

# Introduction

Tuesday, April 8, 2025

9:08 PM

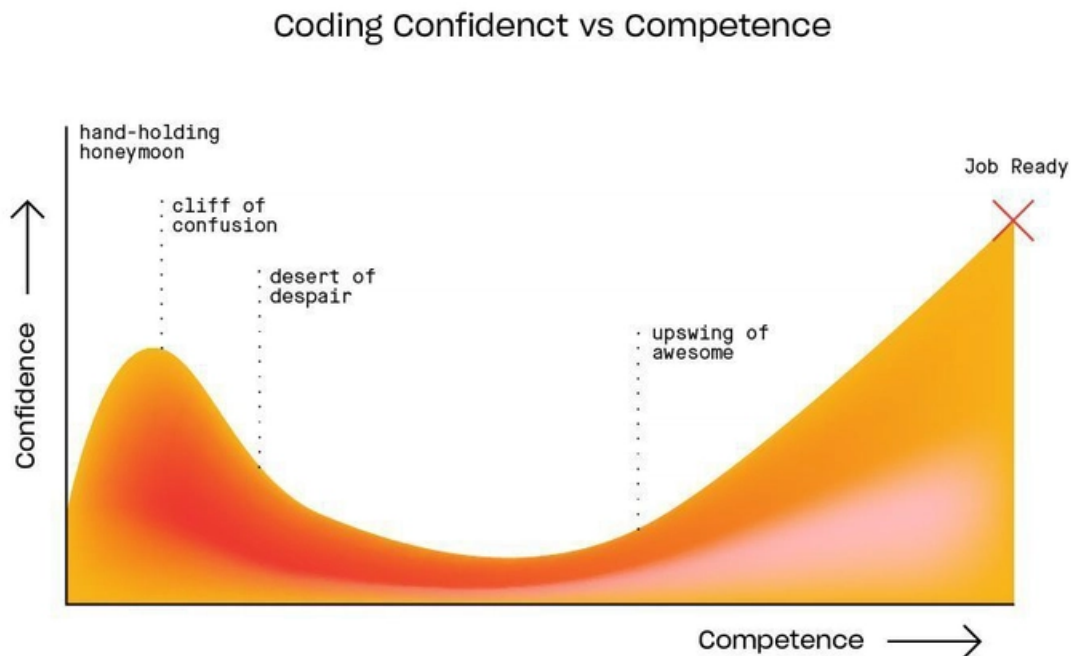
## Useful Tools:

- Command line interface (CLI)
- [Stack Overflow](#)
- [Git](#)
- [GitHub](#)

Note: people tend to care more about what you've actually built than how you got there

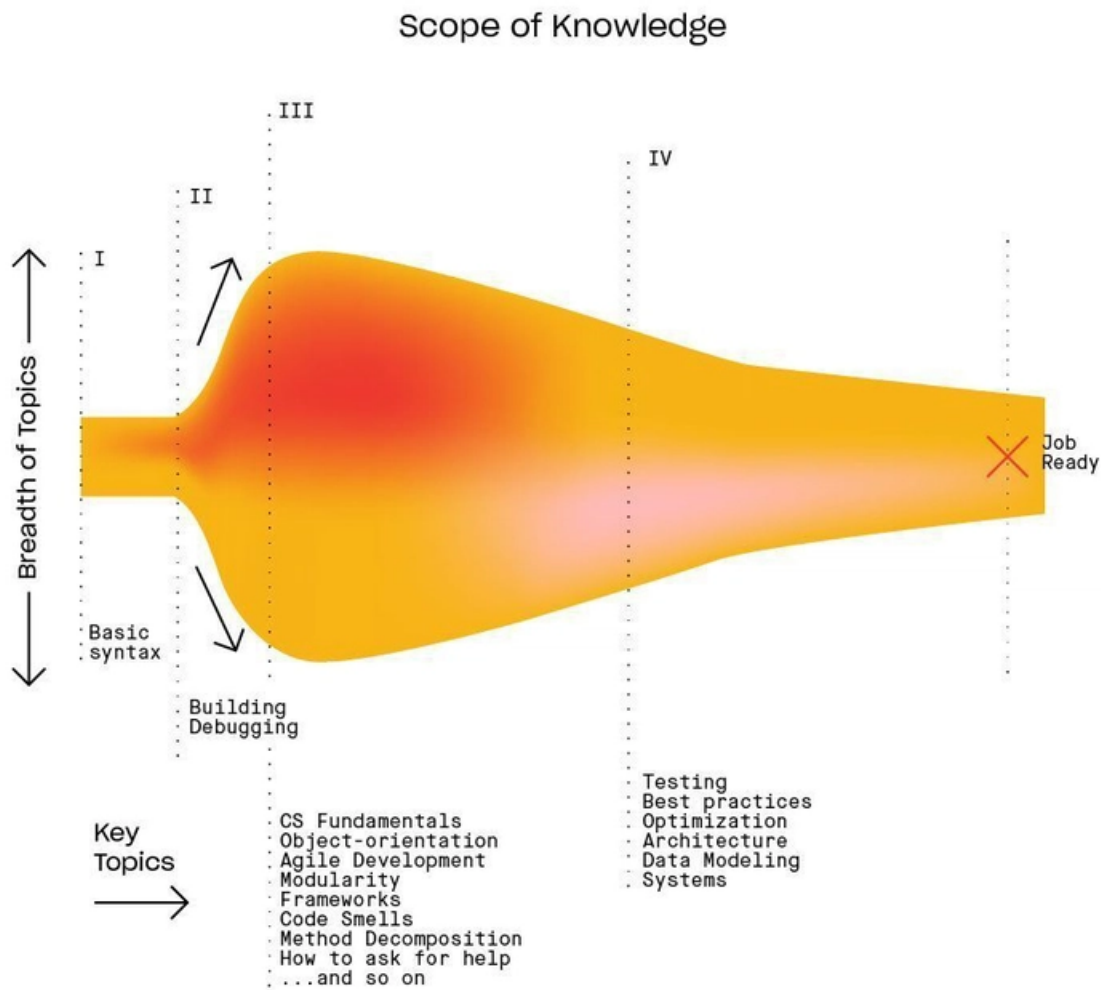
Coding in a nutshell:

