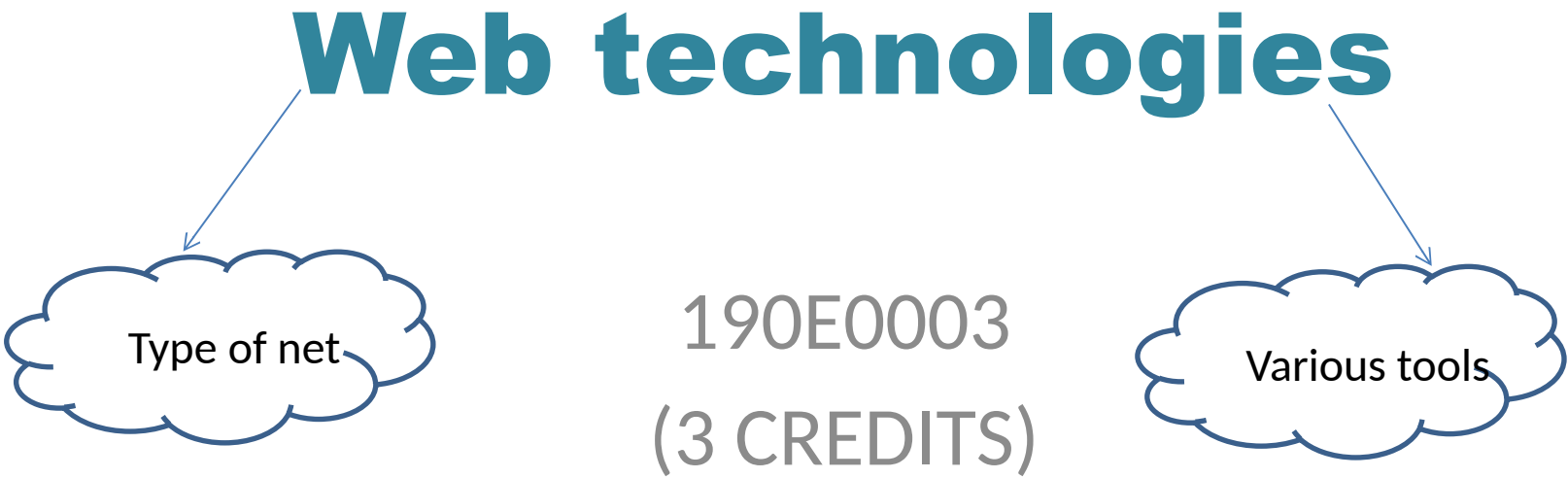


Web technologies



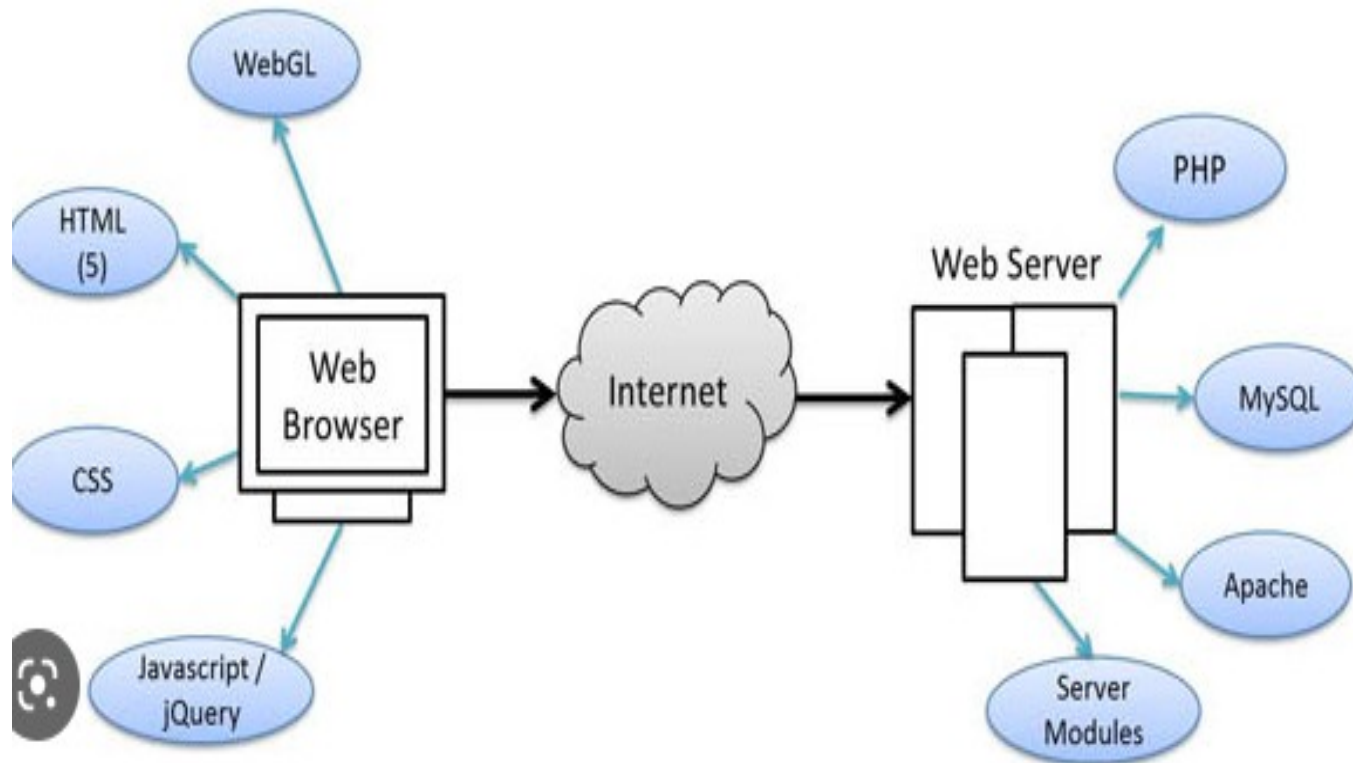
```
graph TD; A[Web technologies] --> B((Type of net)); A --> C((Various tools));
```

