoother, but some people with poor eyesight will find the text harder to read. Things have also been changed significantly, for accessibility features, used by those who are sight impaired, so they might need to update screen readers, for this new version of Internet Explorer.

New Developments: Don't Do Anything

I have learned some new things, after: finding some good design magazines online, having invested in some more software/services, and that some new techniques are now available, that have matured recently. The result of these new developments is, that I was able, to get the custom fonts and many of the special effects, on my website, to work, with Internet Explorer 6-8.

The performance appears fine software wise, bit I don't know how much RAM, or how fast a processor is necessary, for reasonable/usable performance. The custom fonts look much better, on Internet Explorer 7, or higher. I was able to come close, to making the ideal design available, similarly to how it appears, in most of the more

popular new browser, in Internet Explorer 6-8, but the performance suffers noticeably, as well as there being 2 many layers, for all the background designs, to show up correctly.

I can now fully test, for every major version of Internet Explorer, from 6 on, and can now support most, of the modern features, on these versions. I still recommend upgrading your browser to a better one, because of the security and performance benefits alone.

2.2.3 Help for Modernizing Your Internet Experience

How We Got to this Point

Although currently the most popular desktop operating system, Windows is known to be a generic and unpleasant experience, that fits people's budgets, and works ok, for those, who don't do much with computers. For most consumers, they use their computers mainly for access to the Internet. Internet Explorer, the included web browser that comes with Windows XP, the most used version of Windows, comes with Internet Explorer 6. At the time of its release, in 2001, it was probably the best choice, but computers have changed tremendously, in the past 9 years. If it were 5 years ago, I would recommend Firefox (the successor to Netscape) as the best choice, but today, the best choice, for most people, is Google Chrome browser. Microsoft basically abandoned the market, for many years and now has a new version of Internet Explorer (version 9), which catches up with the competition, which may or may not work for you, if you are using Windows Vista or 7 and have a very fast and high end gaming PC.

This Google Chrome started out as an obscure web browser, for a popular form of Linux (actually X-Windows), called KDE. Apple made, what you see on cutting edge websites possible, by taking this basic browser and making it into the most cutting edge web browser currently available. Apple decided to develop it, in a totally different language, than normal Mac and iOS applications are written (which is a very different approach, to developing software, which in the hands of Apple programmers, is one of the fastest ways, to make good desktop and mobile applications). This allowed it, to be easily used, by Apple's competitors. Because it is so good and because Apple also gave away its technology, Google (Apple's main rival) used it for their own web browser. Almost every mobile phone now uses this same web browser technology, including: the Apple iPhone, iPod Touch and iPad, Verizon Droids, Blackberry, Nokia, Samsung, and even HP (who just bought Palm).

4 Ways to Improve Your Internet Experience

There are 4 different ways, to get this onto your PC, for free. You can either download and install Google Chrome, or another leading browser like Opera or even, the long in the tooth, Firefox and use one of these browser, instead of Internet Explorer 6-8. The next option is to use a portable app version, which makes uninstalling it and moving it between different computers easy. The third option is to install Google Chrome Frame, as a plugin, to Internet Explorer 6-8, like Flash Player, but, instead of making web browsing slower, it will make web browsing faster. The fourth option is to upgrade to Internet Explorer 9, if you have Windows Vista or 7 and your computer is fast with all the special effects enabled. The best part is that all those options are free and Google Chrome automatically updates itself.

Keeping up with the latest version of your web browser also helps protect you from Internet based worms, spyware, adware, scams, and identity theft. I am also very aware of the kind of features being used by other web designers and have factored that in, so if you stick with what software I recommend, for my website, you will be in good shape, for the best experience, at most other cutting edge websites, as well. Newer browsers generally give better performance including being much faster on the slowest websites and make better use of the hardware your computer has like RAM and GPU.

Option 1: Choose a Better (Free) Browser

You can have as many browsers on your machine as you want and they won't interfere with each other, so you can use the free Firefox for most browsing and use Internet Explorer 6-8 for those few websites that are broken.

Try the latest version of the Mozilla's free Firefox 4.0 (or the very similar Pale Moon 4.0 or Firefox 4.0 optimized for Yahoo), Google's free Chrome 5.0, or Apple's free Safari 5.0

Learn about switching from Internet Explorer to Firefox. This page will answer most of your questions.

Option 2: Install Another Browser with a Failsafe

One of the ways of getting around the reality that Windows applications are hard to uninstall, because there is no way for Windows to keep track of what files belong to each application, is to use portable apps. Another advantage

of portable apps is that you can take your applications on a USB flash drive and carry around all your applications to any Windows computer, without having to leave any personal data behind or mess with installing or changing the configuration of the computer you are using. All these applications are free and open source or freeware from reputable companies and are free from viruses and spyware. You can get Google Chrome 10.0, SRWare Iron 10.0, Firefox 4.0, Foxit Reader 4.3, Sumatra PDF reader 1.4, WinDjView 1.0, VLC Player 1.1, Songbird 1.9, OpenOffice.org 3.2, LibreOffice.org 3.3, and Abiword 2.8, there.

Option 3: Install a Plugin for Internet Explorer 6-8

There is now a solution, for Internet Explorer 6-8 users, who are uncomfortable using a browser other than Internet Explorer 6-8, for whatever reason, including not wanting to learn how to use another browser. You can download and install something called Google Chrome Frame. What it does is allow website owners, who specifically ask for it, to use the Google Chrome web browsing engine, so there are no compatibility problems, with broken web sites who need Internet Explorer 6-8 or advanced sites, that use new web page features. This gives the best of both worlds.

It works on Internet Explorer 6-8 on Windows XP, Vista, and Windows 7. Once you install Google Chrome Frame, just use the version of Internet Explorer 6-8 like you usually do. The only thing you will notice is that many web sites look better and work faster. Chrome Frame is made by Google is free and has no spyware or viruses in it. Google collects no more information from you than is collected, when you use any search engine, like Google, Bing, or Yahoo.

The only downside is for people who are visually impaired will not be able to take advantage of accessibility features like screen readers. In this case, I recommend downloading and using Firefox.

Option 4: Upgrade to Internet Explorer 9

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Another thing to check is the performance of Internet Explorer 9. If you can run Windows 7, with all its special effects, without any lag or slow downs, then it probably will work well, but if you bought a cheap laptop (or netbook), then it is likely that it will be slow (much slower than even the previous versions). One way to get it faster relatively cheaply is to add more RAM. I would recommend that you check the websites, that you frequent, to make sure they are compatible, as this browser has had a complete overhaul. Also the 64 bit version has much worse performance, to the point of being almost unusable, and should be avoided.

Security is improved greatly and the interface is now much more minimalistic - the controls are smaller, which gives you more space, for the web pages. If you use tabs, then you will likely have trouble using more than a few of them at once, because of Microsoft wanting to give extra space, for web pages. Search is now built into the address bar, so that would make me concerned about how the web browser knows, if you are typing in an address, or a search term, without having to type in special commands. The fonts look much smoother, but some people with poor eyesight will find the text harder to read. Things have also been changed significantly, for accessibility features, used by those who are sight impaired, so they might need to update screen readers, for this new version of Internet Explorer.

Option 5: Don't Do Anything

I have learned some new things, after: finding some good design magazines online, having invested in some more software/services, and that some new techniques are now available, that have matured recently. The result of these new developments is, that I was able, to get the custom fonts and many of the special effects, on my website, to work, with Internet Explorer 6-8.

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I can now fully test, for every major version of Internet Explorer, from 6 on, and can now support most, of the modern features, on these versions. I still recommend upgrading your browser to a better one, because of the security and performance benefits alone.

2.2.4 Help for PC Web Browsers

Why Upgrade to Latest Version?

Keeping up with the latest version of your web browser also helps protect you from Internet based worms, spyware, adware, scams, and identity theft. I am also very aware of the kind of features being used by other web designers and have factored that in, so if you stick with what software I recommend, for my website, you will be in good shape, for the best experience, at most other cutting edge websites, as well. Newer browsers generally give better performance including being much faster on the slowest websites and make better use of the hardware your computer has like RAM and GPU.

Ultimate Experience for Windows Users

For a whole new fully immersive experience beyond just the new font and built in audio, use Internet Explorer 9 (for Windows Vista and 7 users), Firefox 4.0 (or the very similar Pale Moon 4.0, or Firefox 4.0 optimized for Yahoo), Google Chrome 5.0 (stable channel version), SRWare Iron 5.0 (stable channel version), or Apple's Safari 5.0. The latest browsers will provide stunning visual effects involving high impact graphics shapes, light and shadow, and conditional formatting tricks, like: angled rounded corners on images, headings, quotes pages, and select paragraphs; image, page, quote rotation; text drop shadows on headings; drop shadows on images, quotes, select paragraphs; stylized drop caps for quotes; alternating colors for featured links; featured links going to a different website, going to another one of my websites, and on the same page marked as such; featured links to zip files marked as such; faded featured previously visited links; and background gradients. This is all done without any plugins (including Flash Player), without any additional graphics or slower download times, it keeps the website just as accessible as before, and only needs to be edited in one place to change or update the entire website.

New Font and Built in Audio for Windows Users

Google Chrome 3.0 and higher supports all the types of audio and video you will find on my website, including the open source friendly and Apple/iPod/iTunes versions.

Unfortunately you see that different browsers support different audio formats, which makes things more complicated, than necessary. This will likely not change, because of licensing fees and fears of being sued for using someone's unknown patents and these issues will not be resolved for many years, if ever. I have made listening to my songs and readings on my website simpler and less technical, for my visitors, by setting up my audio, to auto detect the correct version, for your web browser. If you use one of the above browser listed versions or higher, the audio on my website will automatically determine the correct file format, that works best, with your web browser.

Google Started a New Format War

Google has now removed the Apple/iPod/iTunes version support from Chrome now to force its users to use its own new format (WebM) or use Flash for video. This was designed to make trouble for the entire consumer electronic industry and its users.

Google is making trouble for Apple and its users, because Apple has decided not to allow Flash on its iPhones, iPod Touches, and iPads due to it radically lowering battery life, to not populate its store with poor performing widget apps, and because it was only available several years after the iPhone and iPod Touch were released.

Google's newly preferred format (WebM) likely has patents on it, opening up those who use it on websites to likely but unknown liabilities, without any patent pools like, in the Apple/iPod/iTunes format, and has no hardware acceleration support in most devices, unlike the Apple friendly format, so it would destroy battery life as well. Google has also refused to pay potential patent royalties, for users of its new format, when the inevitable patent lawsuits begin.

Ironically this Apple friendly format is not owned by Apple or Microsoft (and both pay more for using the patents in software than they get from them) and every major consumer electronics manufacturer (including Google

and many of its phone manufacturer partner companies) had not just agreed to it, but actually funded its development (and they all cross license each other as they are the patent holders).

Microsoft has recently added a free add-on to Google Chrome, that adds back in this removed video format support.

Working with Older and Less Functioning Web Browsers

All the web browsers, that I support, support my new font in their most recent fully tested versions.

Many Better and Free Choices for Web Browsing

You can have as many browsers on your machine as you want and they won't interfere with each other, so you can use the free Firefox for most browsing and use Internet Explorer 6-8 for those few websites that are broken.

Try the latest version of the Mozilla's free Firefox 4.0, Google's free Chrome 5.0, or Apple's free Safari 5.0

Learn about switching from Internet Explorer 6-8 to Firefox. This page will answer most of your questions.

Solving Windows Specific Application Installation Problems

One of the ways of getting around the reality that Windows applications are hard to uninstall, because there is no way for Windows to keep track of what files belong to each application, is to use portable apps. Another advantage of portable apps is that you can take your applications on a USB flash drive and carry around all your applications to any Windows computer, without having to leave any personal data behind or mess with installing or changing the configuration of the computer you are using. All these applications are free and open source or freeware from reputable companies and are free from viruses and spyware. You can get Google Chrome 10.0, SRWare Iron 10.0, Firefox 4.0, Foxit Reader 4.3, Sumatra PDF reader 1.4, WinDjView 1.0, VLC Player 1.1, Songbird 1.9, OpenOffice.org 3.2, LibreOffice.org 3.3, and Abiword 2.8, there.

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2.2.5 Help for Windows PDF and other Viewers

Why Avoid Flash even with Internet Explorer?

The main reason why I ever used Flash is Internet Explorer 6-8 incompatibilities with Javascript and lack of support for CSS (which all the other major browsers support) which used to make it a nightmare, to do anything interactive, that needed to work with Internet Explorer 6-8 (even with having the great Javascript libraries like JQuery and Moo Tools). 3rd party Javascript libraries are now very free, easy to use, and do not require any programming skills, so they often are easier and cheaper than Flash, and even the performance in Flash Player is often worse, than Internet Explorer 6-8, for many things.

I no longer see the need, for Flash, for almost any reason: you just give up too much performance, compatibility with new Apple and Google devices, and CSS, HTML, SVG, and Javascript all work together better than before (but it is hard, to fully leverage them, with Flash because Flash kind of lives in its own parallel world). When you start trying, to update the formatting, on every page, of large sites, in one place, you will quickly see how useful CSS is and how many problems it fixes. In the future, we will be able to gradually fade out excessive Javascript, like we are now, with Flash, as CSS becomes more and more powerful and SVG support becomes more common.

Adobe Reader and Several Better Free PDF Viewers

You probably have the free Adobe Reader 5.0 or higher (released in May 2001) that came with your computer, which I tested version 5.05 successfully with all the types of PDFs on my website and the looked and worked fine. Adobe Reader is likely not the best choice for viewing PDFs due to its security problems, poor performance, and instability, while offering little extra compatibility. There are 3 better options below.

All types of my PDFs were successfully tested with the free Foxit Reader, version 2.3 and they look and work fine with it. Foxit Reader is a much simpler viewer, that is faster to use, and is a much smaller download. It is free for personal use. This software should allow you to view almost any PDF that you find on the Internet, like via the web or via e-mail, without any problems with compatibility.

Sumatra is a free and open source PDF viewer based on Xpdf, which is also faster to use and a smaller download. I have successfully tested my types of PDFs with Sumatra version 1.1 and they look and work fine. Google Chrome now has a simple built in PDF reader, and it works with all my PDFs, as well. This software should allow you to view almost any PDF that you find on the Internet, like via the web or via e-mail, without any problems with compatibility.

Sumatra is free and open source so you can be sure they have no viruses or spyware. Foxit Reader should be fine as well, even though it comes from a small company.

Adobe's free Reader, Adobe's free Flash Player, Apple's free Quicktime/iTunes, and Google's free Chrome are done by very well known, reputable companies and will not contain any viruses or spyware.

Check to see if you have Adobe Reader

For Windows users, most brand name PCs that came with Windows XP and higher already have a new enough version of Adobe Reader already installed on your computer.

To see if you have Adobe Reader installed, check under the Start menu and look for a sub menu labelled Adobe or an icon that says Adobe Reader. You may have to click on little black arrows to expand your Start menu to show it. Another way to tell if you have Adobe Reader installed, is to enter about:plugins in your web browser address bar and then hit enter and if you scroll down you will see the words Adobe Reader if it is installed.

You can also see if it is installed by clicking on one of my linked files that ends in .pdf and if you see text rather than some garbled computer code, then you have it installed. To see the version number of Adobe Reader, locate it in the start menu, click on it and then choose about from the help menu and you should see the version number.

This software is tested and supported on Windows as well as other systems and shouldn't create any problems for you on your computer other than the problems and limitations normally associated with Windows. I do not recommend upgrading on my account if you have a version 5.0 or higher of Adobe Reader.

Solving Windows Specific Application Installation Problems

One of the ways of getting around the reality that Windows applications are hard to uninstall, because there is no way for Windows to keep track of what files belong to each application, is to use portable apps. Another advantage of portable apps is that you can take your applications on a USB flash drive and carry around all your applications to any Windows computer, without having to leave any personal data behind or mess with installing or changing the configuration of the computer you are using. All these applications are free and open source or freeware from reputable companies and are free from viruses and spyware. You can get Google Chrome 10.0, SRWare Iron 10.0, Firefox 4.0, Foxit Reader 4.3, Sumatra PDF reader 1.4, WinDjView 1.0, VLC Player 1.1, Songbird 1.9, OpenOffice.org 3.2, LibreOffice.org 3.3, and Abiword 2.8, there.

2.2.6 So you have a Dell?

I asked on the official Dell forums if Adobe Reader was included with their computers as a pre-installation as it makes viewing my website easier and it would be easier for my viewers if it was preinstalled.

The following is my question verbatim. I put it in the right forum and didn't say anything negative about Dell or Windows. This is my first post to the Dell forums. I even registered and gave my real name.

"Is Adobe Reader pre-installed on Dell PCs? If so, after what year?"

The following is the actual response. I am not making it up - I just cut and paste it in.

"Does it matter if Dell preinstalls Adobe Reader, or not? If you need it, go to this link and download version 8 for FREE. Even if you have an earlier version, it's worthwhile updating to this newest version because some (all?) earlier versions have a security flaw.

