Code Circle Program Overview and Syllabus

Learn, Code and Build...

Program Overview

Software Development is a field based mainly on these two pillars. Every software developer at one point of his/her career learnt one or more concepts on their own and also built stuff as collaborative projects with a team.

Despite some much contents on the web to learn software development, Code Newbies still find it hard to become competent developers and also find it difficult to get a coding partner to learn, code and build together.

Code Circle is a 9 months full time program that intends to train Africans software development by curating content on the web to serve as learning resources, and create an environment where they can self-learn, peer-code and collaboratively build real-life projects to gain both hard and soft skills needed to become a world-class developer.

Our Web Development Syllabus

Part 1: Programming Fundamental Courses

Git and Version Control

> How to use GIT
> GitHub Fundamentals
> GIT Commands
> How to collaborate on repository

Programming Basics

> Understanding types of programming
> Data structure types
> Understanding OOP Programming

Part 2: Building Blocks of Web Development
HTML5

> HTML Syntax
> HTML Media
> HTML Tables
> Forms
> Pug

CSS3

- CSS Basics
- The Box Model
- Floats and Positioning
- FlexBox
- Grids
- CSS Animation

Part 2: Advanced CSS and Design

Responsive Design and CSS Frameworks

- Responsive Design
- Media Queries
- Bootstrap

CSS Preprocessor

- Sass Fundamentals
- Working with Sass

Fundamental Design and UX

- Introduction to Design and UX
- How to build great UI
- Using Figma

Part4: JavaScript

Javascript and DOM

- Javascript Basics
- ES6 Functions
- Javascript DOM
- Event Listeners
- DOM Animations

Vanilla JS

- Building web apps with Vanilla JS
- Mastering Javascript

Learning React

- React Framework fundamentals
- Build single page web apps with React
- Build robust web app using React

Asynchronous Javascript

Learning AJAX
AJAX with XHR
AJAX with jQuery
AJAX with Fetch
JSON

Learning jQuery

jQuery Basics, the DOM and Selectors
jQuery DOM Manipulation
Event Listeners with jQuery

Part 5: Backend Development

Backend with Node.Js
MongoDB
Express.js
MERN Stack

Daily Schedule (9AM - 4PM GMT +1) (Monday - Thursday)

Call - up meeting with the team on Zoom	9:00- 9:30am
Content Absorption	9:30 - 11:30am
Break	11:30 - 12:00pm
Interaction on Slack about the daily task	12:00 - 12:10pm
Daily Task Development	12:10 - 3:40pm
Closing Meeting	3:40 - 4:00pm

Daily Schedule (9AM - 3PM GMT +1) (Friday)

Call - up meeting with the team on Zoom	9:00 - 9: 30am
Content Absorption	9:30 - 11:30am
Break	11:30 - 12:00pm
Interaction on Slack about the code review	12:00 - 12:30pm
Code Review	12:30 - 1:30pm
Game	1:30 - 2:30 pm
Closing Meeting and task poll post	2:30 - 3:00pm