ARG INFOTECH

UI Technologies for Web Designing

Introduction to UI Technologies

- UI Developer roles and Responsibilities
- UX designer roles
- Technologies needed
- Power of UI
- Current market requirements on UI
- Sample Web pages
- Crawling and meta tags

Basics

- DOM
- Structure of HTML Page
- Mandatory tags in the HTML page (HTML, head, body)
- What is CSS
- Different ways of applying CSS for elements, and priority chain of CSS
- Heading tags (H1...H6), Tags and attributes (Class, Id, style..etc)

More Tags in HTML

- Including external page links in a page using anchor tags and its properties
- Working with row and column data using table tags
- Hiding and unhiding elements using display property
- image tag, p tag, ul and ol tags, li, nobr, hr, br etc
- Layouts, forms, buttons
- Input fields (textbox, radio button, checkbox, dropdown, text area etc)

Advanced JavaScript

- Prototyping in JavaScript
- Closures in JavaScript

More CSS properties

- Adding borders, font, pseudo classes
- Positioning elements (absolute, relative, fixed and static)
- Image spriting
- Box model (margins, padding)
- Floating elements (float left, right etc.)
- Including external resources
- Absolute and Relative Paths
- Including external resources like CSS, images etc

Form Elements

- Get & Post
- Validating input values in a form
- Form action and type

JavaScript

- Introduction
- Data types and data structures in JS
- Control structures, if, if-else, while, for, switch case statements
- Dynamic creation and manipulation of DOM elements using JS
- Adding dynamic event listeners to DOM elements
- Event capturing and event bubbling
- Validations using key char codes

JavaScript Supported Data structures

- Arrays
- Predefined methods in arrays
- Strings and predefined methods
- Objects
- JSON

- Inheritance in JavaScript
- Adding methods for an object

jQuery Framework

- Onload and onready difference
- jQuery selectors
- Multiple ways of refering dom elements using jQuery selectors
- jQuery methods
- Adding dynamic properties for dom elements
- Toggleing elements
- Creating dynamic elements using jQuery

jQuery Traversing Methods

- Finding elements using jQuery techniques
- Filtering elements

Events using jQuery

- Binding events
- Dynamic binding
- List of events been supported in jQuery(blur, change, click, dbclick….etc)

Responsive Designs

- Difference between multiple devices, making a page to work on multiple devices
- Media queries
- Introduction to Bootstrap CSS API(2hrs)

AJAX

- Advantages with Ajax and its limitations
- Samples working with Ajax
- Different data formats used in Ajax (string, xml, Json, etc)
- XML and JSON difference
- Cross domain interactions using JSONP

JQuery Templating

- Loading DOM dynamically using jQuery templates
- loading templates using AJAX

HTML5

- Difference between **HTML**5 and HTML 4
- List of Browsers support HTML5
- Doctype
- Media tags (audio and video tags)
- Graphics using Canvas tag
- Drag and Drop features
- Working on locations lat and lng using Geolocation
- Storing user preferences using Local storage.

CSS 3

- Difference between CSS2 and CSS3
- Adding borders and backgrounds
- Advanced text effects(shadow)
- 2D and 3D Transformations
- Adding Transitions to elements
- Adding animations to text and elements

Angular JS Implementation