<http://www.adobe.com/products/reader/>"

So I guess Dell seems to have some sort of vendetta against Adobe Reader. How did I come to that conclusion. First, he doesn't answer my simple question. Then he says "why does it matter?" Well, Linux users and Apple users consider having a PDF reader pre-installed by default to be the norm. It would definitely help Dell's users. People could also download Windows from a player to player network or purchase it online. Then he mentions the security problems of a certain version of Adobe Reader. Isn't that the pot calling the kettle black - a Windows reseller points out a security flaw in an Adobe product. Does he want me to detail all the security problems with owning a Windows PC?

2.3 Help for Apple Users Accessing my Website

My website works with: Mac computers that run Mac OS X 10.4 and higher (released in April 2005) and later, as well as iPhones, iPod Touches, and iPads (iOS 4.0 and higher).

2.3.1 General Help for Mac OS X Users

If you are using Mac OS X, you most likely have everything you need. You're experience with my website will be optimum.

Ultimate Experience for Mac OS X Users

For a whole new fully immersive experience beyond just the new font and built in audio, use Firefox 4.0 (or Firefox 4.0 optimized for Yahoo), Seamonkey 2.1, Google Chrome 5.0 (stable channel version), SRWare Iron 5.0 (stable channel version), Safari 5.0, OmniWeb 5.11, or iCab 4.8. The latest browsers will provide stunning visual effects involving high impact graphics shapes, light and shadow, and conditional formatting tricks, like: angled rounded corners on images, headings, quotes pages, and select paragraphs; image, page, quote rotation; text drop shadows on headings; drop shadows on images, quotes, select paragraphs; stylized drop caps for quotes; alternating colors for featured links; featured links going to a different website, going to another one of my websites, and on the same page marked as such; featured links to zip files marked as such; faded featured previously visited links; and background gradients. This is all done without any plugins (including Flash Player), without any additional graphics or slower download times, it keeps the website just as accessible as before, and only needs to be edited in one place to change or update the entire website.

Firefox 3.6 users will not be able, to read my website, so I recommend users stick, with Firefox 3.5, or upgrade, to Firefox 4.0. Safari 4 users will see a broken looking version, of my website, so I recommend upgrading, to Safari 4.1, or higher.

New Font and Built in Audio for Mac OS X Users

Also, if you are using Firefox 3.5, SeaMonkey 2.0, Google Chrome 5.0 (stable channel version), SRWare Iron 5.0 (stable channel version), Safari 4.0, OmniWeb 5.10, or iCab 4.6, then you can see my website with the new font (which will work without any installation necessary).

Unfortunately you see that different browsers support different audio formats, which makes things more complicated, than necessary. This will likely not change, because of licensing fees and fears of being sued for using someone's unknown patents and these issues will not be resolved for many years, if ever. I have made listening to my songs and readings on my website simpler and less technical, for my visitors, by setting up my audio, to auto detect the correct version, for your web browser. If you use one of the above browser listed versions or higher, the audio on my website will automatically determine the correct file format, that works best, with your web browser.

If you are using older versions of one of these browsers listed above or any other browsers, you will have a basic or minimal experience on my website. I recommend selecting the simple format of my main website.

Special Instructions for Mac OS X Users

Mac OS X users won't need Flash Player for this website. If you have Flash Player installed for another browser for another website, it will work fine on my website too, but you will get better performance disabling it or all plugins, when browsing my website.

For Internet Explorer 6-8 only sites, just ignore them as the main purpose is generally to put spyware and viruses on your computer. You are lucky you don't have to use Internet Explorer 6-8.

There is a bug in webkit on Mac OS X that affects Safari, Omniweb, iCab, and probably any other Mac browser that uses webkit that causes my interactive Flash widgets to fail to work with my standard stylesheets. There are 2 work-arounds: either disable all plugins in Safari, so you see the Javascript version or choose the simple stylesheet. This will not affect the Apple iPhone, iPod Touch, or iPad as they don't have Flash Player for them. This issue does not affect Firefox, Google Chrome, or Opera. This bug is now fixed with Flash Player 10.1. If you upgrade to Flash Player 10.1, then no workarounds are needed. I have only tested this Flash Player fix with Safari 5.

2.3.2 Help for Mac OS X by Version

Mac OS X - All Supported Versions

Preview, the version that comes with OS X 10.4 or higher (released April 2005), should be able to open my PDFs. Quicktime 7, which comes with OS X 10.3.9 or higher (released April 2005), should work for the Apple/iPod/iTunes formats of video and audio as well as MP3.

Upgrade to the free Safari 5.0 (or 4.1) for Mac OS X 10.4 - 10.6, or if you are using Mac OS X 10.3 or lower, you need to upgrade to a newer version of Mac OS X.

This version of Safari will also work great on any site designed for multiple browsers which is 90% of websites. For the other 10%, keep a version of Firefox 2.0 or higher or Camino 1.6 or higher and Adobe Reader 5.0 or higher on hand.

Mac OS X 10.4 - 10.6 Users

For Mac OS X 10.4 (released in April 2005) or higher, you can download Safari 5.0 (or 4.1) (released June 2009). First, you must update to the latest free updates.

To apply the updates, first, click on the desktop to get the Finder menus. Then click on Software Update from the Apple menu in the top left corner of your screen under Finder. It is totally free.

Mac OS X 10.7 Users

For Mac OS X 10.7 (released in July 2011) or higher, you have everything you need, to see this website, at its best, without any further installs or upgrades. Mac OS X 10.7 comes with Safari 5.1

2.3.3 General Help for Apple iPad Tablet

General Information

Apple has released the first generation of a new tablet device that looks a lot like a giant iPhone or iPod Touch (without the phone). It has a 10 inch screen, inch thick, 1.5 lbs, battery lasts 10 hours, and sells for \$500. An iPad runs most of the same underlying software as the iPhone and iPod Touch, although the interface is evolved for the larger screen. You use your fingers to navigate the device, like the iPhone and iPod Touch. But there are some differences in software availability and the resolution and size of the screen changes things as well.

It connects via WiFi, so it will work on any wireless network like a hotspot, a wireless network at a school or office, and on your home wireless network (without any additional software, hardware, services, or contracts). I live in a medium size city and there are about 10 free hotspots, within a couple blocks of my apartment, that work perfectly, with my iPad. The battery lasts forever, as the 10 hour battery life is measured, for playing 10 hours of video. The machine turns on and off instantly. It is 10x easier to use than any other computer you have used, even if you are a Mac user.

My Website Compatibility

The iPad supports a high enough resolution and is physically big enough to browse my full website (and the parts that were just in Flash now also work in Javascript and on the iPhone, so they will work on the iPad), so the main website will work, with all the bells and whistles, so to speak and will support an ultimate browsing experience. The iPad will be able to detect what direction you have it turned, either landscape or portrait, and web pages and apps will adapt to the different orientation, so you can have it oriented like a book or for watching a movie, depending on the activity, just like with the iPhone.

The Apple iPad Tablet (with iOS 4.2) allows for a whole new fully immersive experience beyond just the new font and built in audio. The iPad browser will provide stunning visual effects involving high impact graphics shapes, light and shadow, and conditional formatting tricks, like: angled rounded corners on images, headings, quotes pages, and select paragraphs; image, page, quote rotation; text drop shadows on headings; drop shadows on images, quotes, select paragraphs; stylized drop caps for quotes; alternating colors for featured links; featured links going to a different website, going to another one of my websites, and on the same page marked as such; featured links to zip files marked as such; faded featured previously visited links; and background gradients. This is all done without any plugins (including Flash Player), without any additional graphics or slower download times, it keeps the website just as accessible as before, and only needs to be edited in one place to change or update the entire website.

Special Instructions for Apple iPad Tablet Users

There are some differences in the web browser, for the iPad, that do not apply, to the same browser (Safari), on Mac OS X.

One of these differences is that the custom web page fonts are done differently, so there was some trouble getting all the text, to display correctly, due to a bug specific to the iPad and maybe the iPhone and iPod Touch, as well. This seems to only affect the descriptions of the different file formats, that are listed, on my book pages, and I have applied some tricks, to get it to work, but it is not ideal.

My website looks good in both the landscape and portrait orientations, but the formatting will change, if you rotate it (this was designed by me to do that).

Another issue is that the interactivity is slow, when using holding the iPad in landscape orientation, so if you click on something, that is supposed to have something else appear, when clicked, then click a little lower (because the center of the image is lower, but not visible, because I am using transparency) and give it a second, to respond.

Other iPad Web Browsers

The same company, that makes the Opera web browser, for desktop computers, like laptops and desktops (Windows, Mac OS X, and Linux) makes a totally unrelated web browser, for phones, called Opera Mini. Although the Opera web browser is an advanced browser, that used to display my website fine, until the latest version, that now makes my websites text unreadable, Opera Mini is a much simpler browser, that takes less memory. Opera Mini decides what part of the website it wants to do correctly and which parts it thinks it knows better, than the web designer, so you can get very unpredictable results.

Opera Mini's main market is for those with really slow connections and/or very slow/cheap smart phones and the increased speed comes, from increasing the compression, of images, so that they are unreadable. Basically, Opera Mini is not in the same league, as the default browsers, in Apple's and other leading smartphone vendor's products,

but it will not accept the standard way of targeting this kind of less capable browser, either because it thinks too few web designers make use of this feature, or because they want to claim, that it is more powerful, than it really is.

My main website works great on the default settings with Opera Mini 6 for iPad. You will see my failsafe mode only, and without the custom fonts, but it looks great and works fine. On the Opera Mini 6 for iPhone and iPod Touch, the main website doesn't look like it is supposed to nor is it attractive, but it does work fine, if you set the settings to what I recommend, on the mobile website help section, although I cannot guarantee it will work, if and when I make any design changes. Opera Mini on iPhone and iPod Touch will work, on my mobile website version, as well any other Opera Mini 6, on other phones.

Most other third party browsers, available in the Apple App Store, should work fine with my website, as they use the same software, to display websites with, but, as of the latest current version, of iOS (4.3), the default Safari Mobile browser will give you substantially better Javascript performance, which is usually what slows down your web browsing the most.

Apple iWork Office Suite

Another additional application that is available for the iPad is Apple's iWork office suite, which includes a Word Processor/Page Layout application, a Presentation program, and a Spreadsheet application. The main strength of Apple's iWork is its quality of graphics and its ease of use. The iPad version will have most the features of the desktop version and will have the same file formats, but the cost is \$10 an application, so it is about 1/3 the price of the desktop version. The interface will be significantly different. You can view my Word Processor Versions of my texts in iWork on the iPad. The Mac OS X versions of iWork offer more options than the ones on the iPad, so if you are exchanging files back in forth, you will likely lose formatting (but not data/information).

Other Applications and Add-ons

Most of the third party App Store applications should be available soon for the device. Most iPhone specific apps will work on the iPad, but they only appear in a little window in the center of the iPad, as big as the iPhone and you can double the size, if you hit the 2x option on the side, but the text then appears blurry. Most iPad applications cost \$5 or less and many are free. There is already a wireless keyboard, digital camera cable connector, and cover accessories and a drawing program. You can also expand the memory on your iPad, by using an SD memory card (one of the types of memory, commonly used in digital cameras) and you can also print, from the iPad, to wireless printers. There is also at least one third party application that will allow you to print from almost any printer attached to your computer if you have a wireless network shared with the computer connected to the printer.

You don't need a credit card, to buy software, for the iPad, from iTunes, or buy, from the iBook store, from your iPad. The iTunes gift cards, that come in denominations of \$15, \$25, and \$50, can be used to purchase iPad apps and iBook books, in addition to music, audio books, and videos. You can buy these iTunes gift cards, at your local: Apple store, Mac store, grocery store, or most other stores that stock third party gift cards. You just click on "redeem", in the upper right corner of the iTunes store, and enter the code, on the card, after you scratch of the silver covering, with a coin (like lottery cards).

Device Testing

I have already tested this site on the first generation of the new iPad device (with iOS 4.2) and have it optimized.

2.3.4 Books on Apple iPad Tablet

My Books on the iPad with iBooks

The Apple Mobile Version and Desktop Printer Version of my texts will definitely work, out of the box, after downloading the free iBook e-book reader application made by Apple. I have just re-converted my books to the ePub e-book format, so that all my Apple mobile versions of books now work with iBooks on the iPad. I have also tested the PDF/A-1A versions of my books and they work just as well with iBooks 1.1 and higher. You can download them with your computer, from the zip archive collections, or via the individual book pages and then you can transfer them by dragging and dropping them into iTunes books section. You then just plug in your iPad and open up iTunes on your computer and a copy of each of the books will be sent to your iPad. You just open iBooks on your iPad and you can view them offline. They will appear on the bookshelf or the book list with my name and the titles on the front. The PDF/A1-A format ones will appear under PDFs option, when you choose list view.

You can also get many books, for free, from Google books , that no longer have copyrights, due to being too old,

or the author wanting, to give them away, for free. These should all work fine. I downloaded a little over 100 books total, including about 40 famous Asian and European religion and philosophy books, about 75 history books about Asia from 100-150 years ago, and about 20 rare books about the Syrian churches in Asia (the Nestorian and Jacobite churches) and the Coptic and Eastern Orthodox churches, from Google books and they all look quite good, in iBooks on the iPad. Just make sure when you download the book to choose ePub or PDF format. You can then transfer them over to your iPad just, as I explained, for for my books.

My Books on the iPad with Stanza

The Handhelds Version and Desktop Printer Version of my texts will definitely work, out of the box, after downloading the free Stanza e-book reader application made by Lexcycle. I have just tested 5 different formats of my books, which had varying degrees of success. Stanza e-reader claims to support the epub, PDF, pdb, and DjVu formats. I couldn't get Stanza, to take the DjVu file, that I placed in the file sharing part, of the iPad apps page, in iTunes. Another annoying thing is that there is no easy way to tell which file is in which file format in Stanza, if you have more than one copy of a book in multiple formats. For my books, the Desktop Printer version (PDF/A-1A) and the Handhelds version (pdb) of my texts worked best, as they preserved all the bookmarks in my books. The Apple Mobile format (epub) also worked, but Stanza did not recognize any of the links and only the chapter level headings, so it would be hard to navigate. The Red Letter Edition (PDF) worked, but Stanza recognized none of the bookmarks or links, so it would be very hard to navigate.

The DjVu versions of my picture books work with Stanza, and seem to work best, if you download them directly from your iPad tablet. The following scenario is if you are downloading the Zip archive bundle of my DjVu e-books. It will work similarly, for any other Zip archive bundle, including files in file formats, that you need to open in Stanza. You can also download books, directly from your iPad Tablet, by clicking the hyperlink to it and waiting for it to download (note: you will see no indication of progress). Then, when you see a screen that shows an icon, with the name of the file under the icon, the size of the file under the name, and 'open in "ReadleDocs"' or whatever the name of the app that can open that type of file under the size of the file, click on the "open in ..." button. Then, click on the zip file, in the "documents" listing and the zip file will open up into a folder. Click one of the files, in the folder, click once, in the middle of the page, that opens, click on the second icon, from the right, on the top bar, then select the "open in" menu button, that will then appear, and finally click on one of the app names, that appears. If you are saving to ReaddleDocs, and opening in Stanza, then your file will have to "download" first and then click on the library icon, on the bottom. It should appear there.

Downloading to the iPad with Third Party Applications

The iPad device can handle my long PDF books, like the Red Letter e-book versions, which work great, out of the box, in the included web browser, but they may take some time to download and you cannot save them, with the included browser for viewing later offline, on the iPad (except with a third party application). You can transfer the PDFs over to the iPad via iTunes on your computer or download via the iPad web browser with a third party app like ReaddleDocs. You can even download the zip archive bundles of my PDF files and open them in ReaddleDocs right from the included web browser. Another way to do this is to use iUnarchive and PDF Reader Pro the same way.

You can also transfer files from iTunes on your computer to your iPad, if you first plug in your iPad, to your computer and then select "your name," followed by the word "iPad," on the left side panel of iTunes, then you click on the "Apps" tab, and finally scroll down, to where it says "file sharing". You can then click on the application listed there, that you want the files transferred to, and then drag and drop my PDF books or your other files into that listing space. You can now see the PDFs or other files on your iPad, even when you are offline.

The web page versions should work best for the iPad and, if you want to download this version, to keep on your iPad, then you can download them, via a third party application, called Offline Pages, on your iPad and you will see them, as they appear, in the included web browser, but offline (and Javascript works offline as well, so you can use all the interactive features of my web pages offline).

Buying Books on the iPad

Amazon.com has a Kindle reader , for most major computing devices, including the Mac, PC, and the Apple iDevices, like: the iPhone, iPod Touch, and iPad. It worked for me, when I downloaded a free book, via the Amazon.com Kindle application, on the iPad. I tried downloading a free book, from the Apple iBooks application, on the iPad and it kept crashing, when I opened it, until I synced it and then I removed the book, I downloaded, from the iBook store, and it worked as before. Because of my experience and because you can only buy and see the Apple iBooks, via the iPad, I would have to recommend using the Amazon.com service, if you want to buy books, for now. You may run into the same problem, with Amazon.com's Kindle, but it won't screw up anything else. iBooks works

so beautifully, with the free books I downloaded from Google and my own books that I would hate to lose the ability to use it just so I could buy a few books on it.

