Introduction to HTML5; CSS3 and JavaScript (TT4650)

Modality: Virtual Classroom

Duration: 3 Days

About this course:

Introduction to HTML5; CSS3 and JavaScript are a complete training course of HTML5, CSS3, and JavaScript intended for engineers who need to comprehend the up-to-date in web advancements and responsive plan practices that are key to targeting the whole range of client browsers and platforms. This extensive course gives a reasonable blend of hypothesis and functional labs intended to take understudies through CSS3, HTML5, and JavaScript. Understudies who go to this course will leave this course furnished with the new aptitudes to implement, design, and deploy strong, adaptable, and safe web applications.

The normal pay of the programmer of an HTML5, JavaScript and CSS3 are $76,200 every year.

Course objective:

This course gives indoctrination in the useful utilization of the umbrella of advances that are on the leading edge of web improvement.

Working within a dynamic, hands-on learning condition, guided by our master group, participants will learn:

HTML5:

- The most effective method to successfully meet necessities using the full scope of HTML5 basic components and semantic.
- To work with innovations, for example, application caching, web storage, and cross-domain messaging to improve execution and the client experience

CSS:

- What supports the features of CSS3 and how they can be adequately utilized with HTML5 and different advances?
- To adjust to varying degrees of program support for CSS3 and HTML5.

JavaScript:

- What is JavaScript? The manner by which it identifies with other programming dialects, and the way to script your website pages with it.
- To manipulate and traverse the DOM and handle occasions in manners that work in all programs
- To work with prototypes and closures and other extraordinary highlights of JavaScript

Debugging:

- What is expected to viably troubleshoot these web advancements?
- The most effective method to utilize both proxy-based and program-based debuggers and apparatuses

Audience:

This web advancement course is an intermediate-level course, intended for experienced engineers who need to broaden their insight into web design and development or need to reinforce sound HTML and CSS coding practice.

Prerequisite:

Participants ought to have a past understanding or working information on developing software applications, and also essential CSS and HTML. Real-world programming experience is an unquestionable requirement.

Course Outline:

Module 1: HTML

Lesson: HTML

- Define HTML and review its history
- Look at XHTML and its relationship to HTML
- Identify HTML limitations and improvements
- Exercise: Working with HTML

Lesson: HTML5

- HTML5 Overview
- HTML5 Semantic Structure
- HTML5 Forms
- HTML5 Media Delivery
- Exercise: Writing a Valid HTML5 Document
- Exercise: Writing HTML5 Forms

Module 2: CSS

Lesson: CSS

- Learn the basics of CSS
- Meaning of cascading in CSS

- Declaring CSS within your HTML page
- Creating styles in an external CSS file
- Control how to display and position HTML elements
- Overriding standard tag behavior
- Adding new classes
- Using custom classes in your page
- Exercise: Working with CSS

Lesson: CSS3 Overview

- What is new in CSS3
- The Advantages of CSS3
- Browser Support for CSS3
- Exercise: Working with CSS3

Lesson: CSS3 Advanced Selectors

- Selecting Using Attributes
- Selecting Using DOM Structure
- Complex Selecting using Pseudo-Classes
- Selecting Using UI Components and State
- Exercise: Using Attribute Selectors

Lesson: CSS3 Visual Effects

- Font Options, Opacity, and Color
- Distributing Content Across Columns
- Working with Borders and Boxes
- Working with Vendor Prefixes
- Functional Techniques
- Exercise: Using Improved CSS3 Techniques
- Exercise: Applying CSS3 Functional Techniques

Module 3: JavaScript

Lesson: JavaScript Basics

- JavaScript Defined
- Variables and Operators
- Flow Control and Conditionals
- Exercise: JavaScript Basics

Lesson: Debugging Tools

- Using the strict mode and setting breakpoints
- Browser debugging tools
- Monitoring resource usage and performance

- Emulating devices Exceptions in JavaScript
- Exercise: JavaScript Debugging

Lesson: JavaScript Functions

- Functions in JavaScript
- Invoking Functions
- Function Constructor
- Function Scope and Closures

Lesson: JavaScript Arrays, Math and Date

- JavaScript Literals
- JavaScript Arrays
- Working with Numbers and Dates
- Exercise: JavaScript Built-in Objects

Lesson: JavaScript Event Handling and the DOM

- Events and Event Handling
- HTML Document Object Model
- Accessing the DOM
- Dynamically Working with the DOM
- DOM Challenges
- Exercise: Using Events and the DOM

Lesson: Object-Oriented JavaScript

- JavaScript "Objects" and "Classes"
- Constructors and Prototypes
- Prototypes
- Extending Classes with Prototype
- Reusable, Flexible Classes
- Exercise: Working with Classes