

LAKSHMAN_JAVA_IT_SCHOOL

UI Technologies

WEB UI (User Interface)

1. HTML4,5
2. CSS2,3
3. JavaScript
4. JQuery
5. AJAX
6. Responsive Design
7. Bootstrap
8. LESS and SCSS
9. Real Time Project

HTML 4

Module 1: Web Programming Introduction

- Architecture of a website
- Different technologies in making the website
- Web Development Introduction

Module 2: HTML-Introduction

- History of HTML
- What you need to do to get going and make your first HTML page
- What are HTML Tags and Attributes?
- HTML Tag vs. Element
- HTML Attributes

Module 3: HTML-Basic Formatting Tags

- HTML Basic Tags
- HTML Formatting Tags
- HTML Color Coding

Module 4: HTML-Grouping Using Div Span

- Div and Span Tags for Grouping

Module 5: HTML-Lists

- Unordered Lists
- Ordered Lists
- Definition list

Module 6: HTML-Images

- Image and Image Mapping

Module 7: HTML-Hyperlink

- URL - Uniform Resource Locator
- URL Encoding

Module 8: HTML-Table

- <table>
- <th>
- <tr>
- <td>
- <caption>
- <thead>
- <tbody>
- <tfoot>
- <colgroup>
- <col>

Module 9: HTML-Iframe

- Using Iframe as the Target

Module 10: HTML-Form

- <input >
- <textarea>
- <button >
- <select >
- <label >

Module 11: HTML-Headers

- Title
- Base
- Link
- Styles
- Script
- Meta

Module 12: HTML-Miscellaneous

- HTML Meta Tag
- XHTML
- HTML Depreciated Tags & Attributes

PART 2

Module 1: CSS2-Introduction

- Benefits of CSS
- CSS Versions History
- CSS Syntax
- External Style Sheet using < link >
- Multiple Style Sheets
- Value Lengths and Percentages

Module 2: CSS2-Syntax

- CSS Syntax
- single Style Sheets
- Multiple Style Sheets
- Value Lengths and Percentages

Module 3: CSS2-Selectors

- ID Selectors
- Class Selectors
- Grouping Selectors
- Universal Selector
- Descendant / Child Selectors
- Attribute Selectors
- CSS - Pseudo Classes

Module 4: CSS2-Color Background Cursor

- background-image
- background-repeat
- background-position
- CSS Cursor

Module 5: CSS2-Text Fonts

- color
- background-color
- text-decoration
- text-align
- vertical-align
- text-indent
- text-transform
- white space
- letter-spacing
- word-spacing
- line-height
- font-family
- font-size
- font-style
- font-variant
- font-weight

Module 6: CSS2-Lists Tables

- list-style-type
- list-style-position
- list-style-image
- list-style
- CSS Tables
 - border
 - width & height
 - text-align
 - vertical-align
 - padding
 - color

Module 7: CSS2-Box Model

- Borders & Outline
- Margin & Padding
- Height and width
- CSS Dimensions

Module 8: CSS2-Display Positioning

- CSS Visibility
- CSS Display
- CSS Scrollbars
- CSS Positioning
 - Static Positioning
 - Fixed Positioning
 - Relative Positioning
 - Absolute Positioning
- CSS Layers with Z-Index

CSS Floats

- The float Property
- The clear Property
- The clear fix Hack

JAVASCRIPT

Introduction to JavaScript

- Introduction of client side script
- Introduction of javascript
- Cross browser issues.
- Declaration syntax of javascript
- Statements
- Comments
- Popup Boxes
- Alert
- Confirm
- Prompt
- Variables, Arrays and Operators
- Variables
- Operators
- Arithmetic
- Assignment

- Comparison
- Logical

Document Object Model

- Functions and types
- Conversion functions

Conditional Statements

- if
- if...else
- if...else if...else
- Switch

Loops

- while
- do...while
- for
- for...in Statement
- Break
- Continue

Window Object Document Object Arrays

- Associative Arrays
- Array Properties and Methods

Advanced JavaScript

- Date object
- This object
- Event object
- State management
- Cookie
- Form validation
- Expressions
- Email validation
- Dynamic functionalities of html controls

Oop

1. Class based oop, prototype base oop
2. Inheritance,encapsulation,polymorphism,constructor,this,super
3. Native objects

- Promises
- Clousers
- Arrow functions

HTML5 Introduction

- HTML5 HISTORY
- New Features and groups
- Backward Compatibility
- Why HTML5?
- Power of HTML5:
- m or mobi or touch domains
- Common Terms in HTML5

HTML5 Syntax

- The DOCTYPE:
- Character Encoding:

Obsolete Elements/Deprecated Elements

- <acronym>
- <applet>
- <basefont>
- <big>
- <center>
- <dir>
-
- <frame>
- <frameset>
- <isindex>
- <noframes>
- <s>
- <strike>
- <tt>
- <u>
- <xmp>