- Where am I? Hopefully, the upswing of awesome.



Scope of knowledge:





Note: this stuff takes patience and a lot of time and work

After foundations:

- Seek and follow best practices for programming. You need to understand the difference between hacking and building products. Best practices are a major difference between hacking on your own and building products for others.
- Check your assumptions because you've probably skated by with some gaping holes in your knowledge that you had. You need to diagnose and fix these holes.
- Tackle the unsexy skills that are rarely addressed but highly important for transitioning into a professional role. Things like testing, data modeling, architecture and deployment which are really easy to ignore but are fundamental to good development.
- Get feedback!!!

**Web Developer Categories:**

between a solution and the best solution.  
tion quality code in a real job setting.  
our knowledge that you didn't even know

to a professional setting. This includes  
reeze past but which are totally

1. **Front End** - front-end developers need to be proficient in web frameworks and libraries like **ReactJS**, and **EmberJS**

Bootstrap excels in creating responsive layouts, while ReactJS is renowned for building high-performance user interfaces.

Node.js is a powerful tool for front-end developers, primarily used for managing dependencies and automating tasks. It enhances the development workflow when using frameworks like ReactJS or AngularJS.

Ajax (Asynchronous JavaScript And XML) is a widely used technique for using JavaScript that allows for downloading server data in the background.

2. **Back End\*** - back-end developers use server-side languages like **Node.js**, **Go**, **PHP**, **Ruby**, **Python**, and **Perl**.

They also use tools like **MySQL**, **Oracle**, and **SQL Server** to find, save, or change data and serve it to the client code.

The back-end of a website consists of a server, an application, and a database.

Job openings for back-end developers often require experience with **PHP frameworks** like **Laravel**, version control software like **Git**; and using **Linux** as a development and deployment system.

One of the most critical aspects of back-end development is *database management*. Developers must ensure that data is stored securely and retrieved quickly. This often involves working with *relational databases* like **MySQL** or **PostgreSQL**, and **NoSQL databases** like **MongoDB** for more flexible data models.

1. **Full Stack** - full stack developers should be knowledgeable in every level of how the web works:
  - a. setting up and configuring Linux servers,
  - b. writing server-side APIs,
  - c. diving into client-side JavaScript,
  - d. and applying a “design eye” to CSS.
  - e. This comprehensive understanding allows them to build complete web applications.

Mastering **Content Management Systems (CMS)** is a key component of the full stack skill set.

- A CMS, such as WordPress, Joomla, or Drupal, streamlines the process of building and managing a content management platform that handles everything from content creation to user management.

Full stack developers leverage their knowledge of both front-end and back-end technologies to create end-to-end solutions.

like Bootstrap, Foundation, AngularJS,

performance, dynamic user interfaces.

, running build processes, and automating  
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Python, Java, and .NET

t back to the user through front-end

vel, Symfony, and CakePHP; version

rs must design and maintain databases  
bases like MySQL or PostgreSQL, or even

works:

s from the ground up.

anaging websites by providing a robust

s to customize and extend CMS

- Full-stack developers leverage their knowledge of both front-end and back-end technologies and frameworks, crafting tailored solutions that meet specific business needs.
- Whether it's developing custom plugins or optimizing database interactions, the use of a full-stack developer allows businesses to deliver comprehensive, end-to-end web solutions.

Knowledge of both client side and server side development is crucial. This is a "jack of all trades" role that requires a significant amount of time and practice in both front and back end.

Note: keep a growth mindset. Intelligence can be developed and it is not fixed. Just because I don't know something doesn't mean I have no room for improvement. It's not that I'm not smart enough, I just need to try again.

- **Do NOT use ChatGPT in any part of this process!!!**

Another note: do not keep extensive notes!! This note document will likely be the biggest one.

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CMS empowers full-stack developers to

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