

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

CO1 :: classify the principles of creating effective and engaging web pages

CO2 :: apply CSS box model and advance CSS to enhance webpage aesthetics

CO3 :: examine the role of JavaScript and its data types, variables, operators and functions for interactive web design

CO4 :: determine the acceptability of data inputted through various website components using JavaScript validations

CO5 :: construct a well styled interactive website using CSS and JavaScript

Unit I

HTML:Introduction : 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 II

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

Unit III

CSS:Introduction : basic, home, introduction, syntax id & class, backgrounds, text fonts, links, lists, tables

CSS:CSS Box Model : box model, border, outline, margin, padding

Unit IV

CSS: Advanced CSS : grouping/nesting, dimension, display, positioning, floating, align, pseudo-class, pseudo-element, navigation bar, image gallery, image opacity, image sprites, media types

Unit V

JavaScript: Introduction : what is javascript, understanding events, external javascript

JavaScript:Basic Elements : comment, variable, global variable, data types, operators, if statement, switch, loop, for and while, function

JavaScript:Objects : javascript objects, javascript array

Unit VI

JavaScript:Browser Object Model : browser objects, window object, documentobject, getElementById, getElementsByName, getElementsByTagName, innerHTMLproperty, innerText property

JavaScript:Validation : form validation, email validation

JavaScript: MenuBuilder : menubuilder, bootstrap

List of Practicals / Experiments:

List of Practicals

- Developing webpages using HTML5 elements
- Controlling the website element positioning using CSS Box Model
- Developing aesthetically appealing website using advance CSS
- Adding images sprites on web page to improve website performance
- JavaScript program to generate a random number
- JavaScript program to print all prime numbers in an interval
- JavaScript program to make a simple calculator
- JavaScript program to convert decimal to binary

- JavaScript program to sort words in alphabetical order
- JavaScript program to count the number of vowels in a string
- JavaScript program to compare elements of two arrays
- JavaScript program to perform Intersection between two arrays
- JavaScript program to implement a stack
- JavaScript program to remove all whitespaces from a text
- JavaScript program to check the number of occurrences of a character in the string

Text Books: 1. HTML & CSS: THE COMPLETE REFERENCE by THOMAS A. POWELL, Tata McGraw Hill, India

References: 1. WEB ENABLED COMMERCIAL APPLICATION DEVELOPMENT USING HTML, JAVA SCRIPT, DHTML AND PHP by IVAN BAYROSS, BPB PUBLICATIONS