# **Back-End Web Development**

**Duration: 4 Months** 

**3 Days Free Trial** 

Price: Rs. 8999 /-

### **Module - 1: Introduction to JS**

- 1. Fundamentals of JS
- 2. Loops and Arrays
- 3. Function and Objects
- 4. Working of JS
- 5. Functions in JS
- 6. OOPS in JS
- 7. DOM Manipulation
- 8. JS Async, AJAX & APIs
- 9. Modules in js
- 10. JavaScript Object Notation (JSON)

### Module - 3: Introduction to NodeJS

- 1. Introduction to Nodejs
- 2. Core Node.js modules
- 3. Reading and writing files asynchronously
- 4. File system operations and events
- 5. Event loop and its role
- 6. Callbacks and event emitters
- 7. Promises & async/await

## **Module -5:** Introduction to ExpressJs

- 1. Introduction to ExpressJs
- 2. Creating Servers with ExpressJs
- 3. Creating Dynamic Template
- 4. Defining RESTful Routes
- 5. Implementing MVC in Express
- 6. Middleware in ExpressJs
- 7. Using Template Engines
- 8. Error Handling
- 9. API Handling
- 10. Developing Template Engines
- 11. Using Process Managers

## **Module -7: Introduction to MongoDB**

- 1. Introduction to MongoDB
- 2. CRUD With MongoDB
- 3. MongoDB Data Modeling
- 4. MongoDB Security
- 5. MongoDB Aggregation
- 6. MongoDB Indexes
- 7. MongoDB Storage & replication

## Module - 2: Version Control System

- 1. Introduction to Git
- 2. Git Branches
- 3. Git Workflow
- 4. Introduction to Github
- 5. Github Branches
- 6. Pull / Push to Github
- 7. Clone / Fork from github
- 8. Git Ignore
- 9. Git & Github SSH
- 10. Git Revert / Reset / Amend

### **Module - 4: Introduction to DBMS**

- 1. Introduction to PostgreSQL
- 2. Basics of RDBMS Concepts
- 3. Basics of SQL Concepts
- 4. PostgreSQL Security Concepts
- 5. PostgreSQL Infrastructure Skills
- 6. Automation in PostgreSQL
- 7. SQL Optimization Techniques

## **Module - 6: React & Redux**

- 1. Introduction to React
- 2. Learning JSX
- 3. Create-React-App
- 4. React Components I
- 5. React Components II
- 6. Styling in React
- 7. Component Lifecycle Methods
- 8. React Hooks
- 9. React Router
- 10. Context API
- 11. Redux in React
- 12. Redux Toolkit

# **Module - 8: Projects**

- 1. File Analyzer App
- 2. Image Bazaar WebApp
- 3. Google Drive Clone WebApp
- 4. Open-Board WebApp
- 5. Instagram Clone WebApp