Coding for Adults

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The Language Landscape

What language should I learn?

- Javascript

- Python

- Java

- C/C++

- Ruby

- R

- Go

- Lisp

General advice for learning more (in no particular order)

- Pick a project to build

- Look through several different books about the language

- Try a different approach if the path you're on isn't working for you

- Coding is a craft, not a science or engineering discipline

- Sometimes things seem arbitrary and mysterious….and that's just the way they are

- Search online:

  - Google

  - Stack Overflow (http://stackoverflow.com)

- Use flashcards (https://sivers.org/srs)

Javascript Resources

- FreeCodeCamp (freecodecamp.org)

- Videos on lynda.com (free access through Wayland Library—see online resources on the web site)

- Book/site: Eloquent Javascript (http://eloquentjavascript.net)

- 30 projects in 30 days: https://javascript30.com

- Google for things like "how to learn javascript" or "best book for learning javascript"

- Approaching a Javascript project

- Build a 2D Breakout game

- Don't dive into frameworks too quickly (Angular, React, JQuery, etc.)

Python Resources (Part 1)

- Watch out for version confusion (Use Python 3.x, not Python 2.7)

- FreeCodeCamp (freecodecamp.org)

- Videos on lynda.com (free access through Wayland Library—see online resources on the web site)

- Google for things like "how to learn python" or "best book for learning python"

- Approaching a Javascript project (mostly applicable to any project)

Python resources (Part 2)

- <u>Learn Python the Hard Way</u> (site/book)

- <u>Python for Beginners</u> (site)

- <u>Automate the Boring Stuff with Python</u> (book/free to read online)

- <u>Python challenge</u> (site)

- <u>How to think like a computer scientist</u> (book/free to read online)

R Resources

- FreeCodeCamp (freecodecamp.org)

- Videos on lynda.com (free access through Wayland Library—see online resources on the web site)

- R Studio learning resources

The Programmer's Toolkit

- Learn a good editor

  - Atom, Emacs, vim

- Integrated Development Environments (IDEs)

  - Example: <u>PyCharm</u> for Python

  - For Javascript, turn on developer tools for your browser

- Learn about your operating system

- Libraries

- Compiler

- Runtime

- <u>Beginner project ideas</u>