Barnes and Noble is now has an eReader app that is optimized for the iPad. I will try out the Barnes and Noble iPad application, soon, because I really like the way they have designed their website. It is so much simpler and easier to use than Amazon.com.

You should never enter credit card numbers, passwords, or any other information you don't want everyone else to see over a public wireless network. I would recommend getting a wireless network, in your home, with password protection, to buy things on, like the Amazon.com Kindle bookstore. All the apps on the application store can be bought, from your computer, via iTunes, so you don't need a wireless network, for that part, but many of the applications like Amazon.com's Kindle require that you buy books, from within their application, so you would need a wireless network, at home, for that.

2.4 Help for Other Users Accessing my Website

My website works with most other electronic devices with newer web browsers, including: recent Linux (or any other X-Windows), newer Nintendo and Sony Playstation devices, and most newer mobile smart phones (Apple iOS 4.0+, Google Android 2.1+, Blackberry OS 6+, Windows Phone 7+, and Palm/HP WebOS devices).

2.4.1 General Help for Linux (and other X-Windows) Users

Ultimate Experience for Linux Users

Firefox 4.0 (or the very similar Iceweasel 4.0, or GNU IceCat 4.0, or Firefox 4.0 optimized for Yahoo), Seamonkey 2.1, and Google Chrome 5.0 (stable channel version), Epiphany 2.30.2, Midori .3.2, or higher will provide an ultimate browsing experience on Linux. The latest browsers will provide stunning visual effects involving high impact graphics shapes, light and shadow, and conditional formatting tricks, like: angled rounded corners on images, headings, quotes pages, and select paragraphs; image, page, quote rotation; text drop shadows on headings; drop shadows on images, quotes, select paragraphs; stylized drop caps for quotes; alternating colors for featured links; featured links going to a different website, going to another one of my websites, and on the same page marked as such; featured links to zip files marked as such; faded featured previously visited links; and background gradients. This is all done without any plugins (including Flash Player), without any additional graphics or slower download times, it keeps the website just as accessible as before, and only needs to be edited in one place to change or update the entire website.

New Font and Built in Audio for Linux Users

Also, if you are using Firefox 3.5 (or the very similar Swiftfox 3.5, Iceweasel 3.5, GNU IceCat 3.5, or Swiftweasel) 3.5, SeaMonkey 2.0, Google Chrome 5.0 (stable channel version), KDE's Konqueror 4.3, Epiphany 2.28, Midori .1.9, or Kazehakase .5.8, then you can see my website with the new font (which will work without any installation necessary).

Unfortunately you see that different browsers support different audio formats, which makes things more complicated, than necessary. This will likely not change, because of licensing fees and fears of being sued for using someone's unknown patents and these issues will not be resolved for many years, if ever. I have made listening to my songs and readings on my website simpler and less technical, for my visitors, by setting up my audio, to auto detect the correct version, for your web browser. If you use one of the above browser listed versions or higher, the audio on my website will automatically determine the correct file format, that works best, with your web browser.

Google Started a New Format War

Google has now removed the Apple/iPod/iTunes version support from Chrome now to force its users to use its own new format (WebM) or use Flash for video. This was designed to make trouble for the entire consumer electronic industry and its users.

Google is making trouble for Apple and its users, because Apple has decided not to allow Flash on its iPhones, iPod Touches, and iPads due to it radically lowering battery life, to not populate its store with poor performing widget apps, and because it was only available several years after the iPhone and iPod Touch were released.

Google's newly preferred format (WebM) likely has patents on it, opening up those who use it on websites to likely but unknown liabilities, without any patent pools like, in the Apple/iPod/iTunes format, and has no hardware acceleration support in most devices, unlike the Apple friendly format, so it would destroy battery life as well.

Google has also refused to pay potential patent royalties, for users of its new format, when the inevitable patent lawsuits begin.

Ironically this Apple friendly format is not owned by Apple or Microsoft (and both pay more for using the patents in software than they get from them) and every major consumer electronics manufacturer (including Google and many of its phone manufacturer partner companies) had not just agreed to it, but actually funded its development (and they all cross license each other as they are the patent holders).

Improving your Experience Level with Linux

If you are using a major distribution of Linux or FreeBSD (and OpenSolaris should work fine too) you most likely have everything you need. You're experience with my website will be optimum. Current versions of Linux and FreeBSD come with a good experience level for my website built in, but could be improved to an ultimate experience if you can upgrade to Firefox 4.0 or Google Chrome 5.0 (stable channel version) or higher.

Special Instructions for Linux Users

There seems to be a problem with the anti-aliasing in Epiphany, Midori, and Kazehakase, so that some of the graphics look somewhat choppy, as compared to: Firefox 4.0, Safari 5, and Google Chrome 5.0 (stable channel version). Konqueror 4.6.0, Arora .10.2, and ReKonq .7.0 could barely render my ideal version, but do fine with my failsafe version. I guess webkit anti-aliasing is not uniform for different web browsers or even the same web browser on different OSes. Google Chrome 5.0 (stable channel version), Epiphany 2.30.6, and Midori .3.2 anti-alias very well, with both my ideal and failsafe versions, so that graphics appear very smooth in these two browsers at those respective versions.

2.4.2 Help by Version for Linux (and other X-Windows) Users

Linux Users

For Ubuntu 11.04 (released in April 2011) or higher, you should have Firefox 4.0 (which comes with Ubuntu), which gives the ultimate experience for my my website and Evince (which comes with Ubuntu), which works with all types of my PDFs. Mplayer or VLC (which can be downloaded through Ubuntu Software Center) works for my OGG (Open Source Friendly) formatted audio and video.

Firefox 3.5/3.6 users will not be able, to read my website, so I recommend users stick, with Firefox 3.0, or upgrade, to Firefox 4.0.

For openSUSE 11.4 (released in March 2011) or higher, you should have Firefox 4.0 (which comes with openSUSE), which gives the ultimate experience for my my website and Evince (which comes with Gnome) or Okular (which comes with KDE) which works with all types of my PDFs. Mplayer or VLC (which can be downloaded through Yast) works for my OGG (Open Source Friendly) formatted audio and video.

Firefox 3.5/3.6 users will not be able, to read my website, so I recommend users stick, with Firefox 3.0, or upgrade, to Firefox 4.0.

PC-BSD Users

I don't recommend PC-BSD 8.1 and will not support it, because almost everything doesn't work. It seems they are trying to copy the Microsoft approach of a having everything popping up and bugging you, changing all the established conventions, hiding all the settings, requires more than 1 GB of RAM just to load a basic desktop, it is almost impossible to disable all the fancy effects, and it also takes forever to load and keeps crashing. After I tried to change the settings, the system locked up on me and would not reboot. I knew something was wrong when it needed 10 GB just to install the base system (most Linuxes only take 2-3 GB for a basic install). Some people may say that all those problem come from KDE 4, but openSUSE works fine with KDE 4, so that is not an excuse. I have a recent iMac and 4 GB of RAM, an Intel Core 2 Duo, over 100 GB of free space and I gave the virtual machine 1 GB.

Open Source Users

For recent versions of Linux (Intel, 64 bit Intel, PowerPC; open source and commercial) FreeBSD, and OpenSolaris (x86 and Sparc), you should have Firefox 2.0, Swiftfox 2.0, Ice Weasel 2.0, Gnu IceCat 2.0, Swiftweasel 2.0, Google Chrome 5.0 (stable channel version), SeaMonkey 1.1, IceApe 1.1, GNUzilla 1.1, Flock 1.0, Konqueror 4.3, Epiphany 2.16, Midori .1.9, or Kazehakase .5.8 which work for my web pages.

All types of my PDFs work with Evince (or Document Viewer) under Gnome or XFCE and Okular under KDE 4.2, one of which should come with your desktop environment. xpdf 3 also works with all types of my PDFs for others without a desktop environment on an open source platform.

Testing

I have tested my website Ubuntu Linux 11.04 under Gnome with Firefox and Evince (all on standard Intel 32 bit) and openSUSE 11.4 under KDE with Firefox and Okular.

Other Formats

There are viewers for other file formats that can be installed under Ubuntu by clicking on Ubuntu Software Center and under PC-BSD by double clicking on Software Manager from the link on the desktop.

2.4.3 Help for Mobile Users

You can also access my website content on a mobile device.

2 Different Ways to Access Content on Mobile Devices

There are 2 types of mobile device specific content on my website and 2 different ways to access it. The first is by using a web browser on your mobile device, where you will find it optimal to view the main website, or my website optimized for mobile devices. The other kind of mobile access involves 2 steps: 1st step involves the use of a regular desktop, laptop, or netbook device to download the mobile device optimized files and 2nd step is to transfer those files, to your mobile device, for viewing them later, on the mobile device, in a 3rd party e-reader application.

Simplified Version of Website (Mobile Website)

If the main website is hard to navigate with the iPhone, iPod Touch, Google branded mobile device, Palm/HP Pre, or Opera Mini, try this part of my website optimized for mobile devices.

Only the iPhone and iPod Touch and Palm/HP Web OS will be able to see all the PDFs, unless you have the appropriate additional software.

iPhone and iPod Touch (Main Website)

The iPhone and iPod Touch can browse my main website fine including the PDFs and audio. Almost everything important is made available in standard web pages and everything important is available in a PDF. The design will automatically change based on whether the device is rotated to the landscape or portrait orientation.

You will be able to see everything including my interactive interfaces, because they no longer need Flash Player to function.

Apple iOS Testing (Main Website)

The site has also been tested for compatibility with Safari, and in Apple's iOS Browser Simulator which is included in the iOS SDK 4.2, and was also tested with a real iPod Touch 4 so it should also work well with the iPhone.

Be sure to upgrade to the latest iOS 4.2, if you have any problems viewing anything.

Google device, Palm/HP Pre, or Opera Mini (Main Website)

The main site will work well. You should be able to see the main pages, audio, and PDFs (except the PDFs will not work on the Google devices).

The Google devices (only in portrait orientation) and Palm/HP Pre should be able to see the formatting and this should also apply to other comparable devices as well, as most use the same browser. Opera Mini users should use the mobile version of this website, and they should adjust the settings as described in the help page from the mobile section.

The design will automatically change based on whether the device is rotated to the landscape or portrait orientation on Google (Android) devices.

Google Android and Palm/HP Pre Testing (Main Website)

This site has also been tested for compatibility on the browser which is included in the Google (Android 2.1) SDK Emulator (excluding the PDFs) and the Palm/HP (WebOS 1.4) SDK Emulator and should work well enough on Google branded (excluding the PDFs) and Palm Pre and Pixi mobile devices.

iPhone and iPod Touch (Download Files)

To hear my audio, choose the iPod version from your desktop computer and import it into iTunes to transfer over when you sync your iPhone or iPod Touch with iTunes.

E-Book Reader (Download Files for Mobile Device)

You can get all my philosophy books in their collected edition in 3 mobile e-book optimized formats I call: Apple Mobile version (which can be viewed on iPhones/iPod Touches with iBooks, Google devices, and the Sony Reader) Handheld Version (which can be viewed on almost any handheld device and is the official format of Barnes & Noble e-books and their e-reader the Nook), and Amazon.com Kindle version (which can be read on the Amazon.com Kindle, the Kindle Reader for the iPhone/iPod Touch, and with the Mobipocket Reader on most mobile devices).

You can also see DjVu versions of texts with the Xdjvu application on the iPhone or iPod Touch.

You can get all the books together at my collected works page. More information is included in the zip archive that the e-books are in.

Handhelds (Download Files for Mobile Device)

PDF/A1-As should be viewable on Palm and Windows handhelds with the appropriate version of Adobe Reader.

2.4.4 Help for Game Console and other Embedded Users

You can also access my website content on a game console and other embedded devices.

2 Different Levels of Access

There are 2 levels of embedded device access to my website: the main website can be seen with Opera-powered web browsers like on the Wii and DS, but only the mobile website can be accessed (without formatting) on the Playstation, PSP, and other embedded devices.

Playstation and PSP and Nintendo 3DS (Mobile Website)

If the main website is hard to navigate with the Play Station 3, Play Station Portable, Nintendo 3DS, Sega Dreamcast, Nokia N-Gage, Sony Ericsson Phone, multifunction printer, digital TV, set top box, PDA, web phone, email terminal, or embedded automobile devices, try the version optimized for mobile browsers, which can be rendered but without the formatting, with the included Netfront-based browser.

Only the Nintendo Wii and the Nintendo DS will be able to see the full website (which can be viewed best with the simple format), as they use Opera 8.0-9.6 based web browser.

Nintendo Wii and Nintendo DS (Full Website)

Internet Channel of the Nintendo Wii and Nintendo DS browser can browse my full website fine, except without the new font. This website will offer a basic or minimal experience with these browsers.

You will be able to see everything including my interactive interfaces, because they no longer need Flash Player to function.

Testing (Full and Mobile Website)

The main website has been tested for compatibility with Opera 8 and 9.6, and the Netfront Simulator has been tested with the mobile version of my website.

Chapter 3

General Tech Challenges

by Ben Huot

3.1 Keeping Your Data Safe

3.1.1 Intellectual Property and Copyright Law

Many people think that companies like Apple or the record companies are too restrictive in the conditions upon which they allow use of their works. Many people think that if they buy an intellectual property product like software or music that they can do whatever they want with it. They think they can modify the software to use it in another way that it wasn't intended for. They think that all the company is trying to do is be power hungry and wants irrational control over their lives. They think that pirating software and music is a victimless crime.

Some of those who want to weaken copyright often are unfamiliar with the origins of copyright in America. Copyright started when the British had colonies in America and the printing press was becoming more common and people began to publish the writings of others without permission. This was not an issue before, because it was much harder to copy things and so this was an effective barrier to keep people from making unapproved copies. The term copyright comes from the right granted to copy intellectual property. As the Internet makes things easier to copy (you copy something every time you download something or upload something), it is natural that copyright laws would become more invasive.

Intellectual property, currently, in the United States, is very well protected as we have some very strong copyright laws. Patents are not the same as copyrights. Patents are there to protect people's implementation of different technologies. Both copyright law and patents originate in legal theory on the basis that they help encourage innovation and people to create new things. Most people do not understand copyright law until they actually make something that took a lot of time and effort and turned out really good. Then they want to get all the copyright protections they can.

The moral principles behind copyright law are simple and obvious, but what is protected is often not. The main moral basic of copyright law is this: you have to pay someone to use their work and/or follow the license they give it under, because it is only fair that people profit off their own works. Copyright law applies as soon as you create a creative work like a written work, software, visual art, etc. You do not have to file for a copyright for that legal protection. You cannot copyright a list or a short phrase.

Laws have unforeseen consequences and one of the unforeseen consequences of weakening copyright law is that the free community on the Internet, including people who use Creative Commons Licenses for their creations as well as create open source software, have their rights to offer those conditions protected with copyright law. If you don't like the restrictions that companies place on their creative works, the most effective and legal way of protest is not to steal or otherwise violate copyright laws, but rather create your own content and give it away in a Creative Commons License. This will be the way to make the media either allow people to use their works more freely or else they will no longer be able to sell them. This is one of the reasons why I give so much of what I create away for free.

3.1.2 Managing Information from the Internet

Navigating to Moved Pages

Often times when you follow a link, you get an error message, instead of a web page, that you expected. Websites

are just a collection of files and folders, with each slash marking a folder. There is a default file that opens, when you have a web page ending in a folder. So when you see an error page, you should go to the folder above and so on, until you find a web page. You do this by, for instance, if you go to my website and you are at <http://benjamin-newton.com/help/tech-book/beta/> and you see an error message, delete everything after the slash after tech and then keep on doing so, until you see a normal web page. The reason why this happens is because just as you change the folders you arrange your files in, as you add files to your folders, on your hard drive, so the folder and files on a website change, as a webmasters add content to their websites, in order to keep a logical arrangement of their files.

Controlling Web Site Formatting

If you hate the website design of a website you use or it is too distracting you can use Firefox and choose *view* menu and then choose the *page style* menu item, and then the *no page style* option. You have more advanced options in Opera to simplify the page graphics and styles. Choose *view* menu, *images* menu item, and *no images* option; then choose *view* menu, *style* menu item, and the following options: *user mode*, *accessibility layout*, and *disable positioning*.

Temporary Folder

Use the desktop as a temporary folder. Save everything to the desktop, so that you can see everything you downloaded, before you find a permanent place to organize them, with the rest of your files.

Managing Bookmarks

Drag and drop the icon next to the web address of the website you want to book mark. This way you will not lose it, if your web browser crashes and you can follow the links with any web browser you have installed. You can organize your web address files into your folders. You can later use a web page editor to organizer tour favorite bookmarks and use it for your home page.

Archive Important Information

When you see a page that has information you want to save, save it to your hard drive, because most websites average 18 months. A lot of good information disappears permanently, probably because of how difficult it is to create a web site and how negative the feedback is. Keep the original files of the software you saved from the web and the installation codes emailed to you, so you can re-install, if there is a problem with your program installation, you get a new computer, or your hard drive or operating system upgrade goes bad.

How to Archive Data

To save a an entire web page, with all the associated file together, choose web archive, when saving a web page, or print and then save as PDF on Mac OS X or print to a PDF printer on Linux. PDFs are easier to manage because all the formatting, graphics, and content are in one file, and long documents are split into separate pages, and make printing them out easier. You can save files to the PDF format from your email messages too, if you want to access them later in a convenient format, so you don't have to read them again in you email program.

