TechyEdz Solutions

Training | Consulting | Developement | Outsourcing

Web Development

Web Development Training

✚ Course Overview:

We offers Web Development training courses. Students will learn the skills necessary to become a Back-End Engineer, Front-End Engineer, or a Full-Stack Engineer. After completing the courses, you will be able to design web pages for both static and dynamic websites with latest technologies. The package also includes courses on Professional Web Designing with HTML & CSS, Object Oriented JavaScript, Bootstrap Framework, and backend technologies like Angular JS, Node JS and Mongo DB.

✚ Course Outline:

1) HTML5

Introduction to HTML

- Introduction to Internet
- HTML Basics
- HTML Elements
- HTML Attributes
- HTML Syntax
    - ➢ HTML Headings
    - ➢ HTML Paragraphs
    - ➢ HTML Styles
    - ➢ HTML Formatting
    - ➢ HTML Links
    - ➢ HTML Images
    - ➢ HTML Responsive
    - ➢ HTML Entities
    - ➢ HTML Tables
    - ➢ HTML Forms
    - ➢ HTML5 API
    - ➢ HTML5 Canvas
    - ➢ HTML5 SVG
    - ➢ HTML5 Data Storage
    - ➢ HTML5 Audio and Video
    - ➢ HTML Offline Applications
    - ➢ HTML Geo-location

- ➢ HTML Web Workers
- ➢ HTML5 Web sockets
- ➢ HTML5 Messaging API
- ➢ HTML5 Working with Drag and Drop

2) CSS3

Introduction to CSS
- ➢ CSS Introduction
- ➢ CSS Syntax
- ➢ CSS Text
- ➢ CSS Backgrounds
- ➢ CSS Fonts
- ➢ CSS Links
- ➢ CSS Lists
- ➢ CSS Tables
- ➢ CSS Box Model
- ➢ CSS Margins, Dimensions, Display
- ➢ CSS Navigation Bar
- ➢ CSS Attribute Selectors
- ➢ CSS Rounded Corners
- ➢ CSS Border Images
- ➢ CSS Backgrounds
- ➢ CSS Colors
- ➢ CSS Animations
- ➢ CSS Responsive Web Design - Introduction
- ➢ CSS Responsive Web Design - Viewport
- ➢ CSS Responsive Web Design - Media Queries
- ➢ CSS Responsive Web Design - Images
- ➢ CSS Responsive Web Design - Videos
- ➢ CSS Responsive Web Design - Frameworks

3) Javascript

Introduction to JavaScript
- ➢ JavaScript Introduction
- ➢ JavaScript Output
- ➢ JavaScript Variables
- ➢ JavaScript Operators

- ➢ JavaScript Arithmetic
- ➢ JavaScript DataTypes
- ➢ JavaScript Assignment
- ➢ JavaScript Functions
- ➢ JavaScript Objects
- ➢ JavaScript Scope
- ➢ JavaScript Switch
- ➢ JavaScript Loops
- ➢ JavaScript Break
- ➢ JavaScript Type
- ➢ JavaScript Forms (API and Validation)
- ➢ JavaScript Events
- ➢ JavaScript Strings and String Methods
- ➢ JavaScript Numbers and Number Methods
- ➢ JavaScript Math
- ➢ JavaScript Dates: Formats and Methods
- ➢ JavaScript Booleans
- ➢ JavaScript Comparisons
- ➢ JavaScript Conditions
- ➢ JavaScript Objects
- ➢ JavaScript Functions
- ➢ JavaScript DOM
- ➢ JavaScript Browser BOM
- ➢ JavaScript Frameworks

4) JQuery

Introduction to JQuery
- JQuery Introduction
- JQuery Syntax
- JQuery Selectors
- JQuery Events
- JQuery Effects
    - ➢ JQuery Hide/Show
    - ➢ JQuery Fade
    - ➢ JQuery Slide()
    - ➢ JQuery Animate

- ➢ JQuery Stop()
- ➢ JQuery Callback
- ➢ JQuery Chaining
- JQuery AJAX
  - ➢ JQuery AJAX Introduction
  - ➢ JQuery Load
  - ➢ JQuery Get/Post
- JQuery HTML
  - ➢ JQuery Get
  - ➢ JQuery Set
  - ➢ JQuery Add
  - ➢ JQuery Remove
  - ➢ JQuery CSS Classes
  - ➢ JQuery css()
  - ➢ JQuery Dimensions
- JQuery Traversing
  - ➢ JQuery Traversing
  - ➢ JQuery Ancestors
  - ➢ JQuery Descendents
  - ➢ JQuery Siblings
  - ➢ JQuery Filtering

5) Bootstrap

Introduction to Bootstrap
- ➢ Bootstrap Introduction
- ➢ Bootstrap Components
- ➢ Bootstrap Plugins
- ➢ Bootstrap Grids
- ➢ Bootstrap JS

6) PHP

Introduction to PHP
- PHP Introduction
  - ➢ Installing PHP
  - ➢ PHP Syntax
  - ➢ PHP Variables
  - ➢ PHP Data Types

