

ife with Linux — A Zin

Typeset in LAT_EX

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Impressum

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Although this is now in your hands, and it's also on the web, so if you really wanted to steal this, I've made it pretty darn easy. I can't imagine why anyone would want to, though. You don't need to, however, since this is licenced under a CC BY-NA-SA 4.0 Creative Commons license. More information is at https://creativecommons.org/licenses/bync-sa/4.0/.

FYI, this is made in LATEX using the report document class. It then gets exported to a letterhalf (5.5 in x 8.5 in) pdf, which then gets made into a booklet using Boomaga (https://www.boomaga.org/).

I'm pushing this to my own git server as I write this. You can find it here: https://git.kjodle.net/kjodle/the-codex. New issues will be pushed after they are complete.

The image on the front cover is courtesy JericoDelayah from the Wiki-Media Commons. The image is over here: https://commons.wikimedia.org/wik i/File:4_RETAT_04_Linus_Torvalds.jpg. You can also find a link to the Creative Commons CC BY-SA 3.0 license there, as well.

The image on the back cover is one that I highly agree with. We built it, it's ours, and we shouldn't be charged for using it.

You can just skip over all the diversions in you want. It's just how my mind works. (And yes, there will be politics in this. *You have been warned*.

Chapter 1

The Early Salad Days

Boring, early life stuff when my world smelled like sweat and disinfectant and warm bologna. Feel free to skip this. I wish I could.

1.1 Calculators

Before computers were in my life, there were calculators.

These days, every kid has to have an expensive graphing calculator for middle school math. Specifically, it has to be a Texas Instruments graphing calculator, because the examples in the textbook are all described in terms of a Texas Instruments calculator.

I mean, *sure* you can get your kid that Casio, which has all the same features and all the same buttons and is an order of magnitude cheaper, but you spent all that money on an expensive pre-school, and all that money on expensive tutors, and do you really (he asked snottily) want to risk little Jimmy's chances of getting into Harvard because you were temporarily too cheap to buy the right calculator?

Oh my, a diversion already.

(A little off track here, but this begs two questions: 1) Why is it always a TI calculator that's required, and 2) Are we teaching kids to learn math or to learn how to operate a calculator? The answer to the first question is that Texas Instruments and the Major Textbook Publishers[™] have colluded to produce expensive books that need to be replaced every two to three years [thereby costing the school district money] and that require expensive calculator [thereby costing you as a parent money]. It's a racket, but that's capitalism for you. The answer to the second question is that we are teaching kids how to use calculators. Teaching them how to do actual math would require thought on both the parts of the teachers and the parts of the students, not to mention on the parts of parents and especially administrators, who would also be required to grow a spine. Again, education in the United States has become a racket, but that's capitalism for you.)

(Well, you can probably tell what my thoughts are on the dominant economic system on planet Earth. There *will* be more of that. If you're okay with that, I'm okay with that, too. If you're not okay with it and you want your money back, it's too late—I've already spent it.)

I have noticed that even little kids are required to bring little kid calculators to school with them in most of the local school districts. As I write this, the school supply buying season is coming to an end, but for the past six weeks every store was filled with school supply lists and yeah, you have to have a calculator to get into the second grade.

Ironically, the earliest calculators I can remember seeing (not getting my hands on, because they didn't belong to me) were Texas Instruments. I don't remember a lot about them, but an uncle had given a pair to two of my cousins. They took a *ton* of batteries, had red LEDs for outputs (meaning they glowed in the dark—you could use them in the dark if you memorized the keypad), and they were designed for students because they had a go-back-through-all-your-steps-function-to-see-whereyou-done-screwed-up-boy function, which would be a useful feature on modern calculators to learn math, but again, we're not interested in kids actually learning how to think and do something as radical as math.



The other early calculator I remember was a Casio calculator and it was on a watch. A kid I knew for a short time had one, and even let me wear it for a while. (I wish I could remember his name, because this was a tremendous kindness on his part.) I swore that when I grew up, I would own one of these watches.

Well, I grew up and I didn't buy one of them, even though they are still available. I could just never justify spending the money on what is—let's face it, just a bit of full-frontal nerdity—when there were bills to pay. Nope, just could never bring myself to do it.

It's just me now, and my expenses are numerous but small, and a couple of years ago my local all-in-one-store had all their watches on sale for 40% off, including the name brand watches. I checked—it was in stock. At \$25 bucks it was a lot, but on sale it was only \$15. I could do this! So I picked it up and looked at it lovingly, thinking about all the good times we would have together as we went forth and explored the world one simple calculation at a time.

