



Node JS

60 Hours

(Basic + Intermediate+Advanced)

Programming & Development

Pre-requisite / Target Audience:

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

Introduction:

- HTML Basics
- HTML Elements
- HTML Attributes
- HTML Styles
- HTML Forms
- HTML Form Elements
- HTML Input Element Types
- HTML Input Attributes
- HTML File Paths Script tag and its uses
- HTML & XHTML CSS
- Introduction CSS Syntax CSS Selectors CSS Styling



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

Debuggin 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

Serving Static Resources:

- Serving static files
- Working with middle ware

Database connectivity using Node JS:

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

Template Engine:

- Why Template Engine
- What is Jade
- What is vash
- Example



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TECHNOLOGIES
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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