

## **CAP774: STYLING AND SCRIPTING FOR WEB DEVELOPMENT**

L:3 T:0 P:2 Credits: 4

Course Outcomes: Through this course students should be able to

- describe concepts of HTML and HTML5
- discuss scripting capabilities of JavaScript with advanced CSS and HTML5 elements to make full-fledged web application
- develop capabilities of web page designing by adding dynamic and attractive elements
- differentiate between HTML CSS and JavaScript

### **Unit 1**

**Introduction of HTML :-** HTML introduction, HTML editors, HTML basics, elements, attributes, headings, paragraphs, formatting, links, head, images, tables, lists, blocks, layouts, forms, Iframes, color, colornames, colorvalues, entities, URL encode, quick list, XHTML

### **Unit 2**

**Introduction of HTML5:-** new elements in HTML5, canvas, SVG, drag/drop, geo-location, video, audio, input types, form elements, form attributes, semantic, webstorage, app cache, web workers, SSE

### **Unit 3**

**Introduction of CSS, box model and advanced CSS :-** basic, home, introduction, syntax, id & class, backgrounds, text, fonts, links, lists, tables box model, border, outline, margin, padding Grouping and nesting, dimension, display, positioning, floating, align, pseudo-class, pseudo-element, navigation bar, image gallery, image opacity, image sprites, media types

### **Unit 4**

**Introduction of JavaScript, basic elements and JavaScript objects :-** what is JavaScript, understanding events, external JavaScript comment, variable, global variable, data types, operators, if statement, switch, loop: for and while, function, JavaScript objects, JavaScript array

## **Unit 5**

**JavaScript: browser object model:-** Browser objects, Window object, Documentobject, getElementById, getElementsByName, getElementsByTagName, innerHTMLproperty, innerText property

## **Unit 6**

**JavaScript: validation and MenuBuilder :-** form validation, email validation

MenuBuilder, Bootstrap

## **PRACTICALS:**

1. Basic concepts of HTML such as elements, formatting, images, tables, links etc.
2. HTML5 components such as canvas, form, drag/drop etc.
3. The CSS concepts in id and class, backgrounds, lists, tables, fonts etc.
4. CSS box Model including Box Model, Border, Outline, Margin, Padding and few concepts of advanced CSS
5. Pseudo-class, Pseudo-element, Navigation Bar, Image Gallery, Image Opacity, Image Sprites, Media Types, Attribute Selectors, Introduction, Borders, Backgrounds, Gradients, Text Effects, Fonts
6. The basic concepts of JavaScript
7. The Objects and Browser Object Model components in JavaScript such as array, browser, window, document etc.
8. Validation of forms and validation of emails
9. The menu bars and bootstraps in JavaScript

## **Text Books:**

- HTML & CSS: THE COMPLETE REFERENCE by THOMAS A. POWELL, Tata McGraw Hill, India

## **References:**

- WEB ENABLE COMMERCIAL APPLICATION DEVELOPMENT USING HTML, DHTML, JAVASCRIPT, PERL, CGI by IVAN BAYROSS, Tata McGraw Hill, India.