Type of net

190E0003
(3 CREDITS)

Various tools

- Web technologies refers to the way computers/devices communicate with each other using mark up languages



1.What is website, web page,web browser?

A **website** is a collection of web pages.

A **web page** may contain texts, graphics, sounds, animations, and movies.

Web pages are developed with the help of a language called **Hyper Text Markup Language(HTML)**. It is also a language of Internet.

2.Avalability of website on internet

How is this website made available on the Internet?

These web pages are to be stored in web servers connected to the Internet, to be made available to others.

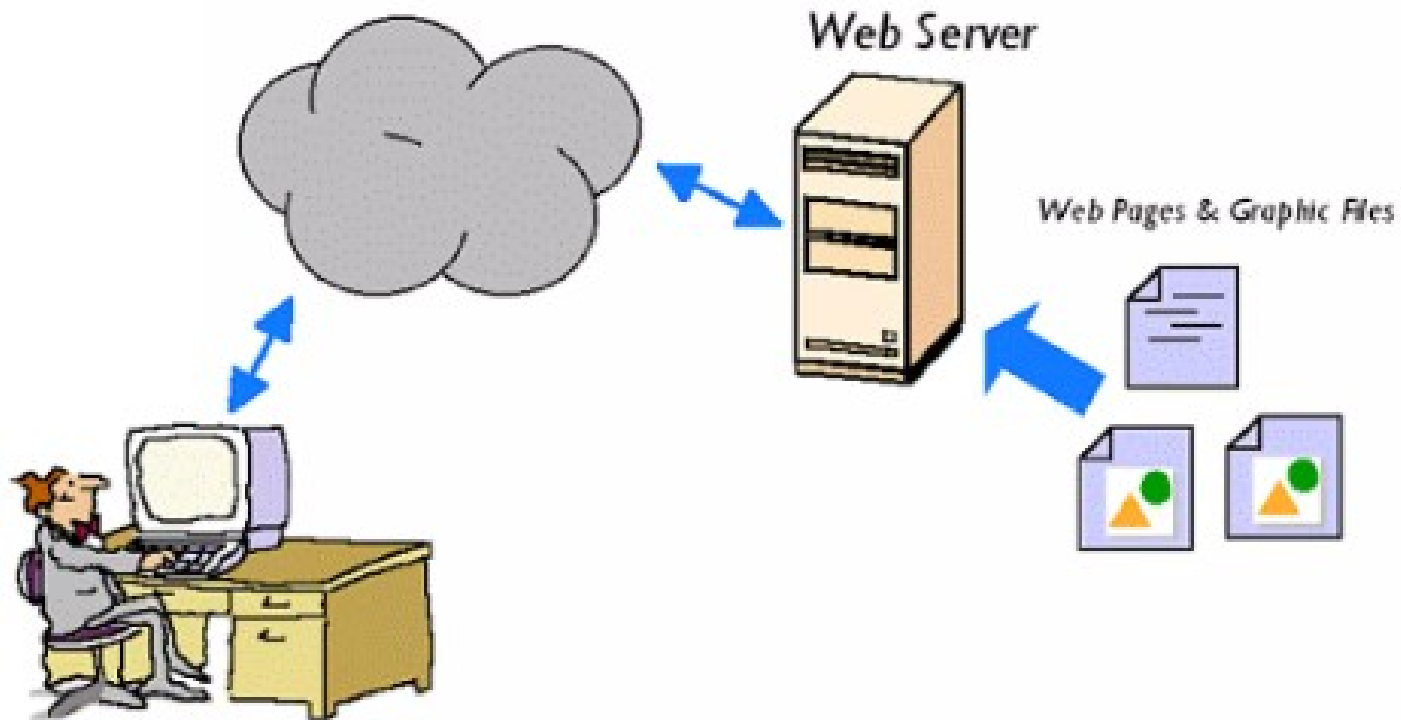
3.Communication

Communication on web



4.Web server

Web server technologies



5.Technologies

- HTML5
- CSS3
- JAVASCRIPT
- XML & JSON
- NODE JS
- REACT

6.OUTCOMES OF WEB TECHNOLOGIES

- Understand the major areas and challenges of web programming.
- To create websites using HTML5, CSS3, JavaScript
- To create dynamic, interactive web pages using JavaScript
- Understand client-side JavaScript libraries and frameworks
- Understand server-side scripting language
- Use the techniques for creating data-driven websites using modern web technologies

