

Module1

Foundation

Questions and Answers

(Q) Do search for web-site, http, URL etc given topics in lecture.

Ans: Following topics are discussed in lecture:

Website: a group of World Wide Web pages usually containing hyperlinks to each other and made available online by an individual, company, educational institution, government, or organization.

HTTP: It's Hyper Text Transfer Protocol. Hyper text is a text which we can access 24/7. Protocol simply means set of rules. It secures the communication between browser and website. It governs how web servers and browsers communicate, enabling the retrieval of HTML documents, images, videos, etc.

HTTP follows a request-response model where a client(browser) sends a request to a server, and the server responds with the requested data.

URL(Uniform Resource Locator): It's the address used to identify resources on the internet. A URL consists of several components:

-Protocol(e.g., http://, https://)

-Domain name (e.g., www.example.com)

Server: server stores data.

Search engine: provides data. E.g, Google, Yahoo, Bing.

Browser: renders HTML code into graphical view. E.g., Chrome, Firefox

WWW: World Wide Web. It's a system of interconnected public webpages accessible through the Internet.

Module 2

Fundamentals of IT

(Q) Do search for domain, hosting, SEO etc.

Ans: In this module learned following topics:

Domain: It's the unique name that identifies a website. Domains are used in URLs to access websites on the internet. For instance, in the URL www.example.com "www" is subdomain which is same for all websites. "example" is domain name or any websites name. ".com" is top domain. It suggest that website is commercial. Another examples of top domain are ".org", ".net".

Hosting: Web hosting refers to the service that allows individuals or organizations to make their websites accessible via the World Wide Web. It involves storing websites files, databases, and other resources on servers that are connected to the internet.

SEO: It's Search Engine Optimization. It's the process of improving your website based on the principle of accessibility, internationalization, privacy and security. Without SEO your website cannot be found on search engines like google, yahoo, bing. It simply provides rankings based on different factors. We always make sure that our website is search engine friendly.

W3C(World Wide Web Consortium) develops standards and guidelines to help everyone build a web based on the principles of accessibility, internationalization, privacy and security.

Module 3

HTML

(1) Are the HTML tags and elements the same thing?

- No, they are not. The only difference between these two tags is that HTML tags have no content between opening and closing tag and HTML elements have content written within a HTML tag. HTML tags are used to hold the HTML element.

(2) What are tags and attributes in HTML?

- HTML tag is a piece of markup language used to indicate the beginning and end of an HTML element in an HTML document.
- Attributes are used to adjust the behavior or display of an HTML element. It can be used to change the color, size or functionality of HTML element.

(3) What are void elements in HTML? With Example.

- A void element is an element in HTML that cannot have any child tag. Void elements only have a start tag, end tags must not be specified for void elements. For example: <meta> <hr>
, , <input>,
- For instance:
``
`
`
`<input type="text" value="" name="">`

(4) What are HTML Entities? With Example.

- An html entity is a piece of text("string") that begins with an ampersand (&) and ends with a semicolon(;))
- HTML entities are frequently used to display reserved characters (which would otherwise be interpreted as HTML. Code), and invisible characters (like non-breaking spaces).
- Examples:
 - & represents the ampersand character
 - < represents the less-than sign '<'
 - > represents the greater-than sign '>'
 - " represents the double quotation mark "
 - © represents the copyright symbol

(5) What are different types of lists in HTML? With Example.

- There are three types of lists: unordered, ordered and description. Example: , , <dl>

(6) What is the 'class' attribute in HTML? With Example.

- The class attribute specifies one or more classnames for an element. For example: Title, important, _title, -class

(7) What is the difference between the 'id' attribute and the 'class' attribute of HTML elements? With Example.

- A Class attribute can be used by multiple HTML elements, while an id attribute must only be used by one HTML element within the page. Id attribute provides unique identification.
- Example: html code
`<p class = "highlight"> This is a highlighted paragraph</p>`
In this example the <p> element has the class attribute with the value "highlight" class in the associated CSS will be applied to this paragraph.

(8) What are the various formatting tags in HTML?

