



Node JS

30 Hours

(Basic + Intermediate)

Programming & Development



POSITIVE QUADRANT
TECHNOLOGIES
SERVING INFORMATION WORLDWIDE

Pre-requisite / Target Audience:

- Basic Knowledge of JavaScript and OOPS
- Knowledge in async programming will be added advantage

Java Script :

- Introduction to JavaScript
- JavaScript Statements
- JavaScript Keywords
- JavaScript Functions
- JavaScript Programs
- JavaScript Operators
- Function Parameters
- Function Return Values
- JavaScript Data Types
- Primitive Types

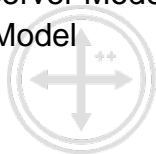


Java Script & Objects:

- Object Overview
- Object Oriented Programming
- Object creation
- Adding Properties to Objects
- Adding Methods to Objects
- JavaScript Conditional Statements
- JavaScript Loops & Iteration
- Enumerating properties
- Call-backs
- JSON

Node JS Basics:

- Introduction
- What is Node JS?
- Advantages of Node JS
- Traditional Web Server Model
- Node.js Process Model



Setting up the development environment for Node.js:

- Install Node.js on Windows
- Installing in mac os
- Working in REPL
- Node JS Console

Node Js modules:

- Functions
- Buffer
- Module
- Module Types
- Core Modules
- Local Modules
- Module Exports



Node Package Manager:

- What is NPM
- Installing Packages Locally
- Adding dependency in package.json
- Installing packages globally
- Updating packages

Webserver Creation:

- Creating web server
- Handling http requests
- Sending requests

File Systems:

- Fs.readFile
- Writing a File
- Writing a file asynchronously
- Opening a file
- Deleting a file
- Other IO Operations

Debugging Node JS Application:

- Core Node JS debugger
- Debugging with Visual Studio

Events:

- Event Emitter class
- Returning event emitter
- Inhering events

Express JS:

- Configuring routes
- Working with express

Database connectivity using Node JS:

- Connection string
- Configuring
- Working with select command
- Updating records
- Deleting records



Project:

Real-time Project involving most of the above concepts with following will be provided

- Product Abstract Document
- Requirement Specification Document
- Step-by-Step procedure for building the project from ground up
- Complete Source Code
- Database Script with Sample data
- Instructions to Setup the Project on a Development box
- Instruction to Deploy the project on Production Box / Microsoft Azure

