Assignment - 2

2M

1) What is HTML, XHTML & XML?

Ans

HTML:

- HTML Stands for Hyper text Markup Language, it is authoring language used to create document on world wide web
- HTML is used to ~~create~~ define the structure and layout of a webpage, how a page looks & special function.
- HTML does this by using what are called tags that have attributes.

eg: <P> means paragraph break As the viewer of the web page we don't see the HTML It is hidden from the view. we see ~~Only~~ the content.

XHTML:

- XHTML Stands for Extensible Hyper text markup language, It has more strict syntax rules in a comparison of HTML.
- XHTML gives us a more consistent well structured format so that our webpages can be easily parsed & processed by present & future web browsers
- It also makes website more easy to maintain, edit, convert, & format in the long run.

XML:

- XML Stands for Extensible markup language
- XLM is a markup language like HTML & was designed to describe data.
- XML tags are not predefined. we can define our own tags according to our needs.

2) What are the advantages of XHTML over HTML
i) Sustainability: As web applications get increasing-ly sophisticated & move toward XML the use of XHTML will be more widespread
ii) Wide range of application: Due to large number of application that XHTML can support it can be used to create more complex website.
iii) Compatibility: The XHTML documents are written in compliance with the rules of XML, XML processing programmes can :. Convert a XHTML document into PDF, Rss or RFT
iv) Closing tags: Unlike HTML, all XHTML have closing tags. This is great for biginners & even help seasoned web design proffesionals keep up with their work.
v) XHTML is easier to teach & learn: The syntax rules define by XML are far more consistent than those found in HTML & :. easier to explain than the SGML rules on which HTML is based
vi) XHTML is ready for the future: When the new version of XHTML becomes a recommendation, XHTML 1.0 documents will be easily upgradable to this new version, to allow taking advantages of it exciting new feature.
vii) Extensibility: XML documents are required to be well-formed with HTML, the addition of a new group of element required alteration of the entire DTD.
viii) portability: Non desktop devices are being used more & more frequently to access internet documents.

3) Write the basic syntax of XHTML. Give example
Ans HTML tags are the core of of Hypertext markup

Language and HTML tags are always enclosed with brackets <>, with the closing tag starting with a forward slash </>.

eg
```
<!DOCTYPE html>
<html>
<head>
<title> Hello world </title>
</head>
<body><h1 bg color = "yellow" > </h1>
</body> 
</html>
```

4) What is DTD?

Ans. DTD stands for Document Type Definition. The purpose of a DTD is to define the legal building blocks of an document.

- A DTD defines the document structure with a list of legal elements & attributes.
- A DTD states what tags & attributes are used to describe content in an SGML, XML or HTML document, where each tag is allowed & which tags can appear within other tags.

eg In DTD one could say that List tags can contain Item tags, but Item tags cannot contain List tags.

5) What is the use of Meta tag? Explain with example

Ans Meta tag provide information about the web page in the HTML of the document. This information is called Metadata & while it is not displayed on the page itself, it can be read by Search engines & web crawlers. The meta elements are used to include name/value pairs describing properties of the HTML

document such as expiry date, author name list of keywords, document author etc.

eg: Define the author of a page
<Meta name = "author" | content = "John Doe">

6) Differentiate between absolute & relative URL

Ans

Absolute URL	Relative URL
-> Absolute URL is free from a relationship	-> Relative URL is made a relationship
-> It is a independent URL	-> It is a dependent URL
-> Absolute URL is exact location of website	-> Relative URL is not exact location of website
eg: <a href = "http://www.skyward.com/BOOKS/BCA/ADA.html">	eg: <a href = "../BCA/ADA.html">
-> It is a type of URL	-> It is a type of URL

7) What is difference between Internal, External & Local Link

Ans * Internal Link: It is useful for long pages. This creates a link that points to another section on the same page.
eg: click here to go to top of page.

* External Link: It is used as a URL as the target. URL stands for universal Resource Location. Simply put, it is the internet address of a web page or site. The URL commonly begins with http://
eg Text Link to someplace.

* Local Link: It uses a page name as the

target it is local to the current server. The page is available in the same server.

eg: click here to go some page!

8) Explain character entities in XHTML

Ans • We can use most alphanumeric characters in the document & they will be displayed without a problem. There are however, some characters that have special meaning in XHTML & for some character there is not a keyboard equivalent We can enter

eg ⇒ we cannot use the gle braket (< >) that start & end tags, as the browser can mistake them for markup

⇒ We can however use a set of different characters known as a character entity to represent these special characters.

BM 1) Explain XHTML DOC type

Ans • By referencing the Document Type Definition (DTD), DOCTYPE definition line in an XHTML document specifies the document type.

• The syntax & legal elements of an XHTML document are specified by DTD. The most commonly used & easy one is the XHTML Transitional Document.

• XHTML 1.0 document type definition are corresponds to 3 DTD's

i Strict (ii) Transitional (iii) Frameset.

