FullStack NodeJS

Live Classes	Guided Learning
Week 1: Web Technology ● Client Server Architecture ● 3 Tier Architecture ● Web Server ● WebSocket ● DNS ● IP Address ● Port Number ● API ● Data Format/Protocol **Week 2: HTML/CSS Basics** **HTML** ● Basic Tags ● Meta tag ● Div vs Span ● Block level & Inline element ● Semantic tags ● Form elements **CSS** ● Introduction to CSS ● Selectors ● Block level element ● Inline element ● Box model ● Positions	Documents, Videos and Assignments will be provided for below topics. Adequate time will be given to the below topics according to your semester calendar. **HTML 5 – Self Learning** ● HTML 5

Week 3 to 5: JavaScript

- Introduction to JS
- Data Types & Variable declaration in JavaScript
- Accessing the form elements & it's values
- Functions
- Regular Expression
- Events
- Builtin Functions in JavaScript (Arrays, String, Date, Math)
- Debugging & Developer tools,
- Dynamic HTML, Changing CSS Styles using JavaScript
- Node properties & Node methods
- Window properties & Window methods
- Screen properties & Screen methods
- Navigator
- Client side storage
- AJAX(HTTP Request)

Week 6: MySQL

- Basic MySQL Queries
- Aggregator
- Joins

Week 8-10: NodeJS

- Introduction to NodeJS
- Chrome's V8 engine
- Workflow of Node.js architecture

- How to run the nodejs file/project (Practice)
- Node packages
- File System
- Streams in NodeJS
- HTTP Server
- ExpressJS
- Middlewares
- RESTFul APIs
- Routes, Model
- View & Controllers
- NodeJS Database connection
- Debugging in NodeJs using VS code

Week 12 - 15 : Advanced DSA using JavaScript

- Stack
- Queue
- Linked List
- Tree
- Hashing
- Breadth First and Depth First,
- Dynamic Programming
- Divide and Conquer
- Greedy Algorithm & Back Tracking

Week 17-19 - Advanced HTML, CSS & JavaScript

- Promise, Async & Await
- Hoisting
- Usage of `this` keyword in JavaScript

- Prototype
- Closure
- Currying

Week 21 -25 - ReactJS

Week 26 & 27 - E2E Project
Management +JWT Authentication -
GIT, JIRA & SDLC

- GIT & GITHUB
- Agile
- JIRA
- SDLC

Week 29 to 32: End-to-End Project
with ReactJS
Profile creation
Interview Preparation