Module wise

Content and Curriculum

Module 1 DSA

- Basics
- Conditionals
- Loops
- Arrays(1D & 2D)
- Strings
- Functions
- Space and Time complexity
- Sorting
- Recursion

Module 2 DSA

- OOPs
- Linked Lists
- Binary Search
- Stacks, Queues, Dequeue

Module 3 DSA

- ▸ Hashing
- ▸ 2 Pointers, Sliding window, Prefix sum
- ▸ DSA projects
- ▸ Trees
- ▸ Bit Manipulation

Module 4 DSA

- ▸ Heaps
- ▸ DP
- ▸ Graphs

Module 5 FrontEnd

- ▸ Intro to Frontend + Github overview
- ▸ HTML Tags, Attributes, Tables, Form
- ▸ CSS Specificity, Combinators, Box Models
- ▸ CSS grid, variables, and media query
- ▸ Bootstrap
- ▸ JavaScript Intro Data Types
- ▸ Hoisting, Strings

Module 6 <mark>FrontEnd</mark>

▸ JS-Events, Objects, Primitive and non-primitive data types

▸ JS- Objects, Array methods, ES6 syntaxes

▸ JS- Error handling, Functions, Asynchronous JS

▸ JS- Call back & Promises

▸ JS- Promise Chaining

▸ Call Stack, Task Queue, Event Loop, Validations, Async Await

Module 7 <mark>FrontEnd</mark>

▸ Intro to React JS

▸ Nested Components, Sass Intro

▸ Conditional Rendering, Virtual Dom, setState asynchronous

▸ React-Rendering Loops, react-bootstrap

▸ Mounting Life Cycle

▸ Hooks- useState, useEffect, React Router, SPA

▸ Higher-Order Function

▸ Redux- Action Creator

▸ Redux- Multiple Reducers, Redux Logger, Provider

Module 8 BackEnd

- ‣ Node and Express – Backend System
- ‣ Web APIs
- ‣ Node – Single Threaded Js, Asynchronous Behaviour
- ‣ NPM – Package Manager and Usage
- ‣ TP: Status codes, Testing using postman
- ‣ Authentication
- ‣ MongoDb
- ‣ Database Normalisation, Joins, Indexing, Caching
- ‣ File system
- ‣ Blogging Assignment