But there was a problem, a rather large problem, actually. The print on those buttons is tiny. and my eyes are bad. I couldn't actually read any of buttons. I use reading glasses when I'm reading or working on the computer, but I don't need them out in the wild. I could wear the watch with me everywhere, but unless I was at my desk, I wouldn't be able to actually use it.

Back on the shelf it went.

At this point, my only hope is that maybe my eyes will get so bad that I'll need bifocals all day, every day. When that happens, will this watch be on sale for so little money ever again? I highly doubt it.

Chapter 2

What's to Like About Linux

I could go on and on here, but I'll try to keep it short. I can always come back to this.

2.1 Control... and an Opportunity

What I like—not love (that's about aesthetics for me)—is that I'm in control.

Partly, that's the nature of open-source computing. If you want to know how something works, you can look at the source code. If you don't understand the source code, you can research how the source code works. You can ask questions. (Thank you, StackExchange!) You can do some more research and then learn how to ask *better* questions. There is always something to learn, and once you've learned everything there is to learn about a particular piece of software ¹ you can fork it and start contributing to the project yourself.

Wondering how something in Windows works? So is everybody else. There is nothing more frustrating than googling a problem in Windoze, getting hundreds or thousands of results, and every result is just somebody else asking the same question.

And yeah, you can write code and create applications for Windows, and you can solve a lot of problems that way, but you can never make

¹Which is never really true. What I really mean is that when you've learned everything *you* want to know about it.

Windows itself better. It is what it is, and if you don't like it, the feature that bugs you might be made better in the next release, or it might be made worse. It's a crap shoot, really.

For what it's worth, Mac OS X, even though it is based on Unix/Linux (I forget which—I dropped out of the Mac world at OS X version 4), is the same way. There *might* be an answer, there *might* be a solution, but you just *might* be on your own there, buddy.

But what I really, really like about Linux?

The command line.

I'll probably write about this some more later, but my experience with computers goes back way before Macintosh made the mouse popular (and necessary). You turned on the computer, and there was just this dark screen with a blinking cursor. If you wanted to make the thing do something, you had to *know* something. With a GUI, you can guess. You can guess a lot, actually, and just poke around all you want because most GUIs come with an undo feature.

There is no "undo" on the command line.

I need to get that on a t-shirt.

Why? Because the command line is like real life. There is no undo button in real life. GUIs have made us lazy—lazy at thinking, lazy at figuring things out. Just do it, if you don't like it, just Ctrl-Z. Just throw that document away and leave it in the recycle bin. If you decide you want it later, you can just drag it on out of there.

2.2 The Unix Philosophy

The Unix Philosophy was originated by Ken Thompson (one of the creators of Unix, upon which Linux is based) and basically says that each program should do one thing and do it well. (There is more to it than this; if you are interested, you can always google it.²

²Searching for something on the internet is *always* an option these days, and so many people seem to be unable to do just that. Question: "Where can I find X?" Answer: The same place I would find it: At the other end of a google search.

Chapter 3

Coda

3.1 What I Learned About LATEX While Creating This Issue

I'm still a relative newbie to LaTeX, so there's always something to learn. Here's a running list of what I've learned so far:

- 1. You might think you want the **book** document class, but you probably will find the **report** class just as handy.
- 2. You want links¹? Use the **hyperref** package.
- 3. The **kpfonts** package has beautiful fonts.
- 4. Footnotes are easy! (Seriously, footnotes in LATEXhave got to be the easiest footnotes I've ever managed.)
- 5. Use the **fancyhdr** package to get more granular control over your headers and footers.
- 6. You can use the **geometry** package to make a document have a paper size of half letter.
- 7. You can make your top margin larger by using \addtolength {\topmargin}{0.5in} but there is not a similar parameter for the

¹Yeah, I know these are irrelevant in a paper document.

bottom margin. Instead, you need to make the text box shorter by using \addtolength{\textheight}{-1in}.

- 8. Want to show inline code without executing it? Use verb following by two pipes. Place your code between the pipes. (I had to use two of those in #7, because that code just went right off the edge of the page when I only used one.)
- 9. Need a little space between elements? Just insert \, (that is, a back-slash followed by a comma).

Like I said, I'm still a newb and I may be completely wrong or off base on some of these things, in which case, I'll make a note of that in a future issue $^{\rm 2}$

If you are interested, there is a link in the Impressum to the git repo for this publication where you can check out the source code.

²Always assuming that there *will* be another issue.