3.1.3 Computer Security Common Sense

for Desktop Computers

A Mac Mini survived 38 hours on the Internet and 4,000 login attempts without being compromised even though it was widely publicized. Secure shell remote login and the web server ports were open. Neither one of these ports are open by default - they have to be manually and purposefully turned on. The only person that got through already had a local account on the machine.

Don't use Windows

- Microsoft has admitted publicly that its software is not designed to be secure or securable.
- The software is closed source so mistakes take a long time to be corrected.
- Security is not a feature that you add on - it is something that must be designed from the ground up.

Use User Accounts

- Make separate accounts for different users.
- Do not use the administrator's account except when necessary.
- These limit the extent that viruses and hackers can access your files.

Network Securely

- When you set up a network (usually you can find a way around doing that), read up on it and find out how to do it as securely as possible.
- Wireless networking is really easy to hack.
- People drive around town scanning for open networks and then use your account to hack into other computers.
- You are then responsible for what they have done, unless the authorities can trace it back to the hacker.

Use a Firewall

- All versions of UNIX come with firewalls. Mac OS X is the easiest to set up.
- It doesn't have to be complicated.
- Just set it to filter out all outsiders from accessing your system.
- You can use servers to share files like .Mac.

Use an Antivirus Program

- Update your Antivirus programs at least twice a month and scan files as you download them from e-mail and from the web.
- This is only for the benefit of Windows users.

Use a Spyware Scanner

- Many programs come with little programs attached to them that steal credit card and social security numbers and send them back to the programmer to steal your identity.
- A spyware scanner will remove these from your system.
- Note: this different than a virus and only necessary for Windows users.

Use Encryption

- Encrypt e-mails with sensitive information if you can't send them any other way.
- Encrypt any sensitive information on your hard drive.
- OS X 10.3 comes with this built in.

Do Not Use File Sharing Programs

- Most viruses are sent through file sharing programs.
- These are also filled with adult only material and stolen music and videos.
- You can buy music online through Apple's new store through iTunes for 1 dollar a song.
- Download software from the manufactures web site and you can be sure there are no viruses in them.

Don't Open Files with Unknown Extensions

- This mainly applies to e-mail.
- Viruses will come from people you know as viruses send themselves through your address book.
- Safe files include extensions with .pdf, .swf, .html, .rtf, and .txt for documents, .psd, .jpg, and .png for photos, etc. Do not open .exe or .zip files on Windows unless they come in originally packaged shrink wrapped software bought from reputable vendors.

- On Mac the major ones to be careful about are .sit, .dmg, .pkg, .bin, and .hqx, and .sea.
- .doc, .xls, and .ppt files also contain viruses often too. If you open these up with non-Microsoft programs, you shouldn't have to worry about viruses.

Make Regular Back-ups

- This is the most important step.
- Back up anything you don't want to permanently lose
- On UNIX systems, you can just back up your home directory.
- On Macs, this is where all your files are saved by default with Documents, Library, Movies, Music, Pictures, Public, and Sites folders. The name of the folder is your user name.
- There is a different one for each user, if you set one up for every person like you should.
- On new Macs, just insert a blank CD-R (Music and Data are the same format) and drag and drop your files onto the CD icon and then select Burn from the File menu under Finder. Tape backups like Zip drives usually fail.
- Mac OS 10.5 now automatically backs up every version of every file you create, once you plug in a USB hard drive into your Mac.
- Have backups off site and far away in case your house burns down or is robbed or there is a natural disaster.
- Make backups on different types of media like print, CD-ROM, external hard drive, and web backups.

Read Up on Security Problems

- Many times there are patches available to fix security problems (but sometimes they screw up your computer), so you have to read reviews of the updates before applying them.
- Don't just blindly update your main browser or e-mail or OS without checking first to see if there are bugs in the fixes.

Secure Delete Hard Drives Before Disposal of Computer

- The best way to protect yourself from identity theft is to securely delete all the files and wipe the hard drive clean of data as well as write over it several times with random data.
- On a Mac you can secure empty the trash and the other way is to reformat with the highest security setting

What is Your Data Worth?

Well I have had no viruses, spyware, or any other malware on my machine and I haven't done anything for security other than make regular backups. But of course I have a Mac and I have never used a file sharing program. I also don't have to worry about what I download from the Internet and I could use the included browser that comes with Mac OS 10.3 and higher and still not get any malware. I have also done a major OS upgrade from 10.2 - 10.3 and had no issues at all. I must have had to reformat and install Windows every few months when I had a PC.

You know that an anti-virus program is not a proactive security measure but just a clean up after the fact. You have to wait for the virus to be in the wild for a while first and be infecting machines - maybe yours - before they come up with the fix, then you need to download it and pay money for this capability and then scan everything, hoping of course it is not hidden by a root kit or some other common way to hide the virus from the anti-virus software assuming of course that the anti-virus software works flawlessly every time. Then when you find a virus you want to verify that all your software doesn't have viruses in it and reformat and reinstall from scratch because just deleting the virus you find may not be good enough because you could get reinfected if part of the virus wasn't found. Then you need to restore all your data from backups after you scan them for viruses and then verify every piece of data you have on the backups and make sure it is all there and nothing was modified. Basically if you care about your data, don't use Windows or MS Office.

Then of course you can run into problems how Windows corrupts software or how you can lose data when you run defragmenting software if there is a power outage - another thing not necessary on a Mac or any other form of UNIX.

3.1.4 Why Make Backups and How to Do Them?

I first used a PC until my data became valuable enough to get a Mac, and now I have a Mac and Linux machine as the data accumulated is now of even more valuable.

- I always make backups copies of my data and I have offsite backups in different parts of the world.
- I have different types of backups: web backups, hard drive backups, optical disc backups, and print backups.
- I also keep all my data in open and common file formats which can be further modified with completely open source products.
- I even have redundant programs in case there is enough of a problem with any of my programs that they won't perform the needed task to my standards.
- I have switched to entirely different platforms every 2 years very easily because of this planning.
- I make backup copies of my files as soon as I create them and then I make other backups throughout the day.
- I have plans for Apple dying and my work will be able to continue on without having to use Windows.
- Because of these precautions, when my hard drive crashed on my Mac Mini after 6 months, I was able to continue my work on my Linux machine; it was a non-event.
- I only had to make it through Easter weekend; our Apple store in town had it repaired on Monday and I just turned it on Good Friday.
- I also backup all my commercial programs on disc along with their registration codes, so I didn't have any problems with restoring all my programs.
- I even keep back up copies of the latest free software and free updates to my commercial software. I have the specifications for the PDF and SWF file formats on optical disc in case I need to recreate viewers as I use these format extensively.
- I also use flat files, so there are no databases to corrupt and no backup programs to fail.

3.2 General File Concepts

3.2.1 Structured Document Formatting

Advantages

- Allows the writer to write and the designer to design independently
- Allows for changes in content to be done after the designer is finished without having to redesign it
- Allows a change in one place to alter numerous documents with the same formatting
- Avoid inconsistent formatting
- Allows the same document to have multiple designs, like different ones for print, small devices, and personal computers
- Easier to convert between file formats
- Reduce file size
- Makes it easier for visually impaired people to read electronic documents

Examples

Always

- LaTeX
- XML
- SVG

Possible

- HTML
- XHTML
- PDF

- Flash
- Photoshop
- Open Document
- ConTeXt
- Text

Not Possible

- RTF
- Postscript
- DjVu
- JPG
- PNG
- TIFF

3.2.2 Drawing vs. Painting

Vector drawing is a way of creating art on the computer. Drawings programs differ from painting programs. In drawing programs, all attributes of every object are always editable. In painting programs, once you put down a brush stroke, you can't cut it out very easily and cleanly. In painting programs, you can use similar techniques to what is done with paint on a canvas, but with drawing programs you have to understand more about how the computer works.

Vector Drawing

In vector drawing, the illustration has a certain structure to it like a skeleton and it has attributes that hang on it like flesh.

Outline of Shape

The first step is to create the structure or outline. I use three techniques, depending on the complexity of the shapes. For the most basic shapes, I use rectangles and ellipses which I join together in different patterns. For more complicated outlines, I draw freehand with my digital graphic pen and tablet. For the most complex patterns, I draw a draft outline with straight lines and then cut out the corners and attach pieces of ellipses in to make a delicately curved piece.

Attributes

After the outline is complete, then you can choose a fill - a solid color, gradient, or pattern and then a stroke - watercolor, pastel, oil, ink, etc. You can also choose a bevel or a soft edge. You don't have to have a stroke if you don't want to.

Sharing with Others

Then if you want to change any aspect of the drawing, you can at any time and it will still look clean and the change can be made easily. When you finish the drawing, in order to share it on the web or send it by e-mail, you have to save a copy of it as a bit map - most likely a PNG at 300 DPI for printing or JPEG 100% quality at 72 DPI for display on the screen. Make sure you add the appropriate extension to the filename.

3.2.3 File Formats

One of the most important steps to take in order to share your completed work to as wide an audience as possible is to save in standardized and free formats. There are different formats for different types of files. Some are primarily for text and layout for printing while others are primarily moving formats for display on the screen, and there are a number that fall in between these two extremes. These formats are common on the Internet and can be viewed freely by anyone on most any computer with a variety of software. Remember to save your work first in the native format and then either export or save as in the free format after you have completed the work.

Text and Page Layout

The most widely used free formats for text and layout are HTML and PDF. HTML is primarily suited for display on a wide variety of different sized computer screens and PDF is optimized for printing and precise layout. Putting graphics into a HTML page works well for picture galleries designed for fast loading on the web or for logos, while embedding graphics in PDF files works better for complex layouts especially ones that have special sizes and are made to be printed out. For short articles filling one screen, HTML is the best format, while text taking up more than one page is easier to save, view, and print in PDF format.

Graphics and Interactive Media

There are two major free formats for still pictures. JPEG at 72 DPI and at 100% quality works best for viewing on the screen as it takes up less space and PNGs at 300 DPI are the smallest size that retain all the quality necessary for printing at high resolutions. The most widely used formats for interactive or moving content are Flash and Quicktime. Flash is useful for simple animations and for moving logos. Quicktime is good for precise layout on the screen and for combining MP3 and MIDI audio, Flash animations, text, and JPEG pictures. It also can be navigated interactively or can be used for motion pictures.

3.3 Instructions for Specific Programs

3.3.1 Chinese Watercolor

Traditional Method

I used ink on rice paper at first to do my first Chinese Watercolor, a bamboo branch. First, you have to soak the brushes until they lose their shape - I did it for about an hour. Then, you have to clear off a desk and put felt underneath where the paper will go to shield the desk from the ink. Next, you grind the ink stick on the stone block very quickly for 3 minutes using the same end every time and the water overflows. Then you have to cut the rice paper - preferably at least 10 to practice on. Then you hold the brush vertically - the brown one - and draw a straight line with one stroke across the paper while letting the brush rest slightly at even intervals. It is very hard to get the thickness right as the ink either spreads out too much on the paper or not enough and it is also hard to get the ink dark enough but not too dark. Next, you grind the ink stick on the stone block very quickly for 3 minutes using the same end every time and the water overflows. Next you draw little branches by just dipping in a tiny bit of ink and sketching deer horn shaped branches with the same brush. The difference in size is about 10 to one. Next, you grind the ink stick on the stone block very quickly for 3 minutes using the same end every time and the water overflows. Then the hard part is barely touching the brush at first and then pressing down more firmly and gradually tapering your stroke in one motion. If you are good you will make it after starting from scratch only 10 times. Your drawing will look like a blob. Then you have to dry all the ink on the stone and throw away 90% of your work.

By Computer

I found that it was easier painting on the computer with the free software program GIMP. It is available for Windows, Mac, and UNIX. It took me about a tenth the time to do it on the computer even with all the time to set the settings for the brushes as follows.

Use the Ink tool that looks like a pen with the following settings

- Opacity: 75 change for different elements
- Adjustment
- size: 20 change for different elements
- angle: 0
- Sensitivity
- size: 1.0
- tilt: 0.3
- speed: 0.7
- Type: round

The technique is the same except it is easier to control, you don't have to mess with getting the ink right, or cutting

the paper and starting from scratch. The size I used was the default but I changed the resolution to 300 dpi, so the size quadrupled to about 1000 pixels squared. I drew it at 50% view. To undo, right click on the painting and choose “edit - undo” and save by right clicking and choosing “file- save”. The first time specify the file name - I chose bamboo.xcf - this saves it with the layers if you decide to work with those. When I was done I right clicked on the drawing and chose “filters-artistic-apply canvas” to get it to look like you drew it on paper. You might want to change the opacity for the branches to 50% and choose 75% for the stalk, so you can outline it at the joints at 100%. I cropped it at the end by clicking on the knife tool and selecting the area I wanted to keep and then clicking on the “crop” button. I then saved it as a bamboo.png for my portfolio. I then reduced it by right clicking on the drawing and choosing “image-scale image” and then putting in 72 dpi for the resolution and changing the horizontal value to 200 - in that order.

This is my first painting on the computer and one of only two things I have ever painted in my lifetime that I remember. I did this on a laptop with a touch point.

3.3.2 LaTeX

LaTeX is a professional typesetting language like Postscript. It is a type of structured document format like the XHTML and Cascading Style Sheets combination where the content is separated from the layout, but it is specific to page layout and includes formatting and content in one file like HTML. This is especially useful in technical writing like scientific journals and technical manuals. It can output to the more easily displayed Portable Document Format (PDF). Like HTML, It can be coded with a text editor like TeXShop or laid out graphically in a What You Mean is What You Get (WYMIWYG) editor like LyX (both with native Mac versions) as with most web languages. It is an open source language so it can be used with low cost tools, it has longevity, and it works cross platform. It is also very stable as it has been around for over 20 years.

Document Structure

There are 3 major types of documents: Article, Book, and Report; which all have Title, Author, and Date headings. The structure that works with all three is Section, Subsection, and Subsubsection. There are three major types of lists: Description - which lists the items with a descriptor to the right of it, Enumerate - which numbers the list items, and Itemize - which puts bullets in front of each list item. There is also a simple automated system for footnotes and quotations.

Text Formatting

There is also an easy way to style arbitrary text in the familiar bold, medium, italic, plain text, small caps as well as relative font sizes reminiscent of HTML. LaTeX commands start out with a back slashes and make frequent use of curly brackets, so to make single spaces after line endings, you just enter 2 back slashes in a row at the end of each line. This works great for poetry.

Recommendations

I recommend using a specialized text editor that has LaTeX functions built into it, so you don't have to actually type the code freehand. TeXShop on the Mac uses the built in OS X service that spell checks on the fly which is nice too. So far LyX doesn't handle changes in formatting without throwing out errors. LaTeX is very good at mathematical formulas but doesn't display photos at a clear resolution. If you are inserting drawings, put them in either Encapsulated Postscript format or PDF. The TeX and Ghostscript system of required software is a couple hundred MBs, so you need a broadband connection to download it.

3.3.3 Book Authoring with OpenOffice.org

Create Chapter Documents

Start out by creating a separate document for each chapter. Choose *Text Document* at welcome screen. Save as *ODF Text Document (.odt)*. Make sure you specifically use the chapter LaTeX headings in your document (you can also use the part division), if you want to ever convert your document to the Daisy XML format.

Mark Headings

Mark each section heading with heading 1, subsection with heading 2, and so on. Choose *Styles and Formatting* from the *Format* menu. Choose *Hierarchical* from the bottom of the floating palette called *Styles and Formatting*. Click on the “little triangle” next to the *Heading* entry in the floating palette, so that that *Heading 1* through *Heading 10* show in list. Select the text for the heading and then double click on the *Heading 1* or *Heading 2* entry and so on from the floating palette for the heading and then subheading and so on.

Create a Master Document

Create a master document and link in the different chapter documents. First, make sure you save all the chapter documents in the same folder and then close all open documents. Then choose *New* from the *File* menu and select *Master Document*, then choose *Save As* from the *File* menu and select *ODF Master Document (.odm)*. A floating palette will open up called *Navigator*. Hold your mouse over the icons on the top of the palette and click on the one with the tool tip called *Insert* and then choose *File* from the pop up menu and then browse to the first chapter file and click *Open*. Continue until you insert all the chapters. Then click on the name of the chapter from the list in the *Navigator* floating palette and hold your mouse over the icons on the top of the palette and click on the one with the tooltips *Move Up* and *Move Down* with all the chapters until they are in the correct order.

Create an Index

Create an index in the master document. Then hold your mouse over the icons on the top of the palette and click on the one with the tool tip called *Insert* and then choose *Index* from the pop up menu and then click on *OK* on the dialog that opens up called *Insert Index/Table* and then position it at the top with the *Move Up* and *Move Down* icons as you did previously as described above.

Add Introduction and Title Page

Add an introduction and title page to the master document after inserting 2 text sections, one before and one after the *Index* you inserted previously. Do this by holding your mouse over the icons on the top of the *Navigator* palette and click on the one with the tool tip called *Insert* and then choose *Text* from the pop up menu and then using the *Move Up* and *Move Down* icons as before to put the introduction and title page in the correct order.

