

Course Name : **NODE.JS AND EXPRESS CREATE A RESTFUL WEB SERVICES**
Duration : **3 Days (Physical Classroom / Virtual Live Instructor)**
Skill Level : **Beginner**

COURSE DESCRIPTION:

Did you know that you can develop a powerful web API for your applications using Node.js and Express? There's no need to learn PHP, ASP.NET, or Python or have extensive back-end programming knowledge. In this course, our trainer will guide you through the process of creating a simple and effective RESTful web API using these two widely-used JavaScript libraries. You'll learn how to set up the project, including the Express server and testing environment, and create the necessary endpoints for adding, updating, and deleting data in a MongoDB database. Additionally, the trainer will demonstrate serving static files such as images through your API. At the end of the course, you will be comfortable writing API endpoints to the JavaScript-based back-end.

WHAT WILL YOU LEARN?

This Node & Express.js course will take you on a journey of exploration and discovery into the world of backend development. Our certified trainer will introduce you to the newest features of ES6 and guide you through the fundamentals of the Node and Express framework. You will gain an understanding of how to create lightweight, fast, and scalable APIs with ease, as well as how to use REST for user-friendly APIs. By the end of the course, you will have acquired the skills to develop comprehensive REST APIs that are both fast and secure. Join us in this comprehensive training program and learn how to develop data-driven, RESTful services with Node, Express, and MongoDB.

PREREQUISITE:

Beginners. Prior JavaScript helps but is not mandatory.

METHODOLOGY:

This program will be conducted with interactive lectures, PowerPoint presentations, discussions, and practical exercises. This course can be conducted as instructor-led (ILT) or virtual instructor-led training (VILT).

JOB SCOPE:

Upon completion of this course, candidates may pursue the following career paths:

- Node.js Developer
- Backend Developer
- Full stack Developer
- JavaScript Developer
- Web Application Developer
- MERN Developer
- MEAN Developer
- MEVN Developer

DAY 1

MODULE 1: INTRODUCTION

- Welcome
- Introduction to React
- History

MODULE 2: ADVANCED JAVASCRIPT | ES6

- Variable Declaration
- Constant Declaration
- Arrow Function Syntax
- Template Literals
- Implicit Returns
- Key/Property Shorthand
- Method Definition Shorthand
- De-Structuring (Object Matching)
- Array Iteration (Looping)
- Default Parameters
- Spread Syntax
- Classes/Constructor Functions
- Inheritance
- Modules – Export/Import
- Promises/Callbacks

DAY 2

MODULE 3: GETTING STARTED

- Welcome
- Overview of APIs and related libraries
- Introduction to Postman
- Installation of Node and Express
- Installation of MongoDB
- The basic configuration of Babel

MODULE 4: BUILDING THE SERVER

- Review of RESTful APIs
- Creation of initial server files and folders
- Implementation of basic routing endpoints
- Fundamentals of middleware and their applications

MODULE 3: CONFIGURING THE DATABASE

- Review of MongoDB basics
- Configuration of the database
- Definition of database schema

DAY 3

MODULE 4: IMPLEMENTING CRUD FUNCTIONS

- Development of POST endpoint for the creation of new items
- Implementation of GET endpoint to retrieve all items
- Creation of GET endpoint to retrieve a specific item by ID
- Development of PUT endpoint to update items
- Implementation of DELETE endpoint to delete items

MODULE 5: DIRECTIVES AND TEMPLATES

- Serving of static files
- Overview of other libraries that can be utilized in API development

CONCLUSION

- QA
- Useful References and Books
- Feedback