

UI Course

(Html, CSS, JavaScript, JQuery, Bootstrap, AngularJS)

HTML:

Introduction

- The World Wide Web (WWW) and history of HTML
- Hypertext and Hypertext Markup Language
- Why HTML
- Prerequisites
- Objective of this HTML course

HTML Documents

1. Dividing the document into 2 parts.
 - ✓ Headers tags
 - ✓ Body tags
2. Paragraphs
3. Formatting's
4. Elements of an HTML Document
 - ✓ Text Elements
 - ✓ Tag Elements
5. Special Character elements
6. Image tags
7. HTML Table tags
8. Lists
 - ✓ Numbered list
 - ✓ Non-Numbered lists
 - ✓ Definition lists
9. Anchor tag, Name tag etc.
10. Hyperlinks - FTP/HTTP/HTTPS
11. Links with images and buttons
12. Links to send email messages
13. Text fonts and styles
14. background colours/images
15. Marquee Behaviour
16. Forms related tags (action, method, name, input, submit etc.)

HTML Media Tags

1. Inserting audio files
2. Inserting video files
3. Screen control attributes
4. Media control attributes
5. HTML Object

HTML 5:

1. Introduction of different Web Technology
2. HTML5 Introduction
3. HTML5 New Elements
4. HTML5 Video
5. HTML5 Video/DOM
6. HTML5 Audio
7. HTML5 Drag and Drop
8. HTML5 Canvas
9. HTML5 SVG
10. HTML5 Canvas vs. SVG
11. HTML5 Geolocation
12. HTML5 Web Storage
13. HTML5 App Cache
14. HTML5 Web Workers
15. HTML5 SSE
16. HTML5 Tags

CSS

1. CSS Introduction
2. CSS Syntax
3. CSS Id & Class
4. CSS Styling
5. Styling Backgrounds
6. Styling Text
7. Styling Fonts
8. Styling Links
9. Styling Lists
10. Styling Tables
11. CSS Box Model
12. CSS Box Model
13. CSS Border
14. CSS Outline
15. CSS Margin
16. CSS Padding
17. CSS Advanced
18. CSS Grouping/Nesting
19. CSS Dimension
20. CSS Display
21. CSS Positioning
22. CSS Floating
23. CSS Align
24. CSS Navigation Bar

- 25. CSS Image Gallery
- 26. CSS Image Opacity
- 27. CSS Image Sprites
- 28. CSS Media Types
- 29. CSS hacking

JAVA SCRIPT

- 1. Introduction to JavaScript
 - Create Basic JavaScript Script
 - Types of Scripts
 - The Script Tags
 - Components of JavaScript
 - The Alert Statement
 - Browser Support
 - Script Errors
 - Identify Scripting Guidelines
 - Comments
 - Line Terminators
- Managing the Browser Window
 - Display Messages on the Status Bar
 - Objects
 - Types of Objects
 - Client-Side Objects
 - Core Objects
 - Object Hierarchy
 - Instances
 - The Window Object
 - Window Object Properties
 - Window Object Methods
 - Event Handler
 - Mouse Events
 - Open a Linked Page in a New Window

Managing the Document

- Write Content to a Document
- The Document Object
- Document Properties
- Document Methods
- Document Event Handlers
- Create a Dynamic Document
- Document Object Model
- DHTML
- Image Rollover

Jquery

Introduction

What You Should Already Know

What is jQuery ?

Adding the jQuery Library to Your Pages

Basic jQuery Example

Downloading jQuery

Alternatives to Downloading

jQuery Syntax

The Document Ready Function

How to use Custom Scripts?

Using Multiple Libraries

jQuery – no Conflict () Method

JQuery – Basics

- String:
- Numbers:
- Boolean:
- Objects:
- Arrays:
- Functions:
- Arguments:
- Scope:
- Built-in Functions:

JQuery – Selectors

How to use Selectors?