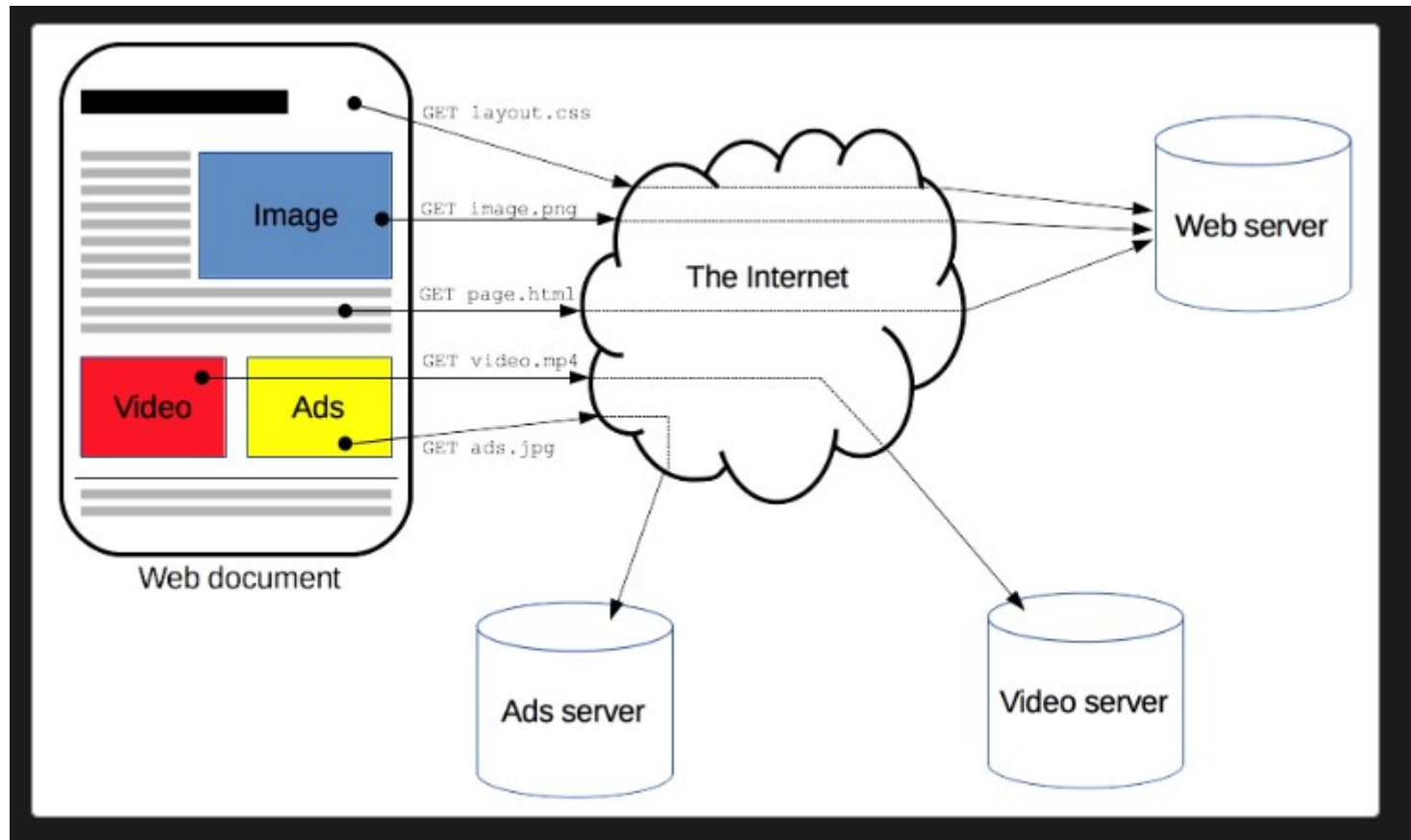
7.INTRODUCTION TO WWW

- World Wide Web, which is also known as a Web, is a collection of websites or web pages stored in web servers and connected to local computers through the internet.
- These websites contain text pages, digital images, audios, videos, etc. Users can access the content of these sites from any part of the world over the internet using their devices such as computers, laptops, cell phones, etc.
- The WWW, along with internet, enables the retrieval and display of text and media to your device.