Create PDF

The choose *Export as PDF* from the *File* menu, make sure that *All* is marked for *Range*, *Lossless Compression* for *Images*, *PDF/A-1* and *Export Bookmarks* for *General* options under the *General* tab. The click *Export* button at the bottom and then click on the *Save* button.

3.3.4 Text File Format Conversions

Background

I started out with a HTML file and then converted it to many other formats. This was done as part of writing a book with LaTeX using the Lulu.com print on demand book printing service. All these conversions can be done most easily on Ubuntu Linux or Mac OS X.

Using Command Line Programs

Finding the Command Line on Linux

To run a command line program, you need to find a *Terminal*, *Console*, *Konsole*, or *X-Term* entry in your programs menu, if you are running KDE, GNOME, or XFCE desktop environments. Once you open the *Console/Terminal*, you will see either a *solid black* or *solid white background* upon which you will see the *name of your login* and the *name of your computer* (prompt).

Finding the Command Line on Mac OS X

go to your *Applications* folder and launch *Terminal* in the *Utilities* sub folder

How to Enter Commands

You type *commands* (program names) after the *prompt*. Most command are structured like this *program_name -options filename*. To get *exact syntax* for command line programs, enter *man command* or *command --help* with *command* being replaced with the *name of the command*. Replace the word *filename* with the *name of the file* you wish to convert.

How to Copy and Paste

You can also *copy and then paste* commands from *web pages* or any other format that has selectable text. To so this, you *highlight the command sequence* and then *middle click* after the *prompt* and then click *enter*.

Getting the Programs Needed

How to Add Programs to Ubuntu via Synaptic

1. Login in to the *First Account You Created* during the *Ubuntu Install*
2. Connect to the *Internet*
3. Go to your *Applications menu* and choose *Synaptic Package Manager menu item* under *System* submenu
4. enter your *password* at the *prompt* (this is the same as your login password if you were the first user created during the Ubuntu install)
5. Click on the *Search button* on the *toolbar* and enter the *Name of the Program* you wish to install and then just click on the *Search button* in the *Search dialog box* that just opened up or just hit *Enter* or *Return* on your keyboard. You should enter everything in *lowercase letters*. (You can also enter words from the description or part of the program name if you don't remember the exact program name. Also, the command for the program is not always the same as the name of the program.)
6. Click on the *Name of the Program/Package* you wish to install, right click on the *Name of the Program* and click *Mark for Installation* from the *popup menu*.
7. Then click on the *Apply button* on the *toolbar* and then click *Apply* on the *pop-up menu*
8. Then click on *Close* from the *pop-up menu* and then choose *File menu* and the *menu item Quit*

You Need

- Kompozer
- gnuhtml2latex
- TeX Live
- Winefish
- latex2rtf
- tex4ht or SimpleTeX4ht
- OpenOffice.org 3.1
- odt2daisy
- Daisy Pipeline
- Ghostscript
- Adobe Reader

Conversions

Note

the word *file* in *file.html*, *file.tex*, *file.rtf*, *file.pdf*, *file.ps* should be replaced with the name of the file you choose.

Kompozer

create document *file.html* in Kompozer

gnuhtml2latex

convert from html to latex with gnuhtml2latex by entering *gnuhtml2latex file.html*

Winefish

clean up formatting with Winefish including taking out the * in headings, then choose *external* and then *PDFLaTeX* to generate PDF

latex2rtf

convert *file.tex* to RTF with latex2rtf by entering *latex2rtf file.tex*

tex4ht or SimpleTeX4ht

convert *file.tex* to ODT with tex4ht by entering *oolatex file.tex*

odt2daisy

download from <http://odt2daisy.sourceforge.net/downloads/>, open downloaded *.zip* file, open *OpenOffice.org* and select *text document* icon from splash menu, choose *tools* menu and then *extension manager* menu item, click on add button, browse to the folder with the same name as the zip files, click on the files ending in *.oxt*, click *ok*, then choose *for all users*, and then restart *OpenOffice.org*

Daisy Pipeline

download from <http://daisymfc.sourceforge.net> and install (only Mac and Windows version work)

if the latex2rtf command works, do the following in OpenOffice.org 3.1

open *file.rtf* document in *OpenOffice.org* 3.1 and save in *Open Document Text* format
change page margins to US Letter with 1 in margins by choosing *format* menu and *page* menu item
add headers of title and footers of page numbers by choosing *insert* menu and *footer* and *header* menu items and selecting *all* option, click on the header and footer then choose *insert* menu, then the *fields* menu item and the options you want to insert
choose *outline numbering* under *tools* and then choose for each *level*, the corresponding number of *heading* with a lowercase *h* under *numbering* drop down list from *heading 1* to *heading 6* and then click *ok*; insert table of contents (under *insert - indexes and tables - indexes and tables*)
select all text manually after the table of contents, choose *tools* menu, *language* menu item, and then choose the *selection*, *paragraph* and *all text* menu items and select *English* option for each menu item
then choose *export as media wiki*, *PDF* with *PDF/A-1* option and *include bookmarks* option, *Export as Daisy XML* with only *use alternate level markup* and *include css* options checked and make sure *language* says *en-US* and click on *export* button, then choose *save as Rich Text Format*, then choose *save as HTML*

if the tex4ht command works, do the following in OpenOffice.org 3.1

open *file.odt* in *OpenOffice.org*
choose *sections* from the *format* menu, click on the *remove* button until there are no sections listed any longer and then click on *ok*
change page margins to US Letter with 1 in margins by choosing *format* menu and *page* menu item
add headers of title and footers of page numbers by choosing *insert* menu and *footer* and *header* menu items and selecting *all* option, click on the header and footer then choose *insert* menu, then the *fields* menu item and the options you want to insert
select all text manually after the table of contents, choose *tools* menu, *language* menu item, and then choose the *selection*, *paragraph* and *all text* menu items and select *English* option for each menu item
then choose *export as media wiki*, *PDF* with *PDF/A-1* option and *include bookmarks* option, *Export as Daisy XML*

with only *use alternate level markup* and *include css* options checked and make sure *language* says *en-US* and click on *export* button, then choose *save as Rich Text Format*

Ghostscript

make sure you have the correct version (8.63 or higher), by entering `gs -v`
the text displayed next should be similar to the following:

GPL Ghostscript 8.63 (2008-08-01)

Copyright (C) 2008 Artifex Software, Inc. All rights reserved.

then, enter the following command:

```
gs -q -dCompatibilityLevel=1.4 -dSubsetFonts=false -dPDFSETTINGS=/prepress -dNOPAUSE -dBATCH  
-sDEVICE=pdfwrite -sOutputFile=final.pdf file.pdf -c '.setpdfwrite'
```

Adobe Reader

open the file *final.pdf* and then select *Properties* from the *File* menu, and under the *Fonts* tab should read something like the following for each font you used

a big red *a* followed by
Font Name (Embedded)
Type: Type 1
Encoding: Custom

The important parts to look for are the word *Embedded* exactly which will be next to the *Font Name* and *Type 1* under the *Type* attribute

Daisy Pipeline

Launch Daisy Pipeline, choose *file* menu, *new* menu item, then *pipeline job* option. Then choose *modify and improve*, *Daisy XML (DTBook)*, *DTBook Fixer*, next, choose input file (the one you exported that ends in *.xml*), and choose output file (different file name), and finally click on the *finish* button.

Choose *file* menu, *new* menu item, then *pipeline job* option. Then choose *create and distribute*, *EPUB*, *EPUB Creator*, next, choose input file (the *fixed one* you exported that ends in *.xml*), and choose output file (different file name, which will end in *.epub*), and finally click on the *finish* button.

Choose *file* menu, *new* menu item, then *pipeline job* option. Then choose *create and distribute*, *XHTML*, *DTBook to XHTML*, next, choose input file (the *fixed one* you exported that ends in *.xml*), and choose output file (different file name, which will end in *.html*), and finally click on the *finish* button.

Choose *run* all menu item from the *run* menu

3.3.5 Vector Graphics File Format Conversions

Background

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How to Enter Commands

You type *commands* (program names) after the *prompt*. Most command are structured like this *program_name -options filename*. To get *exact syntax* for command line programs, enter *man command* or *command --help* with *command* being replaced with the *name of the command*. Replace the word *filename* with the *name of the file* you

wish to convert.

How to Copy and Paste

You can also *copy and then paste* commands from *web pages* or any other format that has selectable text. To so this, you *highlight the command sequence* and then *middle click* after the *prompt* and then click *enter*.

Getting the Programs Needed

How to Add Programs to Ubuntu via Synaptic

1. Login in to the *First Account You Created* during the *Ubuntu Install*
2. Connect to the *Internet*
3. Go to your *Applications menu* and choose *Synaptic Package Manager menu item* under *System* submenu
4. enter your *password* at the *prompt* (this is the same as your login password if you were the first user created during the Ubuntu install)
5. Click on the *Search button* on the *toolbar* and enter the *Name of the Program* you wish to install and then just click on the *Search button* in the *Search dialog box* that just opened up or just hit *Enter* or *Return* on your keyboard. You should enter everything in *lowercase letters*. (You can also enter words from the description or part of the program name if you don't remember the exact program name. Also, the command for the program is not always the same as the name of the program.)
6. Click on the *Name of the Program/Package* you wish to install, right click on the *Name of the Program* and click *Mark for Installation* from the *popup menu*.
7. Then click on the *Apply button* on the *toolbar* and then click *Apply* on the *pop-up menu*
8. Then click on *Close* from the *pop-up menu* and then choose *File menu* and the *menu item Quit*

You Need

- Ghostscript
- PStoEPS
- Scribus
- Inkscape
- uniconverter
- Cenon

pdf2ps

converts from pdf to ghostscript

pstoeps

- converts from postscript to eps
- for Adobe applications

Scribus

- import postscript version
- export svg version
- for web browser version

Inkscape

clean off text on svg

uniconv filename.svg filename.wmf

- convert from svg to wmf
- for most Windows applications

Cenon

- import postscript version
- export dxf version
- for CAD or Technical Illustration programs

Chapter 4

PC Challenges

by Ben Huot

4.1 Microsoft Articles

4.1.1 Why Not Microsoft Office?

Introduction

I stopped using Word within a year because of it crashing so often. That is what interested me in coding (so I could fix the errors) until I found that there was free software available that had over 90 percent of the functionality. And if there was an error, at least I didn't have to pay hundreds of dollars to call Microsoft or for buying it in the first place. Then when OS X came out, I found that you could buy commercial software from small companies, whose software is much cheaper and their support is much better. A large company should be able to support their products much better and have the money to test it in more conditions for errors, yet they don't. I have a strong suspicion that the bigger the company, the bigger the scam. It is a similar problem to how the US can possibly lose a war when they are at least 20 years ahead of the other most advanced Army in the world (of the technology that isn't classified). You can have overwhelming firepower, but if you don't have the intelligence to focus it at the right place and time, you can be defeated by a much smaller force. I would buy products from Microsoft if they would certify that they hadn't coded anything on them. People aren't switching to Linux because of the licenses; they are doing it because Microsoft products don't work right. Microsoft's poor quality makes the whole industry look bad and holds back innovation. Why buy new software or a new computer when it doesn't provide any more real value and the support is still unaffordable?

Price

For \$500 I could either do the following

- Open Microsoft Office files with all formatting or
- Buy a prosumer level 9 MP Sony camera with 20x optical zoom, CMOS sensor, pro lens, and pro processor plus all the software I need including office suite and graphics Suite with 90% of the features of Microsoft and Adobe products

Security

I would open my computer up to the most common viruses. Every document I opened could contain a virus. I could lose all the information on my computer.

Quality

Word has 20,000 features, but does nothing well. I could get any number of word processors that would perform better for as little as \$25 as well as the free one that came with my computer. Word also corrupts your important data, so you lose information. This software made my computer crash all the time. I got rid of it and hardly had any crashes.

Respect

Sending other people files in Microsoft formats says I have no respect for myself for my freedom and for the choices of others. Everybody should have to make the same mistake I did. Everybody else who wants to see your documents with all the formatting has to buy the same program because Microsoft uses its monopoly illegally by not sharing its specifications with others so they have a fair chance of competing.

Prisoners

Microsoft has millions of people's data held hostage in their hidden formats and can at any time demand anything from you for your information, sell it to anyone they want, give out your secrets, and leave you out cold when they decide to no longer support your version.

Examples

Microsoft, despite being on certain standards bodies officially, has done many things to hinder open standards. Hiding behind the technicality that Office Systems uses XML, they hide the fact that this will actually hinder the sharing of the data (as there is no formatting in the XML version as well as the ability to make custom structures and now that they are using DRM it is actually a crime to try to write filters for Office Systems) On the HTML standards front, Microsoft continues to add their own way of formatting in where there are already established methods thereby corrupting standards. On the streaming digital video front everyone agreed on the price of mp4 encoding, including Microsoft, but then Microsoft undercut the price for its exclusive format. These are just a few obvious recent examples.

4.1.2 Making PDFs on Windows for Free

Introduction

PDFs are an open standardized file format that any program can be made to read or write without paying any money and it is controlled by a public standardizing organization that allows anyone to join. The PDF file format is vast, but it was originally designed and does best at making read only print optimized files. Many features were added to PDFs that allow structure, interactivity and multimedia to be added to PDF documents, but the thing that is hardest to add to the PDF format is the ability to edit already created PDFs that aren't well structured. No product can edit every PDF you find. If someone sends you a PDF and wants you to edit it, ask them to send it in the original format it was created in and use the program they did program to modify the file. The reason why PDFs are hard to edit is that you cannot make a document keep the same formatting and still be editable and PDFs were designed to freeze the design.

PDF Creator

Description

Make a PDF from any Windows program that can print from within the print dialog

License

Open Source = free in cost plus not dependent on any company. As long as a programmer has access to source code which is given away freely, the idea/software cannot be killed by Microsoft. Of course no spyware or viruses.

Compatibility

Windows 95 and higher

Website

<http://www.pdfforge.org/products/pdfcreator>

OpenOffice.org 3.0 with Sun PDF Import Extension

Description

Make a PDF from most moderately complex Microsoft Word, Excel, or Powerpoint documents with little need to reformat, and import and then edit some well structured PDFs

License

Open Source = free in cost plus not dependent on any company. As long as a programmer has access to source code which is given away freely, the idea/software cannot be killed by Microsoft. Of course no spyware or viruses.

Compatibility

Windows 2000 SP 2 or higher for latest version

Website

<http://www.openoffice.org/>
<http://extensions.services.openoffice.org/project/pdfimport>

CutePDF Writer

Description

Create, Combine, Rearrange, and add Footers and Header from the print dialog in any Windows application that can print

License

Freeware. No spyware or viruses. Free for as long as the company stays in business.

Compatibility

Windows 98 or higher

Website

<http://www.cutepdf.com/>

Tomahawk PDF

Description

Advanced PDF creator. Can create PDFs from common file formats and even directly edit PDFs.

License

Commercial. You pay to use the software until the company goes out of business. No viruses or spyware.

Compatibility

Windows 95 and higher

Website

<http://www.nativewinds.montana.com/software/tomahawk.html>

Fox it PDF Creator**Description**

Create lean PDFs quickly and efficiently from any Windows application that can print from the print dialog

License

Commercial. You pay to use the software until the company goes out of business. No viruses or spyware.

Compatibility

Windows 2000 and higher

Website

<http://www.foxitsoftware.com/>

Adobe Acrobat Professional, Standard, Elements**Description**

Do anything you can imagine with any PDF and create PDFs from any format and more.

License

Commercial. You pay to use the software until the company goes out of business. No viruses or spyware.

Compatibility

Windows XP and higher

Website

<http://www.adobe.com/products/acrobat>

4.2 Choosing Linux

4.2.1 Why I Don't Use Linux

and Am Happy with a Mac

Introduction

My experience with PCs and Macs can be summed up in the following short story by Tolstoy: "Walk in the Light

while there Still is Light”.

The story is about the early church in the Roman Empire. Two friends grew up studying together and one left to start a cooperative community. The other went on into government and business. They continue to meet by chance as they grow older every decade or so and the friend who went into business was convinced to go with his friend to the coop, but was talked out of it every time by a philosopher. Finally, as an old man, he runs away from the philosopher and joins his friend at the coop. He mourns that he waited his whole life to join the coop, but a fellow worker there says “Walk in the light while there still is light.” While he is still alive he makes the most of his remaining years.

That is the way I feel after seeing the light of the Mac. Remember - it is never too late to give up PCs and go to the Mac.

Why I Started with Linux

- I originally started with Linux because I wanted to get into programming to fix Microsoft Office so it would stop crashing and because I liked the stability and the way UNIX was designed.
- Then I found there were many programs already available that could substitute for and surpass Microsoft Office in terms of features I used and stability and they were mostly free.
- There were also things I could do with Linux for free which would cost thousands of dollars or more for comparable capabilities. These include databases, networking, and 3d modeling.

