Assignment – 02

Title :

Design and develop a web application using HTML, CSS, XML

Problem Statement :

Design and develop a web application using HTML, CSS, XML from the given list:

1. Online pizza order application
2. Student information system for training and placement department
3. Leave management application
4. Blogging platform
5. Meeting room booking application
6. Exam cell automation application

Obejective :

To develop web pages using HTML
To optimize page styles & layout with CSS
To distinguish between HTML & XML

Outcomes :

1) Define the key terms relevant to coding HTML and CSS, including: tag, attribute, element, entity, selector,header, table, ordered list, unordered list, link, heading, paragraph ; et cetra .
2) Describe the function of common tags & styles in short snippets of code & predict the output of the same .
3) They will be able to create well–formed & valid XML documents, write DTDs & Schemas & deliver XML documents over the Web using different style sheets
4) Define & compare the concepts of multimedia , hypermedia & hypertext .

Theory :

Introduction:

Files that travel across the largest network in the world , the Internet , & carry information from ‗Server ‘ to ‗Client ‘ that requested them are called ‗Web pages / HTML documents ‘ . Individual who develops these web pages is called ‗Web Developer ‘ . Web Pages are created using HTML syntax . The organization of web pages into directories & files stored on the HDD of a computer is called ‗Web Site ‘ creation . As studied in previous assignment , the Server Computer runs special software called ‗Web Server ‘ software that allows :

Web Site Management
Accept a client‘s request for information
Respond to a client‘s request by providing the page with the required information

Computers that offer the facility to read information stored in web pages are called ‗Web Clients ‘ . Web Clients run special software called a ‗Browser ‘ that allows to :

Connect to an appropriate Server
Query the Server for the information to be read
Provides an interface to read the information returned by the Server

Following points emphasize the requirements of a good web site :

First Impression – Did the initial page grab the attention ?
Interface Design – Is the menu interface interactive enough & visually interesting ?

Corporate Mildew – Is the site trapped in a web of corporate look , feel & canned marketing speak ?

Coriolis Effect – Does the site generate enough currents of interest based on design & content for the user to comeback ?

HTML :

The language used to develop web pages is called HyperText Markup Language which is interpreted by a Browser . HTML is a set of special codes that can be embedded in text to add formatting & linking information .

HTML Tags are instructions that are embedded directly into text of document . It is a signal to a browser that it should do something other than just throw text up on the screen . HTML tags can be of two types : Paired Tags &Singular Tags

Some HTML tags require additional information to be supplied to them that are known as Attributes of a tag .

Attribute(s) are written immediately following the tag , separated by a space . The creation of textual content of Web Site is done in any editor viz; Notepad / Eclipse / IDE ; et cetra & saved as

HTML tags list

<b>	: make a bold text
<u>	: Make a underline under text
<i>	: make italic text
	: Make italic text
	: make a bold text
<p>	: Make a paragraph
<q>	: make a quotation text
 	: make a break / enter
<h1> to <h6>	: make heading
	: make style text on line
<img src=””>	: insert image
<a href=””>	: make a hyperlink
<Input type =””>	: make in input option
<form>	: Make a form input
	: make a list
<select><option>	: select an option
<table><tr><td>	: make a table
<video>	: insert video
<audio>	: insert audio
<iframe>	: insert other website content
<! -- -->	: make comments
Entities	: make entities
<button>	
<Label>	

---------- ajaira tag ----------

<sub>	: make subscript
<sup>	: make superscript
<del>	: define a delete text
<blockquote>	: make a block quote
<abbr>	: make a abbreviation
<address>	: To write address
<bdo>	: make a bidirectional text
<var>	: make a computer code
<kbd>	: keybord code
<code>	: computer output
<pre>	: make php code
symbol	: make symbol
<ins>	: inserted text

CSS (Cascading Style Sheets) :

Style Sheets are powerful mechanism for adding styles to Web documents that enforces standards & uniformity throughout a web site & provide numerous attributes to create dynamic effects . Style information can be associated with the web page in several ways :

1.by embedding the style information directly through a STYLE attribute
2. by embedding the style information directly through a < STYLE > header
3. by embedding the style information directly through < LINK > element

Order of importance for adding style sheets into the document :

I.Inline styles
II.Embedded styles
III. Linked styles
IV. Imported styles
V.Default browser styles

Advantages:

1.ability to make global changes to all documents from a single location
2.greater author control over appearance of text & its placement on the page
3.reduced clutter of multiple opening & closing tags on individual text elements
4.simplified modification of page design through style editing
5.eliminating the need for clumsy HTML workarounds to achieve basic layout effects
6.great improvement of the design potential for HTML pages without introducing a large no. of new proprietary tags or compromising ability of other browser to effectively display the document text

XML – Nuts & Bolts:

DTD
XSD – eXtensible Schema Definition
XSL – eXtensible Style Languages
XML Linking Languages (XPath , Xlink & Xpointer)
XML Namespaces

Advantages of Schemas:

easier to validate the correctness of data
easier to work with data from database
easier to define data facets & data patterns
easier to convert data between different data types

Conclusion : We have successfully learned about HTML, CSS and XML and developed basic application using it.