**UI Technologies Training Overview**

Usually, UI stands for **User Interface** which mainly comes under the human-interaction field. The main objective of **UI Technology** is to to make the user’s interaction as very simple and most efficient. UI helps us to decrease the gap between requirements and implementation over structured systems associated with the programming language. This UI Technologies Training helps the aspirants to learn the complete concept from beginner stage to advanced stage

**UI Technologies Training Objectives**

* To analyze the necessities and limitations for programming applications by executing user interfaces
* To implement useful client interface methods
* Ability to access the low-high programming application

**Pre-requisites of the Course**

Basic knowledge of HTML and Photoshop is enough

**Who should do the course**

Those who are showing interest towards UI design and development.

**UI Technologies Course Content**

**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)
* Inline and block-level elements

**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)

**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

**Advanced JavaScript**

* Prototyping in JavaScript
* Closures in JavaScript
* Inheritance in JavaScript
* Adding methods for an object

**jQuery Framework**

* Onload and onready diffrence
* 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)

**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
* Crossdomain 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 userpreferences using Localstorage.

**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

**Responsive Designs**

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

**AngularJS Framework**

* Introduction
* Power of ngjs
* Controllers and modules in ngs with sample program
* Data binding with sample program
* What is filter and adding filters to dom elements with sample code
* Loading multiple page content into a single page using ng-routing – Working example
* Developer Tools Addons
* Firebug, chrome and IE Developer tools

**Mini Project**

* Sample web application using all the able technologies