the codevillage

Curriculum

Methodology

- Our learning curriculum is divided into sprints. Each sprint is a week long.
- Everyday you learn concepts in our mentor sessions or using curated quality resources.
- Everyday you write code, build something. It usually builds up into a meaningful project.
- There are review hours every week, where the concepts of the week are recapped.
- Students are required to build a good online presence. Setting up a GitHub account and committing code.
- Our classes are 80% practical and you get 1-on-1 mentoring as well. We use slack, discourse and zoom for 1-on-1 mentoring.

Week 1—2

HTML, CSS, CLI, Git , Developer Tools, LINUX

- Basic LINUX Commands,
- Tools & Environment setup,
- UI, Tags, Elements, Attributes,
- HTML5 Introduction
- CSS Basics,
- Debugging CSS and HTML,
- GIT (Why Git, How Git Works, Basic Git Commands),
- Branching, Developer tool features.

Week 3-5

JavaScript Fundamentals, Web Architecture

- Introduction to JavaScript,
- How the web works, Client Server model,
- JavaScript Console,
- Variables, Types, Operators, Conditional,
- Objects, Arrays, Variables, Functions, Scope,
- JavaScript Functions,
- Object Prototypes, Prototypal Inheritance,
- Forms,
- Introduction to Bootstrap, Bootstrap documentation,
- Introduction to jQuery,
- DOM, Event Handling, Canvas.

Week 6-11

CORE API Development, Integration with Previous Module Work, Databases

This section will cover developing an API using **JAVA - Spring Boot Framework** .

You will then integrate the API to the earlier developed web layer in the modules above.

Course Coverage

- Introduction to **Databases** (MYSQL Syntax and Commands)
- Introduction to **JAVA programming** key features and concepts.
- Introduction to **Spring Boot Framework** and core concepts.
- Building **REST API Interface** with JAVA.

Core Concepts to be learned

- Introduction to SQL: Connect, Insert, Update, Delete, Select, Joins
- JPA (Java Persistence API)
- Transaction Management: Commit and Rollback
- Introduction to Java Bytecode Class Files Compilation Process Data types and Operations if conditions Loops - for, while and do while
- Arrays - Single Dimensional and Multidimensional arrays Functions
- Function with Arguments Function Overloading
- Concept of Static Polymorphism
- String Handling – String Stringbuffer Classes
- OOPS in Java: Concept of Object Orientation
- Attributes and Methods Classes and Objects.
- Methods and Constructors - Default Constructors and Constructors with Arguments
- Inheritance.
- Abstract.
- Final and Static.
- SPRING Framework Introduction

Week 12

Project Completion & Demo

- You will be expected to finalize a personal project to demonstrate your understanding of the course.
- The project will be deployed in a cloud environment.

A certificate of completion will be issued after the course.

Once you complete our Program you will always be part of TheCodeVillage Community and have access to our mentors as well as hiring partners. Access our mentors through Slack/Zoom/Mail.