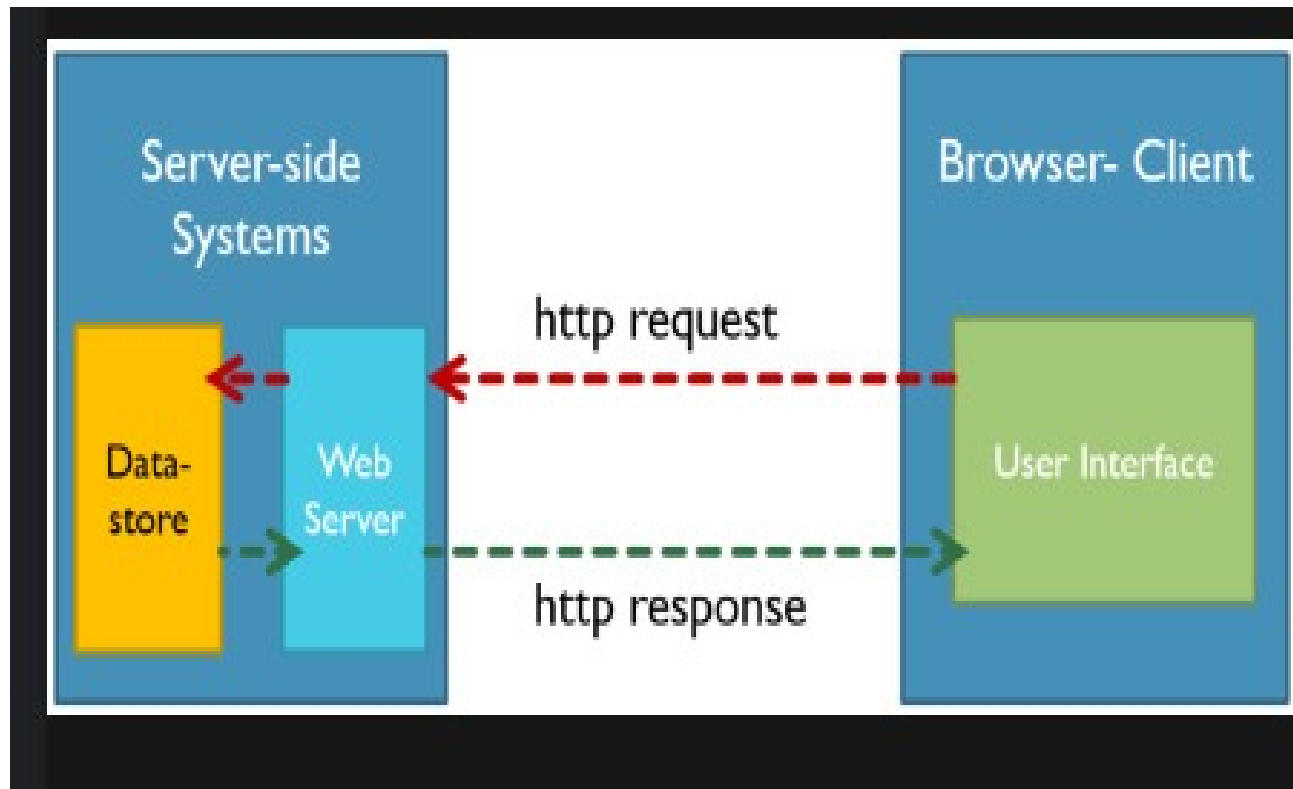
8.Overview of HTTP

HTTP is a [protocol](#) for fetching resources such as HTML documents. It is the foundation of any data exchange on the Web and it is a client-server protocol, which means requests are initiated by the recipient, usually the Web browser. A complete document is reconstructed from the different sub-documents fetched, for instance, text, layout description, images, videos, scripts, and more.

Contd..



HTTP REQUEST RESPONSE



9.HTTP REQUEST RESPONSE

- **HTTP works as a request-response protocol between a client and server.** Example: A client (browser) sends an HTTP request to the server; then the server returns a response to the client. The response contains status information about the request and may also contain the requested content.

10.Markup Language (HTML5)

Introduction to HTML and HTML5

- Formatting and Fonts
- Commenting Code
- Anchors
- Backgrounds
- Images
- Hyperlinks
- Lists
- Tables
- HTML Forms, Audio, Video Tag.

11.Introduction to HTML

- HTML is Hypertext Markup Language.
- It is a combination of Hypertext and Markup Language.
- Markup Language, consists of easily understandable keywords that helps to format the view of a page and the data it contains.
- In simpler words, it is used to mark parts of documents to indicate how they should appear.

12.VERSIONS OF HTML

HTML Version	Year
HTML 1.0	1991
HTML 2.0	1995
HTML 3.2	1997
HTML 4.01	1999
XHTML	2000
HTML 5	2014

HTML 1.0 : Supports only basic tags. Do not support tables, font changes etc.

HTML 2.0: Supports form but only basic.

HTML 3.2: Supports CSS. Only Internal CSS

HTML 4.01: Supports External CSS.

XHTML: HTML with XML elements. Follows very strict way of coding.

HTML 5: Many input element tags were added. GeoLocation , Email, Password etc., bootstrap. W3 consortium.

13. DIFFERENCES BETWEEN HTML & HTML5

HTML	HTML 5
1.Didn't support audio and video without the use of flash player support	1. It supports audio and video controls with the use of <audio> and <video> tags.