HTML5 New Elements

- New Semantic/Structural Elements
- <article>
- <aside>
- <bdi>
- <command>
- <details>
- <dialog>
- <summary>
- <figure>
- <figcaption>
- <footer>
- <header>
- <mark>
- <meter>
- <nav>
- <progress>
- <ruby>
- <rt>
- <rp>
- <section>
- <time>
- <wbr>

HTML5 Canvas

- What is Canvas?
- Create a Canvas
- Canvas Coordinates
- Canvas – Paths
- Canvas – Text
- Canvas – Gradients
- Canvas – Images

HTML5 SVG

- What is SVG?
- SVG Advantages
- Differences Between SVG and Canvas
- Comparison of Canvas and SVG

HTML5 Drag/Drop

- Introduction
- Make an Element Draggable
- What to Drag?Where to Drop?

HTML5 Geo location

- Introduction
- Locate the User's Position+
- Handling Errors and Rejections
- The getCurrentPosition()
- Geolocation object

HTML5 Video

- Introduction
- Video on the Web
- How It Works?
- Video Formats and Browser Support
- HTML5 Video Tags

HTML5 Audio

- Introduction
- Audio on the Web
- How It Works?
- Audio Formats and Browser Support
- HTML5 Audio Tags

HTML5 Input Types

- Introduction
- color
- date
- datetime
- datetime-local
- email
- month
- number
- range
- search

- tel
- time
- url
- week

HTML5 Form Elements

- <datalist>
- <keygen>
- <output>

HTML5 Form Attributes

- New attributes for <form> and <input>New attributes for <form>:
- autocomplete
- novalidate

New attributes for <input>

- autocomplete
- autofocus
- form, formaction
- formenctype,formmethod
- formnovalidate
- formtarget
- height and width
- list, min and max
- multiple
- pattern (regexp)
- placeholder
- required, step

HTML5 Semantic

- Introduction
- What are Semantic Elements?
- non-semantic elements: <div> and
- semantic elements: <form>, <table>, and
- New Semantic Elements in HTML5
- <header>
- <nav>
- <section>

- <article>
- <aside>
- <figcaption>
- <figure>
- <footer>

HTML5 Web Storage

- What is HTML5 Web Storage?
- Browser Support
- The localStorage Object
- The sessionStorage Object

CSS3

- Introduction
- CSS3 Modules
- Selectors
- Box Model
- Backgrounds and Borders
- Text Effects
- 2D/3D Transformations
- Animations
- Multiple Column Layout
- User Interface

Borders

- border-radius
- box-shadow
- border-image

CSS3 Backgrounds

- background-size
- background-origin

CSS3 Text Effects

- text-shadow
- word-wrap

CSS3 Fonts

- @font-face Rule
- font-stretch
- font-weight

CSS3 2D Transforms

- How Does it Work?
- Browser Support
- 2D Transforms
- translate()
- rotate()
- scale()
- skew()
- matrix()

CSS3 3D Transforms

- rotateX()
- rotateY()

CSS3 Transitions

- How does it work?
- transition-property, duration and delay

CSS3 Animations

- CSS3 @keyframes Rule
- Browser Support
- Animation, animation-duration

CSS3 Multiple Columns

- column-count
- column-gap
- column-rule

CSS3 User Interface

- resize
- box-sizing

- outline-offset

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 – noConflict() Method

jQuery – Basics

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

jQuery – Selectors

How to Use Selectors?

- jQuery – CSS Element Selector and ID Selector
- jQuery – CSS Element Class Selector and 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 and 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
- Binding event handlers
- Removing event handlers
- Event Types
- The Event Object and Attributes

jQuery – Effects

- JQuery Effect Methods, Hide and Show
- jQuery Toggle
- jQuery Slide – slideDown, slideUp, slideToggle
- jQuery Fade – fadeIn, fadeOut, fadeTo
- jQuery Custom Animations

jQuery – AJAX

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

jQuery – JSON

- [getJSON\(\)](#)

jQuery-3.6.1.js

jQuery-cycle.js

jQuery-ui.js

jQuery-validation.js

jQuery-cycle.js

jQuery-ripple.js

AJAX

Introduction to Ajax

- [What is Ajax?](#)
- [What can you do with Ajax?](#)
- [Ajax and Web 2.0](#)
- [Ajax Basics](#)
- [Asynchronous requests to consume services or APIs](#)
- [Asynchronous Cross-Origin requests \(CORS\)](#)

Javascript AJAX Call

- [XMLHttpRequest object](#)
- [Open](#)
- [Send](#)
- [Onreadystatechange](#)
- [Response text](#)

HTML Template Tag

- [Working with Template tags](#)
- [Template tag features](#)
- [Template content cloning](#)
- [Manipulating template content and injecting new nodes](#)

Ajax with jQuery

- Overview
- \$.ajax() method and settings
- \$.params() method
- jQuery and requests to JSON, XML, PHP sources
- jQuery and Template Tag

Responsive Design

- Meta tag
- Media queries

LESS and SCSS

Real Time Project