- jQuery – CSS Element Selector
- jQuery – CSS Element ID Selector
- jQuery – CSS Element Class Selector
- jQuery – CSS Universal Selector
- jQuery – CSS Multiple Elements E, F, G Selector
- jQuery Callback Functions

JQuery – DOM Attributes

- Get Attribute Value:
- Set Attribute Value:

JQuery – DOM Traversing

- Find Elements by index:
- Filtering out Elements:
- Locating Descendent Elements :

- JQuery DOM Traversing Methods:

JQuery – CSS Methods

- Apply CSS Properties:
- Apply Multiple CSS Properties:
- Setting Element Width & Height:
- JQuery CSS Methods:

JQuery – DOM Manipulation Methods

- Content Manipulation:
- DOM Element Replacement:
- Removing DOM Elements:
- Inserting DOM elements:
- DOM Manipulation Methods:

JQuery – Events Handling

- Binding event handlers:
- Removing event handlers:
- Event Types:
- The Event Object:
- The Event Attributes:

JQuery – Effects

- JQuery Effect Methods:
- jQuery Hide and Show
- jQuery Toggle
- jQuery Slide – slide Down, slide Up, slide Toggle
- jQuery Fade – fade In, fadeout, fade To
- jQuery Custom Animations

JQuery – AJAX

- load()
- get()
- post()
- ajax()

JQuery – JSON

Bootstrap

- Mobile first design
- Why Bootstrap?
- Including Bootstrap
- Customizing install
- Responsive Design
- The "container" class
- How Grids work in Bootstrap
 - Grid classes (.col-xs-, .col-sm-, .col-md-, .col-lg-)
 - Adding offsets to columns
 - Pushing and pulling columns
 - Nesting columns
- Navigation components
 - Navs
 - Navbars
- Jumbotron component

Page Components

- Headers
- Panels
- List Group
- Breadcrumbs
- Labels
- Buttons
- Glyph icons (with buttons, toolbars and form inputs)
- Wells

Page Components: Forms

- Creating forms
- Inline and horizontal forms
- Form validation

Bootstrap Plugins

- Alert Messages
- Buttons and button groups
- Scroll Spy
- Tabs
- Collapse
- Carousel
- Modal

Angular JS

- Introduction to AngularJS

- What does AngularJS do for me?
- Who controls AngularJS?
- How can I get AngularJS?

- Our first AngularJS application

- A basic application
- Using angular-seed
- The pieces of the puzzle
 - Two-way data binding
 - Directives
- How it fits together
 - How much of the page is an Angular application?
- Model, View, Controller from the AngularJS Perspective

- Single Page Applications

- What do we mean by Single Page Application?
- Creating Angular Modules
- Using Angular's Routing Service
 - Routing Basics
 - Accessing URL Data
 - Using the \$location Service
- Creating a Skeleton Single Page Application

- Controllers

- Where Controllers fit in, and what they do, from Angular's perspective
- Managing Scope
- Setting up Behavior
- Building a basic controller
- A more advanced controller

- Models

- How to create a model
- Explicit models
- Implicit models

- Views

- Angular's take on the View: a little bit different
- Tying a View to a Controller
- Tying a View to a model

- Expressions
 - Expressions are lightweight code snippets
 - Expression capabilities
 - Limitations
 - The border between expressions and \$eval
- Filters
 - Standard filters
 - Writing your own filter
 - Tying filters together
- Scopes
 - What are scopes?
 - What do scopes provide?
 - Scope lifecycle
 - Scopes as glue between controller and view
 - Scope hierarchies
 - Scope and events
- Angular Forms
 - Angular forms vs HTML forms
 - Angular form controls
 - Form events
 - The form controller
 - Form validation
 - CSS classes for form data
- Ajax, Data, and Angular
 - High level interactions with servers
 - Low-level server interactions with \$http
 - The deferred/promises API
 - Making RESTful Service calls with \$resource
- Directives
 - Teaching HTML new tricks
 - Binding text and attributes
 - Directive processing lifecycle
 - DOM Processing
 - Compilation
 - Linking
 - A basic directive
 - Directives and scopes

- Creating reusable directives
- Turning directives into components

- Testing in Angular
 - Unit testing
 - Working with Dependency Injection
 - Other unit testing issues
 - End-to-end testing
 - Angular's E2E testing framework
 - Commands and expectations
 - Controlling what happens before and after the test
 - Running a scenario