Why I Changed from Linux

- I found that I was primarily a writer and artist and that I preferred to create, rather than fix problems. This is what networking is mostly about - fixing problems.
- I discovered that databases were not the solution for my web site. I found that organizing my site well was better than having a search engine and now that I use one in one of my sections it doesn't require a database - just data. (The original computer was designed for an insurance company, but once they organized themselves enough to be able to enter the data, they realized they didn't need a computer.)
- 3d modeling has not to come down to the commodity market like desktop publishing and there are not open web standards that have universal usage like there are for documents or 2d pictures.

Why I Went Back to Windows

- I wasn't able to run my Windows Bible software in the WINE Windows emulation program. I wanted to learn how to use vector drawing programs and there were none that could do what you could do with Windows.
- I then found that I could run Linux programs on Windows, so I already felt I was supporting Open Source.

Why I Went to Mac OS X

- Apple did UNIX right.
- I was very impressed by the reviews of OS X and had a lot of fun working with my mom's eMac.
- Everything worked correctly without having to fix things.
- The graphics were phenomenal.
- There were programs available for everything I wanted to do - fully featured and they didn't cost that much.
- There was also technical support if I ran into minor glitches. No one made fun of me.

Before Switching Back to Linux, I am Waiting for

- More Commercial Technical Support - this free support that you get from mailing lists and newsgroups are mean spirited and rude. This very well may be the case in Windows support groups too. The difference is with Windows there is plenty of commercial support.
- More Graphics Design programs - these would likely be commercial as open source programmers don't seem to use graphic design programs or the ones they create are so hard to use that you have to think like an engineer to use them.

4.2.2 Why Desktop Linux Again?

Reasons for Leaving Linux

My first reason for leaving Linux was the lack of commercial support. There are now a number of commercial options available for support from several experienced and reputable companies:

For High End systems

- Penguin Computing
- Sun Microsystems

For Standard Powered computers

Ubuntu

- simple and clear installation and configuration
- latest software
- vast software library
- easy upgrading to latest versions
- I recommend Comcast Cable Internet

My second reason for leaving Linux was lack of graphic design applications on the same level as intermediate level commercial programs. There are now graphic design application for all the major areas that I use for my creations that:

Match the commercial programs in terms of:

- capabilities
- quality results
- compatibility

Excel in the areas of:

- cost
- longevity
- development rate

Here are some examples:

Kompozer and Bluefish for web design

Text Processing

- Kompozer and OpenOffice.org for word processing
- Winefish and LaTeX for long documents/books

Graphic Design

- Digikam for downloading photos, organizing them from the digital camera
- Gimp for web graphics, photo editing, and effects
- Inkscape and Xara Xtreme for (scalable) vector drawing

Publishing

- gLabels Label Editor for variety of print publications
- gFTP for uploading to websites
- K3B for CD-ROM burning

Gedit or Kate for text file editing

Also useful as well for graphic designers as well as most users there are:

Internet

Firefox, Opera (commercial/free), and Konqueror for web browsing, with:

- Flash Player (commercial/free)
- Evince (comes with Gnome) for viewing PDFs, DjVu, and DVI
- RealPlayer or Helix Player for playing MP3s and Oggs (commercial/free)
- Java

Other Internet

- Archiver for creating and extracting files to/from archives (.zip, .tar.gz, or tar.bz2)
- Thunderbird for email
- Evolution for calendars
- Weather applet in Gnome or KDE taskbar/dock

Others

- Calculator
- Bibletime or Gnomesword for bible study
- HFS Plus, HFS utils, (and xHFS included) for moving files from the Mac platform

Crossover Office for Windows compatibility minus the malware for testing websites on Windows only programs

- Internet Explorer 7
- Adobe Acrobat Reader 5
- Foxit Reader
- Sumatra PDF reader

Main Reasons for Returning to Linux

Longevity of content while still keeping it in an editable format

This is the most important part. As an artist it is not just the cost of your tools that matters, but what is most important is that your creation produces the most inspiration and enjoyment. And part of having the most impact is that the creation lasts the longest and others can enjoy it in the future. It would be even better yet, if others could build on it and restore it to its original glory. On other platforms you may be able to save part of your creation into a content that will survive the test of time, but you will not be able to retain all the information and to add to it they will have to use the same tools you have. Most importantly when you use traditional tools, others have to pay, many likely more than they can afford, to access all of your creation. And finally the vendor that sold you your tools will likely go under some time, the bigger they are - the harder they fall, and then you will have lost part of your creation forever.

- I can produce more types of content than most others can for less than 20% of the cost of using traditional applications.
- Let me repeat: I save over 80% off of what graphic designers using traditional tools have to pay and I can do more.
- Most graphic designers spend \$5,000 total on hardware and software combined.
- With the Mac and using products from independent vendors, I did even more for only \$2,500 in total hardware and software costs.
- With Linux and open source applications, I spent \$850 on hardware and software combined and I can do more than I could with my Mac.
- And I get more support for Linux than I did for my Mac at no extra charge.
- Neither of these figures include upgrades. The cost of major supported Linux upgrades, one click installation of 3rd party products is free. The cost of keeping all your traditional software up to date is at least several hundred dollars a year and is not necessarily supported at that.

Why I Prefer Linux over Mac OS X

Apple reasons:

- The price of upgrades even for just the consumer programs Apple makes is now up to almost \$300 a year (OS X, iLife, and iWork).
- Apple seems to want to make a major transition in either hardware, software or both every 5 years, which make the old products obsolete a few years after that not just because of features but because of compatibility and changes in the fundamental design.
- Apple's major OS releases have been way to buggy to be worth what they cost when they are released.

Macintosh Developer reasons:

- Developers don't want to support more than 2 at the most versions of Mac OS X.

- Developers often take 6 months after the new system is released and preloaded onto Macintosh computers to make their products ready for the new system.
- To get support for new Mac OS X versions, it often requires a paid upgrade.

Linux reasons:

- Linux is ready for prime time.
- Programs are always available for free download or a few dollars on CD.
- Linux runs faster on the same hardware specifications, so even lower powered computers that can barely run OS X can perform the same tasks very fast with Linux.
- When you install Linux, you can install up to thousands of applications at once and they don't ever require any authorization codes.
- It is much easier to compile, install, and run X-Windows based applications (most graphical Open Source programs are) on Linux than on Mac OS X, and they also run much faster on Linux.
- If one distribution of Linux doesn't work, there are many other versions to choose from.
- And Linux doesn't have any viruses or spy ware either.
- Monitor is sold separate from machine on almost all models (except laptops), so you don't have to buy a new monitor with every PC upgrade.

What Linux Doesn't Do that the Mac does

- You can make video DVDs and arrange and record music on the Mac pretty easily and inexpensively. I have not found a way to do either of these on Linux even with commercial software.
- Some of the things that you can do with Photoshop Elements you can't with Gimp like layer styles.
- There are no graphical style sheet editors that are wizard and template driven, have live preview, and and check for support of styles on many different browsers instantly on Linux
- Linux does not have some of the things new to the latest version of OS X like the lightning fast non-destructive image effects and lightning fast spotlight searches.
- Things new to PCs that require new hardware like WiFi are not supported right away. Wireless still doesn't have the best support under Linux.
- There is much more support for Macs amongst Internet Service Providers than there is for Linux, although Linux will work with most those providers unless you have to use a special dialer. Usually you can keep a Mac on hand and then you can prove to them it doesn't work with it either and it is not your fault - it is their server that went down or someone cut one of the cables down the street. I have never had a problem that was traced back to my Mac or Linux. But if you want them to install or there is some sort of authorization required it is a good to keep a Mac on hand. And you can buy a Mac for just \$600 too. You can now run Linux and Mac OS X on the same machine. If you have a problem with an Internet connection after an update, try rebooting first as that is the only thing I have had to do if my connection wasn't working after an update.

Linux Box Specifications

Computer

- Intel Celeron D 340 (2.93 GHz, 533 MHz bus, 256 KB cache)
- 512 MB RAM (DDR 333 MHz PC 2700)
- 80 GB hard drive (7200 RPM)
- 16x DVD+/-RW Dual Layer
- network adapter (10/100 MB/s)
- 3 button scroll mouse
- Linspire 5.0 (Linux) preloaded
- 3 years parts, labor, on site warranty
- 19" Acer LCD monitor with VGA hookups
- 1 GB SanDisk Micro Cruiser USB flash drive

I now run Linux on my iMac with Vmware Fusion instead

4.3 Linux Applications

4.3.1 Linspire Product Reviews

Good Reviews

BibleTime

Neat Bible program. Has all the features of many of the highly rated commercial programs like Logos and Accordance but it is available (by different names/graphical interfaces) for Windows, Mac OS X, and Linux. The one downside is that it doesn't contain copyrighted titles like the NIV, but fortunately most of the best works existed before copyright laws were in place or have been done by groups without big publishing houses financing them so they didn't copyright their work. Also the Linux version allows you to download the books without having to go to your browser (from within the program).

Cinepaint

This program was designed from Gimp code to be a video editor for the Movie Industry, but I haven't figured out how to use it that way, but now that they included brushes from Creative Mac, you can use it very much like Painter.

DebugMode Wink

This is not an open source program. It is freeware for anyone, but you cannot distribute it and there is no access to the source code, so if this company gets bought out or goes under all we will have is the binary, so we won't be able to compile for different platforms or future versions of Linux. Otherwise it is a great program. It is kind of like a \$300 program for Linux called Viewlet Builder.

Digikam

I recommend Digikam for downloading from a digital camera and organizing photos - to get them out of Digikam, just select the ones you want to export and drag and drop them to another folder. You have to add a camera before it will allow you to import from it.

Flash 7 PlugIn

This Flash plug-in works great on any site I have used that needs Flash 7. I think people are running into sites that require Internet Explorer or Netscape to function and are hard coded in. If a developer is dumb enough to limit itself to only Windows/Internet Explorer users, then I would prefer not to use their websites. Check out my site which requires Flash 7 and works perfectly with this plug in.

GFTP

I wouldn't call it easy to set up, but it is fully featured and fairly straight forward to operate once you have configured it.

Good Weather

Great application for seeing an entire forecast on the desktop. Just the right size too. 3 downsides though - it is see through, so it is hard to read through dark wallpapers, it is unclear on how to get the code for the city - I think it is the zip code, and you have to right click and select move to get it to move.

HTMLDoc

I started using this product in 1999. The really unusual and cool thing about this product is in how it creates PDFs. You make an HTML page with heading 1, subheading 2, subsubheading 3 and it will create bookmarks in the side panel of the PDF file as well as a table of contents and title page. It also supports lists, tables, images, and links. If you want to link from one part of the document to another you can use name anchors and then link to them and they

will work within the document. You can also link to pages not in document. I recommend using one long HTML page as that is the easiest way to do it. You can also save all your settings in a file, so you just open that and all your settings are saved for that project. This product is also available for Mac OS X and Windows. It uses the Fast and Light Toolkit for its interface so it is very memory efficient and fast.

Inkscape SVG Vector Illustrator

Great intermediate level vector drawing program. Not quite as many features as Illustrator or Freehand but for most uses more than enough features. Very high quality results. You can export to pure SVG to import into Scribus for conversion into a PDF. Also directly exports to PNG.

Jalbum

For creating photo galleries I recommend Jalbum which could handle hundreds of files at once and although it is a Java application it worked very fast. It had many beautiful and very customizable themes which displayed perfectly at varying resolutions. You can even choose another language other than your default one for the gallery with some templates. You would want to specify 100% quality jpeg compression too as it defaults to 75%.

Komics

A great little application and great selection of comics, but when I first loaded this up it loaded 33 instances of the Gimp -one for each comic. Once I set my image files especially gif to open with Kview by default it worked fine. You have to launch it and then right click on it in your system tray and I recommend just selecting one comic rather than double clicking on the icon and having it open all of them at once.

Nautilus

I use Nautilus CD creator to burn data CDs and DVD+Rs. You just open two windows - one with the source directory and the other the CD creator and then drag and drop and then choose burn disc. It really is that easy. If you don't want to reuse the same files for the next burn, uncheck that options when the dialog pops up.

Nvu

I am very impressed by what Linspire was able to do with Netscape Composer as it was very difficult to use as it would link everything in absolutely, so when you saw your web page online it looked fine from your computer, but not anyone else's. This NVU is a totally different beast. It can handle even very complex stylesheets correctly and you can do everything through graphical menus as well as edit the code by hand when you want to. The one downside is that its stylesheet editor is not easy to use, so I would design your stylesheets separately.

Opera

I not only use Opera for testing my website to check it with another browser, but because Opera renders the HTML more faithfully according to what the code actually says than the Mozilla-based browsers do. In other words, if you screw up your code, Firefox will usually figure out what you were trying to do, but not with Opera. This is how Opera helps me as a web designer to develop better code.

Quanta Plus

I am very pleased with the capabilities of this HTML editor. The downsides are that its inline preview looks very ugly and it doesn't have the right schema built in for WML for web enabled cell phones. Also its image map editor does not create all the code you need to get the image map to work through a graphical interface/dialog. You may just want to do imagemaps in Gimp. Also when you load Quanta Plus again it loads a separate instance of the same files so you can end up with two versions of the same file - it can be very confusing and a mess to clean up.

QtFpro Anti Virus

I am very happy with QtFpro after trying this one and ClamAV. I like it much better as you have all the options and thereby control you need. And it searched my whole hard drive in 11 minutes. It is also rated much better at finding and eliminating viruses than KlamAV. Remember it takes a number of very stupid decisions to get a Linux virus and

they are not circulating in the wild either, but the reason to have anti virus software on Linux is to help out your Windows using friends who are vulnerable to virus attacks.

Spreadsheet Pro/Kspread

I don't use Spreadsheets very often and am not that demanding of them, but I was pleased at how easy it was to use. And I was able to arrange rows alphabetically, after entering them in out of order, under its sort command and I was able to export it with clean HTML markup.

Superkaramba Liquid Kalendar

Nice little widget - like dashboard on Mac OS X. Very convenient and useful.

Thunderbird

Great easy to use email client with the features most people use like HTML mail and junk mail controls from the makers of Firefox. Has an easy to use and attractive interface and is available for Linux, Windows, and Mac OS X.

Write Pro/Kword

I have had trouble with OpenOffice.org crashing and bringing down my desktop when just doing routine editing, so I tried Kword hesitantly as I had used it a number of years ago and then it couldn't open its own file formats. I was *very impressed* this time. Not only was it very stable, but I was able to use it as a regular word processor by choosing the text document template and it has a print to PDF function like in OS X and can be saved to numerous formats including Palm Doc format and WML for web enabled cell phones. You can also use it like a page layout editor too.

Ximian Evolution

Great product like Outlook without the crashes and malware. I use it for basic calendar functions only. If you don't like its email abilities, try Thunderbird.

Bad Reviews

Gnome Desktop Environment

Hosed my installation. Had to re-install. I think it is Debian specific.

Lphoto

I couldn't even export 80 photos to a gallery. It kept on crashing on me. The Flash template would never load my images. Flash Player works fine for me otherwise and I have the latest version.

Lsongs

Nice interface but the audio playback stinks. I played a brand new CD in it and it sounded like it was an old scratched vinyl CD. The CD played fine in Amarok and my Panasonic MP3/CD player. My sound card is fully supported by Linux as I got my computer pre-installed with Linspire. Go with Amarok - you will be much happier. I do like the Internet radio feature which ironically sounded perfect.

Passepartout

You have to create a separate XML file for each block of text you want to have in the document. You cannot enter text in the text boxes as with Scribus or even insert a plain text file into the frame. Also there is no way to create a PDF of your file within the program or export it in any standard format. The only way you can get it out of its own format for others to read is to print it out on paper or print to a Postscript File.

4.3.2 Installing Popular Freeware on Ubuntu

Now you can get some of these programs either in *Synaptic* or via *Add/Remove Programs*, but to get the latest or a different version, do the following.

Flash Player

I found the best way to install the Flash Player from Adobe is to

1. Download the *.tar.gz* for *Flash Player* package from *Adobe.com*.
2. Set your file manager to *view hidden files* in order to be able to view the *.mozilla* directory (which is in the top level of your *home* folder).
3. Make a *plugins* directory inside the *.mozilla* directory.
4. Copy the *flashplayer.xpt* and *libflashplayer.so* files (inside the archive) to the new folder.
5. To see if you have installed it correctly, type in *about:plugins* into your *address bar* of *Firefox* and hit *enter*, you should see the *Shockwave Flash* listed with the file extension association *.swf*.

Adobe Reader

1. Download the *.tar.gz* file for *Adobe Reader* from *Adobe.com*.
2. Extract the files to the *desktop*.
3. Open the *terminal* from the *accessories sub menu* in the *Ubuntu applications menu*.
4. After you launch the *terminal*, type *cd Desktop* and then hit *enter* if that is where you extracted the files to.
5. Then type in *cd AdobeReader* and then hit *enter* again.
6. Then type in *./INSTALL* and then hit *enter*.
7. Then just type in *y* if it is listed as an option in parenthesis for that particular question and if not, just hit *enter*. Proceed in this manner until it stops asking you questions.
8. When you see your *user name* printed out again, then you can close the *terminal*.
9. You can check and see if it is installed correctly by typing in *about:plugins* in the *address bar* of *Firefox*. If it says *Adobe Reader* and then has an association listed with *.pdf*, then you are set up correctly.

