

Justin Lesson 1 - Tools

Brandon Feder

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1 Introduction

There are three main tools you will use to program: A browser/search engine, text editor/IDE, and a terminal. Each has its own unique purpose and each is critical to successfully programming which is why its critical to not just be able to use them, but instead understand what they are.

1.1 Browsers/Search Engines

A browser, such as Google Chrome (Not Google), Firefox, and Opera are tools that allow you to access the internet. However, do not confuse browsers with search engines. While browsers allow you to view files on the internet, search engines do most of the heavy lifting in finding the files you want to view based off of a query you give them.

Examples of search engines include Firefox (Same name as browser but different), Google (Different then Google Chrome), Duck Duck Go, etc.

To clarify, browsers are the tool that allows you to view files, but search engines are what tell the browser what to render.

Choosing your browser and search engine, and getting familiar with it, can greatly increase the ease and comfort you get from using the internet. When choosing a browser/search engine, there are a few considerations.

1. Security. Does the browser/search engine track you
2. Resources. What resources does it use? How much memory, CPU, etc.
3. Aesthetics. What do you personally like? What makes you comfortable?
4. Familiarity. Use what you are familiar with. Its hard to go wrong.

I'll leave it up to you to find the browser and search engine of your choice. Also, do some research about shortcuts and tips as it can greatly help how you use the internet. For example, in google if you use `""`, it will find results with the contents of the `""` in it.

1.2 Text Editor/IDE

First of all, I want to clarify the difference between a text editor and an IDE. An text editor is simply an editor of text. It often does not have spell check, special formatting functionality, and extra tools to help you. An example would be the notepad app on Windows. An IDE, however, is a text editor + extra functionality. It may have syntax highlighting (like spell check for programmers), debug tools, and formatting tools just to name a few. You can imagine an IDE as a Google Docs for programmers.

For now, until you get comfortable with writing code, I would like you to use a basic text editor. Remember to get familiar with it so it feels east and comfortable to use.

1.3 Terminal

A terminal is the most important tool you have. It allows you to do anything you'd do with a GUI (Graphical User Interface), but often much faster. However, there is a small learning curve that you need to cross in order to fully understand its potential. I will try my best to explain it, but you will have to practice to understand what it is.

How I imagine it is a way to talk to a computer. You can give it commands (Ask it questions or tell it to do something), and it will complete those commands. However, unlike a text editor, you can only run commands one at a time and cant go back in time. Imagine you are having a conversation with the computer. I can ask it to `"cd"` then to `"ls"`, but you can go back and tell the computer to undo what you already did. The only way to really understand is to practice.

Here is a great article showing you some of the most basic commands: [Linux Commands](#).

Make sure you understand `cd`, `ls`, `rm` (be careful. This can destroy your computer), `mkdir`, and `touch` (look this up on your own) commands.

1.4 Note on Questions

Feel free to ask questions after you look things up, but not before. You need to be able to teach yourself without a guardian angel (or devil) holding your hand the entire way.