- Formatting tags used in HTML are:
 - : used to bold the text
 - : used to bold the particular word or sentence. It also provide keywords to the search engine.
 - <i>: used to change the font into italic.
 - : used to font one particular word or sentence into italic.
 - <u>: used to underline the text.
 - <i>: used to underline the specific word or sentence
 - <sub>: provide subscription when we need.
 - <sup>: provides superscription
 - : to form line on any text to show that this will not be considered.
 - <tt>: It's teletypetext. Used to write text in monospace.
 - <pre>: It's preformatted text. It renders the code as written in code editor.

(9) How is Cell Padding different from Cell Spacing? With Example.

- Cellpadding basically defines the space present between a table cell's border and the content present in it. Cellspacing basically defines the space present between individual adjacent cells.
- Example: html code
`<table cellpadding="10">
<tr>
<td>Cell1</td>
<td>Cell2</td>
</tr>
</table>`
In this example, each cell will have additional padding of 10 pixels around its content.
Html code:
`<table cellspacing="5">
<tr>
<td>Cell1</td>
<td>Cell2</td>`

</table>

In this example, there will be a 5-pixel space between the borders of adjacent cells.

(10) How can we club two or more rows or columns into a single row or column in an HTML table? With Example.

- We can do this with the attributes `colspan` and `rowspan` in an HTML tables. For example, we are creating a table of four rows and two columns and we need to merge first two rows. Here, we can use `rowspan` attribute in `<td>` tag and the value will be 2. We can do the same thing for column as well. If we require three or four rows to merge, we can change the value accordingly.

(11) What is the difference between a block-level element and an inline element?

- Block-level elements are those elements which cover space from left to right as far as it can go. It simply means it uses 100% space of the page. Block elements always start from a new line.
- On the other hand, Inline elements never start from a new line. It only covers the space as bounded by the tags in HTML element.

(12) How to create a Hyperlink in HTML? With Example.

- With the help of anchor(`<a>`) tag we can create a Hyperlink in HTML. We can create hyperlink by using two methods. For example, we require navigation and content to be on the same page. In this case, we use internal links. `<a>` is always nested and it's parent tag is always `` tag. `<a>` has default attribute named `href`. Here, we provide our links destination. In `href` attribute we give path as `#` and then particular id name. It is required to write `id = #`. In `<div>` tag we provide id value. For instance, our id name is `home` so we can give path in `href` as `"#home"`.
- For external link we need to write code for different pages. For instance: `home`, `about`, `contact`, `product`. To link them we do not require id attribute we just need the same code in every page.

(13) What is the use of an `iframe` tag? With Example.

- The `<iframe>` tag in HTML is used to embed another HTML document or web page within the current document. It allows you to create a window(frame) in your webpage where the content of another document can be displayed.
- The content within the `<iframe>` tag is as follows:

```
<iframe src="" width="" height="" frameborder="0"></iframe>
```

(14) What is the use of a `span` tag? Explain with example?

- `` tag in HTML is used to write text side by side. It is an inline container.
- Example: `html`
 - `code`
- As a result `html` and `code` will be written side by side.

(15) How to insert a picture into a background image of a web page? With Example.

- If you want to insert an image into a background image using only HTML, you can use the `<div>` element to create a container for your content and set the background image as the background of this container.

- Inside the <div>, you can then include an tag for the image you want to insert.

(16)How are active links different from normal links?

- Normal links are links which are there on the page and have not been clicked yet. Active links are those links, which have just been clicked at that instant.

(17) What are the different tags to separate sections of text?

- In HTML, there are various tags that you can use to separate and structure different sections of text. Here are some common tags for this purpose.
- Paragraph Tag(<p>)
- Heading Tags(<h1>

(18)What is SVG?

- SVG stands for Scalable Vector Graphics. SVG is used to define vector-based graphics for the Web.SVG defines the graphics in XML format.

(19)What is difference between HTML and XHTML?

- HTML(HypertextMarkup Language) and XHTML(ExtensibleHypertext MarkupLanguage) are both markup languages used for creating and displaying web pages.
- The main difference between them is the syntax and structure.HTML is more lenient in its syntax, while XHTML has a more strict syntax and follows XML rules.

(20) What are logical and physical tags in HTML?

- Logical tags are used to add some logical or semantic value to the text.
- Physical tags are used to provide the visual appearance to the text.