Real Player

1. Download the *.bin* file from the *Real.com* website to your *Desktop* directory.
2. Change the permissions on the *.bin* file to *execute* for your user.
3. Open the *terminal* from the *accessories sub menu* in the *Ubuntu applications menu*.
4. Then type in *cd Desktop* and then hit *enter*.
5. Then follow the prompts as with *Adobe Reader*. When it asks you where to put *Real Player*, I chose */usr/local/RealPlayer*. On the rest, you either hit *y* for yes, or just hit *enter*, depending on the question. When you see your *user name* printed out again, then you can close the *terminal*.
6. You can check and see if it is installed correctly by typing in *about:plugins* in the *address bar* of *Firefox*. If it says *Helix DNA plugin* and then has an association listed with *.rpm*, then you are set up correctly.

Java

Java comes with Ubuntu by default as far as I can tell, but can also be downloaded via *Synaptic* - get the *Java Common* package.

4.3.3 Getting VMware Player Set Up on Ubuntu

do not upgrade kernel even when prompted to

if you plan on doing so, do not install via the *synaptic multiverse repository*

- Install the *linux headers*, *linux headers* (insert kernel version here), and *gcc* via *Synaptic*
- download the *.tar.gz* file from the *vmware.com* website
- compile from source by running the installer under *sudo*

Installing Vmware Player (the easy way)

1. choose *Synaptic Package Manger* from the *programs menu*
2. choose *repositories* from the *settings menu* of *Synaptic*
3. make sure *all the repositories with Ubuntu in the name* are checked
4. scroll down the list and then click on the one labeled *Ubuntu* with *attribute universe and binary*, then click *add* and check the *multiverse attribute* and then click *add*
5. click the *search button*, type in *vmware*, and then hit *search*
6. right click on *vmware-player* and choose *mark for installation*
7. hit the *apply button*, hit another *apply button*, then hit the *close button*

Downloading Virtual Appliance

1. Go to www.vmware.com in your web browser
2. choose *free virtualization* from the *products menu*
3. click *access the directory* under *virtual appliance*
4. choose *desktop user* or *advanced user* from the *combo box* to the *far right*
5. click on the desired distribution and follow instructions
6. write down the user name and password especially the root password and then bookmark the website you downloaded it from
7. After downloading, *double click* to open up the *zip archive*, then click on *extract*

Running the Virtual Appliance

1. Choose *Vmware Player* from *system submenu* of *main menu*
2. browse to where you put the expanded archive, and select the *.vmx* file, and click the *open button*
3. from the *ethernet button* on the top, right click and choose *NAT*
4. to get the mouse to work in the virtual machine, click in *desktop within desktop*
5. to get the mouse to work in main OS, hold down the *control button* and hit *alt button*

Chapter 5

Apple Challenges

by Ben Huot

5.1 Mac Articles

5.1.1 Why Macs Cost More than Cheap PCs

(They Include More Powerful Features)

Lowest End Mac which is equivalent to a mid-range PC now costs \$599

In Stock and Functional at Base Price

There are Mac Mini machines in stock and available in the lowest cost model which you can receive at that price and are fully functional. Dell has only a couple computers in stock and available at the the prices they claim you can get one for. Good luck competing with all the thousands of other customers for those couple PCs. And they still keep on pushing you to add on features which before you reach what the Mac has you will be paying more money.

One Version of Industrial Strength OS

With bargain PCs you only get a crippled OS. Apple puts the same 64 bit OS that runs their servers for millions of users on their desktop computers. There are thousands of easy to use, advanced, and inexpensive applications available for the current version of Mac OS X, as well as many Mac only applications that cost hundreds less and do design work that isn't possible on a PC and are of cinema quality. You can run many applications at one time, without any crashes. There are no viruses or spyware circulating on the Internet (that will install without you deliberately doing so manually). Mac OS X is easy to fix and does not require extra work to make it secure or fully functional. You can also find any file by what words are in that file instantly.

Runs Windows Better than on a PC

Apple now uses Intel processors in all their consumer machines models, instead of PowerPC which will run a standard Windows XP Home or Pro or Vista on the same machine (the Mac), at the full speed of the machine, with no limitations and you can run them simultaneously, share files, and be able to run any software which can run on Windows and your Mac keeps its full warranty, even after installing Windows. You can run Windows at exactly the same speed as on the other few PCs, with as fast a processor as the Macs come with.

Built in Network Card for High Speed Internet and Networking

All Macs come with a network card for high speed Internet access and for networking with other computers in your home or office. Macs easily integrate into Windows networks and even auto-detect it while still being secure. Bargain PCs do not come with the capability to network, or do high speed Internet and the modems they have for slow Internet access are missing basic components and instead use software to perform basic functions, so your whole computer locks up, when you connect to the Internet. Mac OS X includes a heavy duty web browser, email client, calendaring, and address book that work in any application. Mac OS X also ships with Adobe Flash Player. There are actually more choices in web browsers for Mac OS X, than for any other OS.

Backups

You can backup your music and your photos to a CD-ROM with one click as well as make CD-ROMs of other data by drag and drop onto the disc and then choosing burn disc from the file menu. You can also backup data automatically with Mac OS 10.5. All you have to do is plug in a USB hard drive. You can get any version of any file ever created, through a point and click and instant search graphical interface, after the external hard drive is plugged in.

Multimedia

Macs come with a DVD player and DVD- ROM support, so you will be able to install programs that come on DVD-ROM and play DVDs on your Mac. Macs also come with decent microphone, speakers, and sound card as well as the leading programs to organize photos, movies, TV shows, music, audio books, podcasts, and Internet radio. Macs come with software that allow you to create your own music, movies, podcasts, blogs, and publish photos, movies, and songs to your website or to iPod, iPhone, and Apple TV with a few clicks.

Graphics Support

Mac OS X comes with PDF viewing and markup software, PDF creation from any application that can print, and can turn any EPS or Postscript file into a PDF by double clicking on it. You can compress PDFs with one click as well as make industry standard PDF/X-3s. Digital tablets work in any application. Mac OS X gives small developers the ability to create graphics that have cinema quality graphics.

Programmers Dream

OS X includes Java including the developer suite, the Xcode world class programming software for creating Mac and iPhone applications, and X-Windows for running Open Source programs that don't have a complete Mac version available. Mac OS X has optimized access for any Mac application for audio, graphics and video effects, 3d, animations, sql databases, instant search, instant incremental backup, and many more Mac only features that rival anything Adobe can come up with. Cocoa is what Java and .Net are a cheap rip off of. A developer who programmed in .Net and considered an expert spent 1/3 the time developing an application with Xcode, even though he had never used it before. Small developers can have the same potential market for their applications when they make Mac only software as they would making Windows only software. They could either have 50% of the Mac market or 2% of the PC market.

Technical Support

Apple support is rated higher than any PC maker and you can talk to Americans who speak without heavy accents, so you can understand what they are saying. This is something you can not do with even the so called superior PC makers. Support only costs \$150 for consumer models for 3 years and they cover the hardware, software, and the OS, so there is no passing the buck. This support includes telephone support, on-site repair, parts, and labor warranty. You also have up to one year to pay for the warranty and all Macs ship with a 1 year warranty for free, that covers everything but telephone support. To talk to Microsoft for one incident, it costs \$200 and they will blame your hardware manufacturer which will blame third party software which will blame Microsoft and the vicious cycle has just began. You get free shipping with Apple products over \$100. Dell charges you \$100 to ship its computers.

Statistics

- Macs have risen from 2% market share to 10% US in just a few years
- Apple makes more money on selling computers than iPods
- The Apple only browser Safari, is the third most common browser
- Home Users - 20% have Macs
- Internet Users - 10% have Macs
- Adobe Sales - 25% are for Macs and that is including Adobe Acrobat
- At many Ivy League schools, the students have more Macs than PCs
- New Apple Computer Purchases - 50% are former PC users and new to Macs
- Digital Artists and Graphic Designers - over 75% have Macs
- All iPhones and iPod Touches run a simplified version of Mac OS X

5.1.2 Basic Design Tools

used in production, design, and publication of Benjamin-Newton network on my Mac

The following are the current tools I use to complete my designs - primarily web based. I use PDF, DjVu, JPEG, PNG, MP3, OGG, HTML, CSS, and Flash to publish my work on the web.

Software

- My text books were designed with **TeXShop** and **LaTeX** (pdftex)
- I designed my graphics illustrations books with **Inkscape** and **Scribus**.
- My *Book of Lists* was designed with **HTMLdoc**.
- My book covers were designed with **Xara Xtreme** or **Inkscape** and **Pages**.
- My handouts were done with **Toon Boom Studio Express** and **Apple's Pages**.
- For my website, I created my stylesheets with **Stylemaster**, most HTML pages with **Komposer**, and for uploading content, I use **Filezilla**.
- I create my graphics with many different programs, including: **Toon Boom Studio Express**, **Painter**, **Art Text**, **Photoshop Elements**, **Carrara 3d Express**
- I manage my photos and other graphics and create web galleries mostly with **iPhoto** and **Jalbum**.
- My Flash animations are done with with **Toon Boom Studio Express** or **BannerZest Pro**

- My music was designed with **Garageband**, **iTunes**, and **Quicktime Pro**.
- I use **Quicktime Pro** for video and audio format conversions.
- Bible verses quoted from **MacSword**

Hardware

- 2.4 Ghz Intel Core 2 Duo iMac with 4 GB of RAM and 250 GB hard drive and DVD burner \$1400
- Sony Cybershot DSC-HX1 - \$500
 - 9 MP
 - 20X Optical Zoom
 - CMOS sensor
 - USB 2.0
- Olympus WS-300M USB digital voice recorder - \$100
- Lacie D2 Hard Drive Extreme Triple Interface - \$120
 - 160 GB
 - USB 2.0, Firewire 400, Firewire 800
 - 7200 RPM
 - 8 MB cache
- Brother HL-2040 USB monochrome laser printer - \$120

Rationale

The major brands of software are harder to use and have many bugs. They require a much larger financial commitment all at once. You cannot buy just what you need. It is a one size fits all approach.

Paying more for an application does not make it better. While you can usually return computer hardware (tangible devices and components) with receipt within a month without problems or longer if there is a manufacturing deformity and it is recalled, with software (the stuff you download off the web or buy on a CD-ROM) it is very hard to return for any reason because the software company usually believes that you are asking for a refund to scam them while keeping the product on your computer.

5.1.3 How to Buy Mac Hardware

Know What You're Buying it For

If you're buying for web design, you can get by with cheaper hardware, for instance. If you are only printing out in black and white or just text you can save money too. You will also often times need different products. Laser printers print out text sharper and have cheaper volume printing costs, but for photos and computer drawings, inkjets do much better.

Know How Much You are Willing to Pay for a Given Quality

If you only have \$400 to spend on a digital camera, there is no point in finding out how good the ones are that cost more. If you need a 4 megapixel camera, don't buy one until you have enough money saved.

Mac OS X Compatibility

Make sure it says "built for OS X and universal". OS 9 only compatible drivers are not going to work.

Good Name Brands

Buy a name brand that is good quality and does a good job of supporting Macs. Apple, Canon, Epson, LaCie, Lexmark, and Wacom are good examples.

Try it Out First

If your buying something that is on display, try it out first. I found drawings with colored gradients are the most strenuous on printers (my still life drawings are good examples) and digital cameras can almost always get good enough pictures for email or web, but not all print out so well.

Good Deals

Get good deals on hardware at Apples Hot Deals website (updated weekly). These are the leading resellers of Mac hardware and software (although buying from the manufacturer is not a bad idea too. Be sure to read up on the product specifications first and be careful about buying software as it is almost impossible to return.)

iLife integration

Try to get one that integrates with iLife (for digital cameras and portable audio players)

5.2 Apple iPad Tablet and iPod Touch

5.2.1 General Apple iPad Information

What is an Apple iPad Tablet?

Apple has released the first generation of a new tablet device that looks a lot like a giant iPhone or iPod Touch (without the phone). It has a 10 inch screen, inch thick, 1.5 lbs, battery lasts 10 hours, and sells for \$500. An iPad runs most of the same underlying software as the iPhone and iPod Touch, although the interface is evolved for the larger screen. You use your fingers to navigate the device, like the iPhone and iPod Touch. But there are some differences in software availability and the resolution and size of the screen changes things as well.

Basic Information about the iPad

It connects via WiFi, so it will work on any wireless network like a hotspot, a wireless network at a school or office, and on your home wireless network (without any additional software, hardware, services, or contracts). I live in a medium size city and there are about 10 free hotspots, within a couple blocks of my apartment, that work perfectly, with my iPad. The battery lasts forever, as the 10 hour battery life is measured, for playing 10 hours of video. The machine turns on and off instantly. It is 10x easier to use than any other computer you have used, even if you are a Mac user.

5.2.2 Best of iPad

Apps

Low Price of Apps

- wide variety including hobby, specialty, and academic apps
- more games than for every other platform combined
- most complex and advanced apps only \$5-10 maximum
- most regular apps free-\$2
- Google only offers simple widget-like apps

One Click App and Free OS Install and Update

- Google OS updates may or may not be available
- Google OS updates may or may not be current

All Apps Tested by Apple

- no viruses
- no spyware

- no pirated media
- no porn
- unlike Google stores

Apple Keeps Your Info Confidential

- Apple makes money off the hardware
- they don't have to sell your info, to make money, like Google

All Apps in One Place

- plus music
- plus movies
- plus TV shows
- plus rentals
- plus e-books
- plus audiobooks
- unlike with the many Google stores

Widest Selection of Apps

- Google doesn't even have an OS for tablets
- Google doesn't even have a store for tablets

Don't Need Credit Card

- to buy anything on iTunes store including apps, e-books, audiobooks, music, movies, rentals
- gift cards can be bought, as low as \$15, at most grocery stores
- unlike Google

Easy iTunes backup

- you can back up yourself
- you don't depend on a third party service
- unlike Google

Hardware

Battery Life

- 10 hours is for playing video non-stop
- other uses will extend the battery life much further

Speed, Responsiveness (compared to any other general purpose device) Ease of Use (compared to any other general purpose device)

Reliability/Durability of Data Storage

- compared to PC laptops
- compared to pre-Air Mac laptops
- compared to netbooks

Lightweight

- compared to netbooks
- compared to full size e-book readers

Perfect Size

- compared to competing 7 inch tablets
- compared to netbooks

Bigger Screen for Given Size (compared to devices with built in hardware keyboards and buttons)

Screen Quality

- compared to non-Mac computers
- compared to any other general purpose devices

Low Price

- compared to Mac laptops

- compared to full size Amazon Kindle
- Storage Space (compared to e-book readers)

Other

- Technical Support
- Integration with other Apple products
- Warranty

Best Uses of iPads

Playing Instruments (you can't play more than one key of a piano, etc. without a touch screen)

Reading Books

- being able to buy from any e-book store (all e-book readers only work with one major e-book distributor)
- the ability to read almost any e-book format, with the appropriate free app, unlike e-book readers
- depending on app used, built in support for PDFs, unlike many e-book readers
- larger screen size than e-book readers
- ability to adjust brightness settings
- and for reading in bed, due to backlighting, unlike e-book readers

Maps

- auto-updating
- work offline

Legal and Medical References

- auto-updating
- work offline

Bible Study

- auto-updating
- work offline

Reading Magazines

- auto-updating
- work offline

Browsing in Website Apps

- better designed than their websites
- make better use of space than their websites
- more familiar interface than their websites

Reading PDFs (you can manage PDFs from iTunes and the Apple iBooks program)

Playing Games (more games than for every other platform combined)

Worst Uses

- Touch Typing
- Opening 100 MB plus PDFs (low amount of RAM)
- Playing Audio in Public (too big for headphones)
- Not Enough Space for Video
- Not Enough Space for Garageband like Apps
- Comic Books (hard to use free apps)
- Text Editor (immaturity of iPad text editors)

5.2.3 Purchasing Advice and What to Wait For

Lack of Space

I would recommend buying an iPad, for most users, provided you are aware of several factors, that might make it best for you to wait until Summer 2012 or 2013, to buy the iPad. The biggest limiting factor of the iPad is that it is small on disk space. 16 GB is not that big, when it comes to storing audio and applications. When you throw in video, the lack of disk space becomes a major issue. The iPad disk space will likely double, at least once a year, for the foreseeable future. If you want to get an idea about how much space typical applications take up - all my applications together (most are listed in this directory) take up almost 8 GB (but that includes a tremendous amount of information that I can access without being connected to the Internet). The cost for the all the recommended apps in all categories is about \$200 which averages about \$2 an application.

Recommended Accessories

It seems now that you can get double the disk space, for \$100 more - I recommend this, as well as buying the 2 year AppleCare warranty, and a hard case. I have the dockable keyboard but rarely use it. The digital pen may work well for some, but I would wait to see what Apple recommends, in this department, as it might damage the screen. Also try drawing with your finger, because it is much easier than you most people think it is, as the sensor is very precise, and you can draw fine lines, with your finger.