(i) XHTML 1.0 Strict:

• If we are planning to use strictly Cascading Style Sheet & avoiding to write most of the XHTML attributes then it is recommen

-ded to use this DTD.

- If we want to use XHTML 1.0 strict DTD then we need to put following line at the top of the XHTML document

```
<!DOCTYPE html
Public "-//W3C//DTD XHTML 1.0 Strict
//EN" "http://www.org/TR/xhtml1/DTD
/xhtml-strict.dtd">
```

(ii) XHTML 1.0 Transitional

- If we are planning to use many XHTML attributes as well as low cascading Style sheet properties, then we should adopt this DTD & we should write XHTML document to DTD

```
<!DOCTYPE html
Public "-//W3C//DTD XHTML 1.0 Transitional //EN"
"http://www.org/TR/xhtml1/DTD/xhtml-transitional.dtd">
```

(iii) XHTML 1.0 Frameset

We can use this when we want to use HTML frames to partition the browser window into two or more frames.

```
<!DOCTYPE html
public "-//W3C//DTD XHTML 1.0 Frameset //EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-
                                frameset.dtd">
```

2) Give any ten tags used in text markup?

Ans: <html> </html>

→ This is the root element tag. It designated that everything between these brackets contain HTML code

ii) <head> </head>

→ This tag distinguishes the head of the web page from the content. This is where you put Javascript code or give 'meta' information about the website.

iii) <title> </title>
→ Have you noticed that browser tabs contain text that gives you an overview of the website. That text is written as the Sites title with this tag.

iv) <body> </body>
→ The body tag specifies the actual content of the website

v)
→ This tag specifies that a given section is supposed to be its own paragraph

vi) <h1> </h1>
→ This is a heading which creates a title by making text bigger & making it bold.
→ There are 6 hedding tags: h1, h2, h3, h4, h5 h6 in descending order of size.

vii) <a>
→ This tag lets us create a link with its 'href' attribute
 click here

viii) <img> </img>
→ The img tag is how you insert images into a web page

ix)
→ Div tag group multiple pieces of the content into single container which allows you to do things like apply seperate styling to just that content.

x)
→ Span is like a smaller version of div, used to style / interact with inline content. you could add just a couple of words to a particular class which again is great for styling & making the content more responsive

3) What is an attribute? Explain the type of XHTML attributes

Ans→ Attribute provides additional information to an XHTML element.
→ XHTML tags can contain one or more attributes
→ Attribute are added to a tag to provide the browsers with more information about how the tag should appear
→ Attribute consist of a name & a value seperated by an equals (=) sign

Syntax: name of attribute ↓ ↓ value of attribute
name = "value"
equal sign, opening quotes; closing quotes

eg </body style = "background-color-orange">
The particular attribute statement, style = "background color. orange", tells the browser to style the body element with a background color of orange.

There are 3 types of attribute they are:

i) Core attribute: The class, Id, and title attribute.

ii) Internationalization attribute: The dir, lang and xml:lang attributes.

iii) UI events: Attribute associated with events such as onclick, double click, on mouse down, on mouse up, on mouse over, on mouse move, on mouse out, on keypress on key down & on key up.

⇒ Core attributes

a) The Id attribute.

- The Class & Id attribute are namely identical they play no direct role in forming the elements but rather serve beneficial the scenes for scripting & cascading style sheet (CSS)
- The idea is that we specify id for a certain tag & later format the tag using CSS
- The Id attributes can be used to uniquely identify any element within a page.

Syntax id = "string"

eg paragraph type1
 paragraph type2

Here the 1st paragraph id is to display the paragraph in Italic & second paragraph id is to display the paragraph in bold. CSS will be used.

b) The class attribute

- The class attribute is used to associate an element with a style sheet, & specifies the

Class of element

<table class = "Emphases">

- The class attribute simply link the tag to CSS style that also reference that specifies class

c) The title attribute

- The title attribute gives a suggested title for the element.

Syntax: title = "String"

- The behaviors of this attribute will depend upond the element that carries it, although it is in often displayed as a tool tip.

eg: Skyward @gmail.com

d) The style Attribute

- The style attribute allows to specify CSS rules within the element.

eg Skyward @ gmail.com

ii) Internationalization attributes.

- These are 3 Internationalization attributes that help user to write pages for different languages & Character sets & they are available to most XHTML elements [dir lang xml:lang]

a) The dir attribute

- The dir attribute allows to indicate to the browser the direction in which the text should flow, left to right or right to left. The dir attribute can take one of two values as we can see in the table

ltr	left to right (default value)
rtl	right to left

b) The lang attribute
- The lang attribute allows to indicate the main language used in document, but this attribute was kept in XHTML only for backwards compatibility with earlier version of HTML
- This attribute has been replaced by the XML:lang attribute in new HTML documents
- The value of the lang attribute are ISO-639 standard two character language codes.

c) XML:lang Attributes
- The xml:lan attribute is the XHTML replacement for the lang attribute.

