Developing Web Applications Using Node.js

Course #: NJS-100   **Duration:** 2 days

Prerequisites

Advanced JavaScript Programming

Details

Developing Web Applications Using NodeJS is a two-day instructor-led course that teaches students how to build server-side web applications using open source JavaScript frameworks and powered by NodeJS.

Students will learn how to create and test modern web applications and APIs using open-source JavaScript modules, NodeJS, and MongoDB.

Software Needed

Text Editor

Outline

Developing Web Applications Using Node.js

- **Setting up Node.js and Other Essentials**
    - Installing Node.js and NPM
    - Launching Node.js Scripts
    - Node.js Basics and Syntax
    - Node.js Core Modules
    - Handy Node.js Utilities
- **Node Package Manager**
    - Installing a Package
    - Global Packages
    - Updating Packages
    - Creating Packages
- **Using Express.js to Create Node.js Web Apps**
    - Installing Express.js
    - Express.js Scaffolding

- Setting Up Folders and Configuration
- **TDD and BDD**
  - Installing and Understanding Mocha
  - TDD with Assert
  - BDD with Expect.js
- **Persistence with MongoDB and Mongoskin**
  - Installing and Running MongoDB
  - Data Manipulation from the Mongo Console
  - Native MongoDB Driver for Node.js
  - Main Mongoskin Methods
- **Boosting Data with Mongoose ORM Library**
  - Installing Mongoose
  - Mongoose Schemas
  - Mongoose Models
  - Relationships and Joins
  - Express.js + Mongoose = True MVC
- **Using Sessions and OAuth in Node.js Apps**
  - Authorization with Express.js
  - Token-Based Authentication
  - Session-Based Authentication
  - Node.js OAuth
- **Building Node.js REST API Servers**
  - RESTful API Basics
  - Test Coverage with Mocha and Superagent
  - REST API Server Implementation with Express and Mongoose