

Course: Front End/User Interface Development

Topics: HTML5 + CSS3 + JQuery + AngularJS

Any fresher or professional can join this course who wants to start his/her career as UI developer/web designer. This course includes HTML4, CSS2, HTML5, CSS3, JQuery, AngularJs.

Part 1—Introduction HTML5 Overview

- History of HTML5
- The HTML5 vision
- WHATWG and W3C specifications
- What is part of HTML5?
- When can I use HTML5?
- Moving away from Adobe Flash
- Mobile HTML5 Applications
- HTML5 Accessibility and WAI-ARIA
- Web Applications versus Web Sites
- What is CSS?
- Div based HTML design.
- How to use HTML5 in browsers that do not support it
- Native availability of HTML5 features and Polyfills
- What is Java script, JQuery?
- Overview of the HTML5 APIs
- Browsers & Server

Part 2—Semantic Markup, Microdata, and Forms HTML5 Markup

- HTML5 page structure
- HTML5 DOCTYPE
- HTML5 markup
- Structural elements

- Semantic elements
- Deprecated elements
- HTML5 validation
- Browser support and polyfills
- Using Helper Libraries
 - HTML5Shiv
 - HTML5 Boilerplate
 - Modernizr

➤ **Microdata**

- Overview
- Data vocabularies
- Google Rich Snippet tool

➤ **HTML5 Forms**

- HTML5 Form elements
- New input types
- Form validation
- Building and using HTML5 Forms
- Styling Forms

Part 3—CSS3

- Overview
- Border radius
- Box and text shadows
- Gradients

- Multi-column layout
- Reflection
- Selectors
- Transformations and Transitions
- Web Fonts
- Media queries
- Browser support and polyfills

Part 4—Multimedia (HTML5 Audio and Video)

- Overview
- Audio and video containers
- Audio and video codecs
 - WebM
 - H.264
 - Ogg
- WebVTT and video accessibility
- Browser support and polyfills

Part 5 - Getting Started with jQuery

- What is jQuery?
- Download and attach jQuery in web page
- Creating a simple jQuery-enabled page
- Overview of jQuery's features

Programming in jQuery with HTML Page Content

- CSS selectors and filters
- Using basic jQuery selectors
- Using basic jQuery filters
- Show, hide and toggle elements

- Access Parent and child elements
- Access next and previous elements
- Form selectors and filters
- Understanding jQuery statement chaining
- Create class and Objects in Java script
- Inheritance in java script
- AJAX

Part 6—Graphics and 3D

SVG

- Overview
- SVG vs. canvas
- Browser support and polyfills

Canvas

- Overview
- Canvas coordinates
- Context
- Accessibility
- Pixel data
- Overview of 3D canvas (WebGL)
- Browser support and polyfills

Part 7 - Devices Access

HTML5 Geolocation

- Overview
- User Privacy
- Location information sources(Working with Google Maps)

Drag and Drop

- Overview

- Events
- Simple Game with Drag and Drop

More Device Access

- Device orientation
- Speech input
- Webcam

Part 8 - Performance and Integration

HTML5 Web Workers

- Overview
- Web Worker communication

High-Performance HTML5 Web Applications

- Tips and Tricks for Web App optimization
 - JavaScript
 - CSS
 - Images
 - Sprites
 - Data URIs
- Developer Tools for
 - Page Speed
 - YSlow
 - Chrome Speed Trace

PART 9 - Offline and Storage

HTML5 Offline Web Applications

- Overview
- Application Cache API and Events
- Understanding the Manifest file
- Server Configuration

- Building and using HTML5 Offline Web Applications

HTML5 Web Storage

- Overview
- Local Storage
- Session Storage
- Application Cache Object
- Deleting local Cache

Part 10 - Connectivity

Cross Document Messaging

- Overview
- Understanding the origin concept

XMLHttpRequest Level 2

- Overview
- Cross-document XHR
- Progress events

Server-Sent Events

- Overview
- EventSource API

HTML5 WebSocket

- Overview
- WebSocket API
- WebSocket Protocol

Part 11- Angular JS

- Introduction to Angular JS
 - What is framework
 - What is SPA
 - Design Pattern
 - Angular JS Vs JQuery
 - Model View Controller
- Angular JS Views and Directives

- Angular JS Events
- Angularjs AJAX
- Angular JS Forms
- Custom Directives
- Routes