

# **NODE API Development with React Project**

**Prerequisites: Knowledge of ES6 and React Programming**

## **1. Understanding Node environment**

- Extending JavaScript
- V8
- The Process Object

## **2. Understanding Asynchronous Event Driven Programming**

- Broadcasting Events
- Listening for Events
- Timers
- Understanding the Event Loop
- Callbacks and errors

## **3. Streaming Data Across Node And clients**

- Exporting Streams
- Creating an HTTP Server
- The Request objects
- Working with Headers
- Handling Post Data

## **4. Access the File System**

- Directories & iterating over files and folders
- Reading from File
- Writing to a File

## **5. Introduction to Express**

- What is use of Express Framework?
- Install Node and necessary dependencies

## **6. Getting Started with Express**

- Express: The Basics
- Basic Routing
- Serving Static Files

## **7. Middleware and Rendering**

- Express Middleware
- Responding with JSON
- Express with View Engine
- API/ Server-Side rendering

## **8. Request & Response**

- Request Object – Forms and Cookies
- Query String
- Data Params
- Headers
- Router
- Express Generator
- Rendering in Express (EJS)
- HandleBars
- Pub/Jade

## **9. Project: Building API**

- Project Overview and Setup
- Routes and Middleware
- Movie Routes and Headers

## **10. Databases**

- Relational Database and SQL
- Node & MYSQL
- NoSQL and Documents
- MongoDB and Mongoose
- CRUD operation using MongoDB
- Working with MySQL
- CRUD Operation using MYSQL

## **11. API Integration with JS Frameworks**

- Connecting React with API
- A CRUD project with REACT and Node