

## **Building Functional Prototypes using Node.js**

**Modality: Self-Paced Learning**

**Duration: 20 Hours**

**SATV Value:**

**CLC:**

**NATU:**

**SUBSCRIPTION: Learn, Master**

### **About this Course:**

Building Functional Prototypes using Node.js is an intermediate-level 20 Hours Training Program solely focusing on back-end web development. This course is specifically tailored for Entry-Level Web Developers who want to learn the art transitioning a basic web application prototype into a dynamic live data storage model. This course covers the key concepts and functionalities of Node.js and Express.js and helps professionals build familiarity with coding in JavaScript Ecosystem.

Through this course, professionals will also get to know the fundamentals of SQLite and SQL Databases and will learn the art of writing queries. Besides this, this course also sheds light on the key elements of Microsoft Azure Web App Deployment and helps candidates develop SQL Statements. Upon the completion of this course, professionals will also be able to connect REST APO and SQLite Servers.

### **Course Objectives:**

The core objective of this course is to help professionals develop a better understanding and sound knowledge of the following key concepts:

- Difference between Front-end and Back-end Web App Development
- Back-end web Server Creation using Node.js and Express.js
- Getting to Know REST and API Services
- Understanding the use of Database and Database Management System
- Web App Deployment using Microsoft Azure
- SQL Statements Development and REST API & SQLite Connectivity
- Fundamentals and Essentials of SQL Server
- Querying Database with SQLite & Web Server Fundamentals
- Essentials of SQL, HTTP, & Web Routing

### **Audience:**

This course is tailored for the following group of professionals and interested candidates:

- Entry-Level Web Developers
- Programmers & IT Professionals

- Professionals striving to learn about Back-End Web Development
- Candidates interested in building familiarity with Node.js

## **Prerequisites:**

Professionals planning to enroll in the Building Functional Prototypes using Node.js course must comply with the following prerequisites:

- Fundamental Knowledge of HTML
- Basic Understanding of CSS
- The familiarity of Working with Programming Fundamentals such as JavaScript

## **Course Outline:**

### **Module 1 | Intro to Back-End Web Development**

- Overview
- Overview of Back-End Web Development
- Intro to HTTP
- Intro to APIs and REST Services
- Summary
- Knowledge Check

### **Module 2 | Writing Server-Side JavaScript with Node.js**

- Overview
- Getting Started with Node.js
- Getting Started with Express.js
- Exercise - Building REST APIs with Node.js and Express.js
- Module 2 Summary
- Knowledge Check

### **Module 3 | Working with Databases**

- Overview
- Intro to Databases
- Working with Databases
- Building SQL Statements
- Node.js and SQLite
- Exercise - Connect a REST API to a SQLite Database
- Module 3 Summary
- Knowledge Check

### **Module 4 | Deploying on Azure**

- Module Overview
- Intro to Azure
- Deploying to Azure

- Azure App Insights

## **Module 5 | Final Assessment and Evaluation**

- Final Assessment
- Evaluation
- Next Steps