Alx software engineering by safu

\*\*Trimester 1:\*\*

1. C Programming

- Basics

- Functions

- Pointers

- Data Structures

- Arrays

- Singly Linked Lists

- Bit Manipulation

- Variadic Functions

- Memory Management

- Static Libraries

2. Linux

- Basics

- Permissions

- Redirections

- Syscalls

3. Milestone Projects

- printf (Milestone project related to formatting and output)

- Shell (Milestone project involving shell scripting)

- File Redirection (Part of a project involving I/O and file handling)

- Static Libraries (Part of a project related to modular programming and libraries)

\*\*Trimester 2:\*\*

1. System Engineering and DevOps

- SSH

- SSL/TLS

- Configuration Management (Puppet)

- Load Balancers

- Postmortems

- Monitoring

2. Modern JavaScript

- ES6 Basics

- ES6 Promises

- ES6 classes

- ES6 data manipulation

- Typescript

3. Web Development

- ORMs (SQLAlchemy)

- AirBnB Clone (Continued)

- Templating (Jinja2)

- Javascript

- JQuery

- Webstack Debugging

- Deployment

- Servers

- Web Servers (Nginx)

- Application Servers (Gunicorn)

- APIs

- Flask

4. Algorithms and Searching

- More Algorithms

- Searching

\*\*Trimester 3:\*\*

1. Python

- Variable Annotations

- Async

- Async Comprehension

- Unittests and Integration Tests

2. Storage

- MySQL advanced

- NoSQL (possibly MongoDB or similar)

- Redis basic

- Files manager

3. Back-end Concepts and Practices

- Pagination

- Caching

- Basic authentication

- i18n (internationalization)

- Session authentication

- User authentication service

4. Additional Topics

- Queuing System in JavaScript

This schedule represents the ALS SE program in a sequential order, progressing from foundational topics in C programming and Linux to more advanced subjects in system engineering, DevOps, and backend development

thanks