

# Node & React JS





# **WEB-SCRIPTING**

## Section 1: HTML5- The Static Web Page Creation

- ✓ HTML5 Introduction
- ✓ Structure
- ✓ Elements
- ✓ Semantics
- Audio & Video
- ✓ Section & Article
- ✓ Canvas, Aside
- ✓ Drag & Drop
- ✓ Forms & Form Elements

#### Section 2: CSS 3 - The Presentation Semantics

- ✓ 2.1 CSS Properties, Selectors, Style **Declaration Types**
- ✓ 2.2 Colors, Backgrounds, Text and Fonts
- ✓ 2.3 Images, Links, Tables and List
- 2.4 Borders, Padding, Margin
  2.5 Cursor, Dimension, Scrollbars, Visibility and Positioning
- ✓ 2.6 Pseudo class & Elements, @Rules( import, font-face, charset)
- ✓ 2.7 Filters, Media Types, Printing and Layouts

#### Section 3: JavaScript - The Interpreted **Programming Language**

- ✓ 3.1 Interpreted Programming Languages
- 3.2 Integrating JavaScript with HTML
  3.3 Variables in JavaScript
- ✓ 3.4 Operators in JavaScript
- ✓ 3.5 Expressions in JavaScript
- ✓ 3.6 Arrays in JavaScript
- ✓ 3.7 Handling Loops & Decision structures
- ✓ 3.8 Executing Conditional statements
- ✓ 3.9 Working with Functions
- ✓ Section 4: ES6 Write Less Do More...
- ✓ 4.1 Understanding ES6
- ✓ 4.2 Arrow Functions
- ✓ 4.3 Event Handlers
- 4.4 Sliding, Easing, Fading, Toggling
- 4.5 AJAX calls
- ✓ 4.6 JSON

#### **Section 4: UI-Components**

- ✓ 5.1 Introduction to Semantic-UI-React
- ✓ 5.2 Grid System
- ✓ 5.3 Creating Layouts with Semantic-UI-React
- ✓ 5.4 Semantic-UI Understanding the CSS
- ✓ 5.5 CSS Customization / Skins
- ✓ 5.6 Responsive Web design with Semantic-UI-React
- ✓ 5.7 Single Page Responsive site with Semantic-UI-React
- ✓ 5.8 Semantic-UI-React Layout Components

- 5.9 Semantic-UI-React Plug-ins : ? 1
- Transition
- Modal
- Dropdown
- Scrollspy
- Tab
- Tooltip
- 5.10 Building Web-App with Semantic-Ul-React.

# **PROGRAMMING LANGUAGE** (NODE.JS -- MySQL)

#### Section 1: Node.js – Understanding the **Preliminaries**

- Introduction to web & internet
- ~ Introduction to server
- Understanding localhost server
- Starting Node.js
  - Node.js syntax and variables
  - **Operators and Expressions** Conditional Branching and
- Looping Statements
- Learning Arrays in Node.js

#### Section 2: Node.js - The Core Logics and **Techniques**

- ✓ 2.1 String and Math functions in Node.js
- ✓ 2.2 Introduction HTML Form Elements and Fields
- 2.3 Accessing Node.is, HTTP Data
- 2.4 Query Strings and Hyperlinks
- 2.5 Describing Pre-Defined Variables -Super Global Arrays
- 2.6 Understanding NPM (Node Packeage Modular)
- 2.7 Usage of import and require statements

#### Section 3: Node.js and MySQL - The Structured **Repository**

- 4.1 Node.js MySQL Connectivity  $\checkmark$
- 4.2 Integrating Web Forms and Database
- 4.3 Using Node is MySQL package

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#### Section 4: Learn More Advanced Techniques in Node.js

- ✓ 5.1 Introduction to Functional Programming
- 5.2 Events and handlers
- ✓ 5.3 Events And Process On Firing Events
- ✓ 5.4 Constructors
- ✓ 5.6 Exception Handling
- ✓ 5.7 Regular Expressions
- ✓ 5.8 Session Handling
- ✓ 5.9 Using Cookies

#### Section 6: Working with JSON

- ✓ 6.1 Introduction to JSON
- ✓ 6.2 Understanding the power of ison
- ✓ 6.3 Building a Sample Web Application

#### Section 7: Express Framework

- ✓ 8.1 Introduction to Express Frameworks
- ✓ 8.2 Working with Express Framework
- ✓ 8.3 Routing
- ✓ 8.4 Routes, Views and Public Assets
- ✓ 8.6 Helpers and Modules
- ✓ 8.7 FormValidation
- ✓ 8.8 FetchingData using
- ✓ 8.9 Session
- ✓ 8.10 Database

#### Section 9: Payment Gateway, E-mail and Social **Media Networks**

- ✓ 9.1 Integration of payment gateway
- ✓ 9.2 Integrating emails to web application
- ✓ 9.3 Integrating social media networks to web application

#### Section 10: Web Security

- ✓ 11.1 Data Validation
- ✓ 11.2 SQL Injection
- ✓ 11.3 Cross Site Scripting

# **MySQL**

#### Section 1: Relational Database

- ✓ Basics
- ✓ Brief History of MySQL
- ✓ Relational Databases and Popular Databases
- ✓ SQL Statements
- Section 2: Data Manipulation Language (DML)
  - ✓ 2.1 INSERT
  - ✓ 2.2 UPDATE
  - ✓ 2.3 DELETE
  - ✓ 2.4 SELECT

## Section3: Data Definition Language (DDL)

✓ 3.1 CREATE

- ✓ 3.2 ALTER
- ✓ 3.3 DROP

#### Section4: Sub-Queries, Joins and Unions with **MySQL**

- 1 4.1 Order By, Like , And & Or, Where , Between
- 4.2 Joins & Unions
- 4.3 Aggregate Functions and Grouping

#### Section 5: Constraints and Normalization

- ✓ 5.1 Understanding Primary and Foreign Kevs
- 5.2 Understanding Database Normalization
- 5.3 Views and Triggers

## React

#### Section 1: Introduction to concept of react

- ✓ Basics
- Understanding the nature of react  $\checkmark$
- The Power Of React

## Section 2: Working With React

- ✓ 2.1 Components
- ✓ 2.2 State
- ✓ 2.3 Props
- ✓ 2.4 Render

### Section3: State management

- ✓ 3.1 Understanding the problem
- ✓ 3.2 Solution Context API
- ✓ 3.3 Working with Context API

#### Section4: Interacting of Components

- ✓ 4.1 Passing state
- ✓ 4.2 Using Parent's State As Props
- ✓ 4.3 Changing the state of the parent

#### Section 5: Working with React Routers

- ✓ 5.1 Understanding Routing In React
- 5.2 Switching Between Components

#### Section 6: Advance React

- 5.1 Understanding Higher Components
- ✓ 5.2 Code Splitting
- ✓ 5.3 Server Side Rendering

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