4) Explain image tag with all its attributes Give example.

Ans - Image tag is written as <img>. It is used to insert a image in an XHTML document. It is necessary to close the <img> tag in XHTML. It is done so by putting as (/) backslash after the word img ie </img>
- The various attribute have to be included in it to display the image on the webpage

eg

Attribute of <img> tag
The main attribute are src, alt, width & height. The remaining attribute are deprecated in XHTML. The deprecated attributes are replaced in CSS

→ If the image is present in web
<img src "http://www.yahoo.com/images/html.png"
alt = "XHTML Image Demo">.

i) Alt
→ Alt is an attribute which displays a text if the picture is not displayed on the web browser.
eg

ii) width
→ width determine how wide the picture should appear on the web page.
eg

iii) height
→ height determine how height the picture should appear on the web page.
eg .

iv) align
→ The align attribute was created to align an image within the page
eg

v) Border
→ A border is a line that can appear around an image / other element. By default, image do not have border.
eg

vi) hspace and vspace

This hspace and vspace attributes can be used to control the amound of white space around an image.

eg

Example:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="https://www.w3.org/1999/xhtml">
<head>
<title> image Demo </title>
</head>
<body>
<p> The below clock is good one </p>
<img src="c:\web Example 1: image\clock.png" alt="This is my image" />
<p> The time is 10:10 </p>
</body>
</html>
```

5) What is hyperlink ? Explain it in detail with example

Ans web pages can contain links that take us directly to other pages even specific parts of any given page. These links are known as hyperlinks. Hyperlinks allow visitors to navigate between websites by licking on words phrases & images.

Creating Hyperlink

- The tags used to produce links are <a> and this element is called anchor tag.
- The <a> tells where the link should start & the indicates where the link ends.
- everything between these too will work as link.

eg Click here to go to google

- specify the target in the
- Then add the text that should work as a link
- Finally add an tag to indicate where the link ends.

```
<?xml version = "1.0" encoding = "ISO-8859-1"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0
                                Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-
                                transitional.dtd">
<html xmlns = "http://www.w3.org/1999/xhtml">
<head>
<title> Hyperlink DEMO </title>
</head>
<body>
Click <a href = "http://www.google.com"> here </a>
  to go to google Home page <br>
Click <a href = "http://www.yahoo.com"> here
  </a> to go to yahoo Home page <br>
</body>
</html>
```

6) Explain list & its type in details with example

Ans List are frequently used for products offered by the site, / members currently on the site or from controls XHTML defines three different types of lists.

i) ordereded list ii) Unordereded list iii) Definition Lists

i) Ordereded list

- Ordereedlist have elements that are preceded by numbers / letters.
- ordered lists use the ordered list tag (<ol>) to delimit the entire list, & the list item tag (<li>) to delimit each individual list item.

eg
```
<ol>
<li> coffee </li>
<li> Tea </li>
<li> Milk </li>
</ol>
```

ii) unordered list

- If we want to make a list of bullet points, we write the list within the <ul> element
- Each bullet point or line we want to write should then be contained between opening <li> tags & closing tags.

Syntax

eg
```
<ul>
<li> coffee </li>
<li> tea </li>
<li> milk </li>
</ul>
```

iii Description list

A description list is a list of terms, with a description of each term

The <dl> tage defines the description list, the <dt> tag defines the term (name)
<dd> tag describe each term

eg <dl>

<dt> coffee </dt>
<dd> Black hot drink </dd>
<dt> milk </dt>
<dd> white cold drink </dd>
</dl>

7) Explain table tag & all its attribute with eg.

Ans An html table consist of an <table> element & one / more <tr>, <th> and <td> elements.

- The <tr> element defines a table row, the <th> element defind a table header, & the <td> element defines a table cell.
- The HTML table may also include <caption>, <colgroup>, <thread>, <tfoot> & <tbody> elements.

Attributes	Description
• Align	Designates the alignment of content inside an element.
• Bg color	Designates the background color of a table
• border	Designates were the or not cell should have a border.
• cell padding	Designates how much spacing is between the cell wall & the cell content
• cell spacing	Designates spacing between cells.
• Frame	Designate which parts of the Outsides borders are visible
• Rules	Designates which parts of the inside border are visible
• Summary	Designate what the contents of the table.
• Sortable	Designate that a table is sortable
• width	Designate how wide the table should be

eg
```
<html xmlns = "http://www.w3.org/1999/xhtml">
<head>
<title> Align and valign </title>
</head>
<body>
<table border = "2" width = "500">
<tr>
<td height = "200"> <b> Align Eg </b> </td>
<td align = "left"> Left Align </td>
<td align = "center"> Center Align </td>
<td align = "right"> Right Align </td>
</tr>
<tr>
<td height = "200"> <b> valign eg <b> </td>
<td> Default valign </td>
<td valign = "top"> Top valign </td>
<td valign = "bottom"> Bottom valign </td>
</tr>
</table>
</body>
</html>
```