Wait for More Software Support

The next issue is the lack of Flash Player for the iPad: by 2012-2013 most websites will not be using Flash or there will be a Flash Player for iPad - this will be a painful transition for many web masters and content providers, but it will be resolved in the next few years. Another thing that is lacking which matters to some people is the lack of Microsoft Office for the iPad. If Microsoft does not release a Microsoft Office for the iPad, then some other company will provide a solution - maybe IBM, Oracle, Google, or a small company. This issue will likely be resolved in a few years as well.

iPad Does Not Replace Your Computer

The final thing to realize is that the iPad is not designed to replace your computer. You may find yourself using your iPad more than your computer or feel that it replaces your iPod Touch, your dedicated e-book reader, your game console, your iPad, net book, and even your laptop, but you will need a Mac or Windows PC computer (desktop, laptop, or even net book), to back up and sync your files with your iPad. This may change in the next few years as well.

5.2.4 iPad Compared to iPod Touch

iPhone vs. iPod Touch

The big difference between an iPhone and an iPod Touch is that the iPod Touch does not require an expensive cell phone data plan (or committing to either AT&T or Verizon, for several years) and so is much cheaper than the iPhone. This also means that the iPod Touch will only work at Wifi hot spots or your work or home wireless Internet set up. For most other uses they are the same. There are some subtle differences, like GPS working much better on the iPhone, as well as the iPhone having a bigger and better camera, for shooting video or taking pictures. When I refer to the iPhone being able to do something, I usually am referring to both the iPod Touch and the iPhone, unless stated otherwise.

iPad vs. iPhone or iPod Touch

The iPad is often said to be a big iPhone, without the phone, or a big iPod touch, but there are some very significant differences. One of the things people often mistake is that they think, that computing power is relative to size, which, at least, in this case, is very misleading. Many of the other smart phone manufacturers were shocked when Apple introduced the iPhone, more because of how many things it could do, that they had a hard time believing was possible, with the given hardware.

Bigger does not Mean Better

When people bought the iPhone and took it apart, and then later did the same thing with the iPad, they found that the secret of its power is the battery. Not only does Apple develop its own battery designs, but was the first, to put together a very tiny processor, with a huge battery. The thing, that takes the most battery power, on an iPhone or iPad is the screen. So, although the iPad is much bigger, than the iPhone or the iPod touch, is is not any more powerful. In fact, the current iPod touch is significantly more powerful, than the current iPad, because it was released 6 months later.

Optimal uses Different

The major thing, that differentiates the iPad and the iPhone, is that the difference in sizes make the optimal use of each entirely different. The big downside to the iPad is that it is too big, to use with headphones, so that it makes a poor iPod. The big upside of the of the iPad is that its size allows, you to do things, like: word processing, web browsing, and other more advanced content creation like creating music, drawing, or editing photos.

Different Sizes for Different uses

Both games and and photos look and work well on both. Video is better on the iPad, because of its size and the iPhone works well, at giving a quick glance of information, like a devotional or a daily quote. Another thing many people, who have never used an iPad, don't realize is that you can run most any iPhone app on the iPad, but you won't want to, as it is really tiny, or, if you enlarge it, very blurry. The best thing, about the current iPhone, is the screen, which is so sharp and high quality, that it is much easier to read on, than you would think, for its size.

Price, Capacity, and Updates

The current base model of the iPod Touch has twice the hard drive space then that, of both the iPhone and the iPad. This makes a huge difference, when having many fancy games and audio and video, on the device. The iPad starts at \$500, while the iPod Touch starts at only \$300. New iPod Touches generally are released, in the fall, with the other iPods and, so far, iPads are looking like they will be released in the spring. So far, the iPad is getting major OS updates, far after both the iPhone and iPod Touch do.

iPod Touch Summary

Apple calls the iPod Touch the most fun iPod, because of the popularity of games on it, but I would call it Apple's cutest product, because of the size and screen quality. The biggest difference, other than the size, between the iPhone and the iPad is the number of apps available. There are maybe 8 or 10 times as many iPhone apps, as there are (optimized for) iPad apps.

Advantage of 3G

The iPod Touch is more limited, than the iPad, in Internet access, if you get the iPad, with 3G and buy a monthly data plan, from AT&T. The big advantage, of using 3G cell phone network, over WiFi hotspots, is that it is secure enough, to send passwords, as your local home or work wireless Internet set up. If you send passwords, or other sensitive information, over a WiFi hotspot, you can almost guarantee, that someone else sitting next to, you will steal your information.

Disadvantage of 3G

The big downside, of using a cell phone network, is that almost every provider only allows you to use 5 GB a month, even for the "unlimited plan". Contrast this with the Comcast cable Internet, which allows a maximum of 250 GB a month. Many could do fine with maybe 10-20 GB a month, but 5 GB is pretty small, if you do any video watching online or download any apps.

5.2.5 Apple iPad Navigation Techniques

Basic Navigation

To zoom in, you either double click, or touch the iPad, with your thumb and finger together, and then spread out

your finger and thumb. To zoom out, you start with your finger and thumb spread wide and then bring them together. To get the program options buttons, if they disappear, by double clicking. You rotate the screen, by rotating the iPad, and holding it up vertically.

Home Screen Navigation

To get back to the home screen, where all your apps are, click on the square white outline button, on the bottom or top of your iPad, if you are holding it up, in the portrait orientation. You have more home screens, depending on how many programs you have.

You can fit up to 20 apps per screen, but you only want to include a maximum of 16. This is because you navigate between the home screens, for more programs, by dragging your finger across the bottom of the tablet, below the program icons. You can move forward or backward, by dragging your finger back and forth, across the bottom empty space.

You can also move the app icons around the home screens, in iTunes, on your computer, under the Apps tab under your iPad section, or on the iPad directly, by clicking and holding on a program icon. If you accidentally click and hold on an icon, you can get back the icons back to working as before, by clicking on the home button.

Copying and Pasting Text

You copy and paste by first clicking in a text area and then clicking and holding in the text field, until a magnifying glass pops up. Then you should see an option bar that allows you to select, select all, or paste. After you choose select all, then you have the options pop up for cut, copy, and paste. Choose the copy option. To paste, go to the place where you want to paste and do the first part again, up to the point, where you see the options select, select all, and paste. Select the paste option.

Troubleshooting your iPad

You get to most the application settings, by clicking on your settings icon. If you have trouble with your iPad not working, one of the things you can do is reset your iPad. Realize you lose all your iPad settings this way, but not any programs or data. You do this, by holding down on your iPad home button and the sleep/wake button, at the same time, for at least 10 seconds, until the Apple logo appears.

If you have an app, that locks up your iPad, you can make it quit, by pressing the sleep/wake button, for a few seconds, until a red slider appears. Then press and hold the home button until the application quits. The if that doesn't work, then press and hold the sleep button until the red slider appears. Then drag the slider. Then press and hold the sleep/wake button, for at least 10 seconds, until the Apple logo appears.

If you cannot get your screen to rotate as you rotate the iPad, then make sure your screen orientation lock is not set on lock. That is controlled by the switch on the side of the iPad. The button below this switch controls the volume.

5.2.6 Advice for Using iTunes

Managing Apps and Media

Installing apps is easier than on a Mac. All the apps can be found on the iTunes store, which you can access on your Mac or PC with iTunes, or directly from your iPad. Installing an app is as easy as searching for what you want and then clicking on free or buy and confirm (you may enter your password, if you want it to prompt you, each time). You can delete the apps, by clicking on the app, you want to delete, from the Apps section in iTunes and choosing Edit and Delete from the iTunes menu. Then you just plug in your iPad and the Apps are copied over to your iPad. For updates to apps, go to the App section in iTunes and it should have a number next to it (corresponding to the number of application updates available) and then click on "get updates" or "check for updates," if you want to check manually. There are 2 ways to ad media like books, audio, and video to your iPad. You can buy it from iTunes or buy it in a supported format (ePub and PDF for books; MP3, MP4, Apple lossless, AIFF for audio; MP4 for video) from a third party and then drag and drop it into the proper iTunes category.

Managing Disk Space

Now if you want to transfer more content than fits on the iPad, the iPad automatically prioritizes which data is most important. You can see how much space each type of media takes up, on your iPad, when you plug it in. To see this

click on “Your Name” followed by the word “iPad” on the iTunes sidebar. Then click on the tab titled Summary. The blue color tell how much space audio takes up, video is purple, photos are yellow, apps are green, books are magenta, and other is orange. There are tabs for Info, which includes Mobile Me (Apple’s online service you can purchase for an additional fee), address book (from Address Book on a Mac), calendar (iCal on a Mac), mail (Mail on a Mac), and web browser bookmarks (Safari on a Mac); Apps; Music; Movies; TV shows; Podcasts (free internet radio shows); iTunes U (free university lectures); Books (e-books); and Photos (from iPhoto on a Mac). You can choose what you want to put on your iPad by name, by category, by album, by collection, by date, by order, and by what has been played.

Backing Up iTunes Library

One of the great features that Apple’s line of iOS products (iPhone, iPod Touch, iPad, and any other product which syncs or is managed with iTunes) is that you have a complete backup copy of everything on your Apple device like apps, books, music, videos, and settings all in your iTunes Library. So you can easily back up your entire iPad installation, information, and data by just copying the folder titled iTunes in your Music folder of your home directory /Users/Your_Name/Music to another portable hard drive or USB Flash drive. The other way to backup your iTunes library is to choose File, Library, and then Back up to Disc from the iTunes menu. Then follow the instructions. Make sure you have a few DVD-ROMs available. To restore your iTunes Library in case of a hard drive crash or you lose or damage your iPad, you just insert the first disc into iTunes and select the option that you want to restore from backup. Then you just follow the instructions. The other way to restore your iTunes Library is to copy back your iTunes folder to your Music folder in your home directory.

5.2.7 Advice for the App Store

Features and Cost

One of the things you need to remember with the iPad applications on the iTunes App store is that applications generally don’t include any features not mentioned in the application description page. Most iPad applications have been written from scratch not very long ago and are often not as mature as comparable desktop applications, although they cost much less. Generally the maximum price even for a very large and complex application is only \$10. Most apps cost \$5 or less. Prices may change from time to time and some technical apps cost much more. Always check the free apps first and be careful not to spend more than \$5, unless you really understand what you are getting.

Help for Choosing Apps

I also recommend reading the reviews, before you buy an application. Remember though reviewers are brutally honest and expect a lot from apps that are almost free, so take what they say with a grain of salt. But they tend to be very specific about what is wrong, so it will help you decide which one to get. Also, when you search, make sure you choose the iPad specific ones, as the iPhone only apps are very small on the iPad and check to see that it works offline, as you will likely find yourself in situations where there are no wifi hotspots in range.

Gift Cards

You don’t need a credit card, to buy software, for the iPad, from iTunes, or buy, from the iBook store, from your iPad. The iTunes gift cards, that come in denominations of \$15, \$25, and \$50, can be used to purchase iPad apps and iBook books, in addition to music, audio books, and videos. You can buy these iTunes gift cards, at your local: Apple store, Mac store, grocery store, or most other stores that stock third party gift cards. You just click on “redeem”, in the upper right corner of the iTunes store, and enter the code, on the card, after you scratch of the silver covering, with a coin (like lottery cards). There is a problem with some of the gift cards - sometimes the code you need to enter is illegible. If this happens, call customer support and say iTunes. Unfortunately, the telephone system makes you say the product instead of picking a numbered option and it mixes up the word iPad with iPod, so when you get to a person you will need to be transferred to someone else. If you don’t want to role the dice on whether or not the code will work, I would recommend just not using the cards. I am certainly never going to use them again.

Advice on Entering Sensitive Information

You should never enter credit card numbers, passwords, or any other information you don’t want everyone else to

see over a public wireless network (WiFi Hot Spot). I would recommend getting a wireless network, in your home, with password protection, to buy things on, like the Amazon.com Kindle bookstore. All the apps on the application store can be bought, from your computer, via iTunes, so you don't need a wireless network, for that part, but many of the applications like Amazon.com's Kindle require that you buy books, from within their application, so you would need a wireless network, at home, for that.

Other Applications and Add-ons

Most of the third party App Store applications should be available soon for the device. Most iPhone specific apps will work on the iPad, but they only appear in a little window in the center of the iPad, as big as the iPhone and you can double the size, if you hit the 2x option on the side, but the text then appears blurry. Most iPad applications cost \$5 or less and many are free. There is already a wireless keyboard, digital camera cable connector, and cover accessories and a drawing program. You can also expand the memory on your iPad, by using an SD memory card (one of the types of memory, commonly used in digital cameras) and you can also print, from the iPad, to wireless printers. There is also at least one third party application that will allow you to print from almost any printer attached to your computer if you have a wireless network shared with the computer connected to the printer.

5.3 Apple TV: First Impressions

5.3.1 What is an Apple TV?

The Apple TV allows you to transfer over all your iTunes audio, video, plus photos, and access YouTube wirelessly to the Apple TV box. The Apple TV which has a hard drive, which stores your media and you get a remote you can move through it with. It only works with HDTVs. Setting up the Apple TV was easy. The 160 GB version had plenty of space and only cost \$230.

5.3.2 Why Haven't I Heard of it Yet?

Many people have not bought an Apple TV. It is one of Apple's least successful products since Steve Jobs came back to Apple and they released the iMac, iTunes, the iPod, the iPhone, the iPad, and the like. There are two related reasons. One is that it doesn't replace any other box people have like TiVo, their cable or satellite boxes, their DVD and Blue-Ray players, or anything else. Another problem is that for it to be useful to most people Apple needs to either allow people to transfer DVDs onto the Apple TV or else they need to integrate it with one of those other boxes like the cable box. The problem is that powerful industries like cable and satellite companies as well as the movie industry don't want this to happen, because they are afraid they will make less money.

5.3.3 PC or Mac Storage Space Issues

The downside is that it takes a lot of space on your Mac or PC hard drive even for standard definition (SD) video. You need to leave a copy of all your media in iTunes on your PC or Mac and back it up to a portable hard drive and or a series of DVD-Rs.

SD videos of TV show episodes are about 500 MB and most series have 22 episodes in them, so it takes 11 GB per season/per show. Many of the successful TV shows have 4-6 seasons or more. I have been able to clear about 90 GB free on my Mac which has 250 GB hard drive.

Remember to only download from your Cable or DSL broadband connection. You really don't want to be downloading 500 MB files over dialup and unlimited wireless is usually limited to 5 GB a month, regardless of service provider. It might be convenient for you to download over a free public wifi hotspot, but that would likely make the network unbearably slow for others there, and you don't want to be sending your iTunes information over a public connection either.

Remember to leave some free space on your Mac hard drive (and probably your iPad and Apple TV as well) for it to run well. I am leaving about 3 GB free on my 16 GB iPad and 50 GB on my iMac. You also need to allow some extra space for a OS upgrade and for newer versions of applications which will likely grow in size.

5.3.4 Apple TV Media Management

Prices vary from \$15-35 on the ones I was interested in. The iTunes store is nice because it has more selection, especially of the older TV shows, than local stores and because it is so much easier having it transfer automatically

to my Apple TV, instead of having to pop DVDs in and out of the player.

I have decided to just have my photos, maps, medical and legal references, e-books, digital magazines, Bible books software, documents, games, and Apps on my iPad. Since I want to be able to use it around in quiet places like waiting rooms or the library and because head phones would be awkward with the size of the iPad, I have decided to put my music, iTunes University courses, podcasts, and TV shows just on my Apple TV.

5.3.5 Wireless Router

The Apple TV requires a wireless router, like Apple's Airport (\$100). Apple's Airport works for up to 5 devices. I have it set up for my Mac, iPad, and Apple TV and it works well. The Airport is easy to set up. If it doesn't detect the Airport on your computer after plugging the other end into your cable or DSL modem and plugged into an electrical outlet, then just reset it and try again.

I think you can also connect via LAN, but that might not be very convenient, especially if your TV is across the room or in another room. You also still would need a router to handle multiple connections as most computers have a maximum of one ethernet port (network adapter). Copying files over a wireless connection is slow, so you need to allow some time for copying/syncing.

Also never choose to stop syncing to your Apple TV, or unplug your Airport, or else you need to restore your Apple TV to factory defaults to get it to sync again. This means you have to recopy everything from iTunes, but setting it up again is fairly quick and simple. You can set it up to stream over your media to your Apple TV, but that would only make sense, if you had a much bigger hard drive on your computer, than on your Apple TV, and you had so much media on your hard drive, that there would not be enough space for it on your Apple TV.

5.3.6 Why You Cannot Copy DVDs

Unfortunately there is no simple, free, and supported way of transferring DVDs to iTunes like it is with audio CDs. You can thank the Motion Picture Industry for this. Actually, the reason we are able to transfer over songs from audio CDs was an unforeseen consequence of the CD-ROM being based on the same technology as the audio CD and the popularity of CD-ROM drives. The files were too big for hard drives of the time and would be even now if it weren't for the MP3, MP4, and OGG formats. By the time DVDs came out they decided to make it harder to copy them by using DRM.

The irony is that I can steal most things digital (I don't but most people do not have a problem with theft of intellectual property) much easier than I can transfer over my media for backup or transfer purposes that I already legally own, because at least a couple computer programmers find a way to break through the restrictions usually in a matter of 24 hours or less. They usually then make an easy to use program for other people to be able to break the restrictions. Basically, the media industry is penalizing the honest people for what dishonest people do and they don't want to admit that it doesn't stop pirating because they have no other solution.