- PHP Strings
- PHP Constants
- PHP Operators
- PHP XML Parsers
- PHP SimpleXML Parser
- PHP SimpleXML Get
- PHP XML DOM
- PHP XML Expat
- PHP with Mysql
  - PHP Mysql Database
  - PHP Connecting to Database
  - PHP Creating Records
  - PHP Selecting Records
  - PHP Programming Loops
  - PHP Functions
  - PHP Arrays
  - PHP Superglobals
- PHP Forms and XML
  - PHP Form Handling
  - PHP Form Validation (Server side)
  - PHP Required
  - PHP Deleting Records
  - PHP Updating Records
  - PHP Limit Data
  - PHP Insert Multiple
- AJAX with PHP
  - AJAX Introduction
  - AJAX PHP
  - AJAX Database
  - AJAX XML
  - AJAX Live Search
  - AJAX RSS Reader

7) MySQL

Introduction to MySQL

- MySQL Introduction

8) Angular JS

Angular JS Basics

- What is Angular JS?
- Why Angular JS?
- Why MVC matters
- MVC-The Angular JS way
- Features of Angular JS ,Model-View-Controller
- My First Angular JS app

Angular Expressions

- All about Angular Expressions
- How to use expressions, Angular vs JavaScript

Filters

- Built-In Filters, Using Angular JS Filters
- Creating Custom Filters

Directives

- Introduction to Directives, Directive Lifecycle
- Binding controls to data, Matching directives
- Using Angular JS built-in directives
- Creating a custom directive

Controllers

- Role of a Controller, Controllers & Modules
- Attaching Properties and functions to scope
- Nested Controllers, Using Filters in Controllers
- Controllers in External Files

Angular JS Modules

- Introduction to Angular JS Modules
- Bootstrapping Angular JS

Angular JS Forms

- Working with Angular Forms, Model Binding
- Forms Events, Updating Models with a Twist

- ➢ Form Controller, Validating Angular Forms
- ➢ $error object

Scope

- ➢ What is scope, Scope Lifecycle
- ➢ Scope Inheritance, Scope & Controllers
- ➢ Root scope, Scope Broadcasting
- ➢ Two-way data binding, Scope Inheritance
- ➢ Scope & Directives, $apply and $watch
- ➢ Scope Events

Dependency Injection & Services

- ➢ What is Dependency Injection
- ➢ Creating Services, Factory, Service & Provider
- ➢ Using Dependency Injection, What are services
- ➢ Using Angular JS built in services

Single Page Application (SPA)

- ➢ What is SPA, Pros and Cons of SPA
- ➢ Passing Parameters, Changing location
- ➢ Installing the ng Route module, Configure routes
- ➢ Resolving promises, Creating a Single Page Apps

Angular JS Animation

- ➢ ng Animate Module, CSS Transforms
- ➢ CSS Transitions, Applying Animations

9) Node JS

Introduction to Node JS

- ➢ Introduction to Node JS
- ➢ Advantages of Node JS
- ➢ What is Node JS, Node.js Process Model
- ➢ Traditional Web Server Model

Setup Development Environment

- ➢ Install Node.js on Windows
- ➢ Working in REPL, Node JS Console

Node JS Modules

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

Node Package Manager

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

Creating Web Server

- Creating Web Server
- Sending Requests
- Handling http requests

File System

- read File, Writing a File
- Opening a file, Deleting a file
- Writing a file asynchronously
- Other IO Operations

Debugging Node JS Application

- Core Node JS Debugger

10) React JS

Introduction to ReactJS
- History of front end libraries
- Motivation for using React
- Key differentiators (Virtual DOM, One way binding)
- Thinking in React

React Components
- React component
- Render function
- Component API

- ➤ Component lifecycle
- ➤ State
- ➤ Props
- ➤ Mixins
- ➤ JSX

React internals
- ➤ Reconciliation algorithm

Component inter communication
- ➤ Component composition
- ➤ Pass data from parent to child
- ➤ Pass data from child to parent

Component styling
- ➤ Radium
- ➤ CSS Modules
- ➤ LESS/SASS

Unit testing components
- ➤ Jasmine
- ➤ React test utilities

Performance optimizations
- ➤ PureRenderMixin
- ➤ Expensive DOM manipulations
- ➤ Performance tools

11) Mongo DB

- ➤ NoSQL Vocabulary
- ➤ Working with MongoDB
- ➤ Creating Data
- ➤ Reading Data
- ➤ Updating Data

➢ Destroying Data

➢ Setting Up Schema & Validations

➢ REST API Endpoints

✚ **Prerequisites:**
- This course doesn't require any prior programming knowledge. Basic computer science knowledge will be enough to get started with this course.

✚ **Who Can Attend:**
- This course can be taken by anyone who wants to learn the art of web development. Besides this anyone who wants to create stunning websites using HTML5, CSS3, Twitter Bootstrap 3 and jQuery can take this course.

✚ **Number of Hours:** 60hrs
✚ **Certification: None**
✚ **Key Features:**
➢ One to One Training
➢ Online Training
➢ Fastrack & Normal Track
➢ Resume Modification
➢ Mock Interviews
➢ Video Tutorials
➢ Materials
➢ Real Time Projects
➢ Virtual Live Experience
➢ Preparing for Certification