2.It does not allow drag and drop effect.	2. It allows drag and drop effects.
3. Not possible to draw shapes like circle, rectangle, triangle etc.	3. Allows to draw shapes like circle, rectangle, triangle etc.
4. It is supported by all old browsers	5. It is supported by all new browsers.
5. Old version of HTML are less mobile-friendly.	5. HTML5 language is more mobile friendly.
6. It cannot handle inaccurate syntax.	6. It is capable of handling inaccurate syntax.

14.HTML STRUCTURE

- The structure of HTML contains the following essential building blocks:
 - Doctype Declaration
 - HTML
 - Head
 - Title
 - Body

15.HTML STRUCTURE

HTML Page Structure

`<!DOCTYPE html>` ← Tells version of HTML

`<html>` ← HTML Root Element

`<head>` ← Used to contain page HTML metadata

`<title>Page Title</title>` ← Title of HTML page

`</head>`

`<body>` ← Hold content of HTML

`<h2>Heading Content</h2>` ← HTML heading tag

`<p>Paragraph Content</p>` ← HTML paragraph tag

`</body>`

`</html>`

Contd..

- `<!DOCTYPE html>`, specifies the type of the document. In this case, the type of file is html.
- `<html lang = 'en-us'>` html tag includes attribute lang, specifies the language in which the document is written. **[specifies the language code of the page followed by the country code that means US style of English language is used for all the text on the page.]**
- `<meta>`, is used to provide additional information. It provides the information about the character set used in the document.
- Ex: `<meta charset = 'utf-8' />`

16.ELEMENTS & TAGS

- HTML uses predefined tags and elements, that tells the browser how to display the content.
- Tags are represented with angular braces. `<>`
- For every opening tag there should be a closing tag `</>` (with forward slash).
- A HTML document can be saved using .html or .htm extension and can be opened in the browser.

17. COMMENTS IN HTML

- Comments increase the readability of the programs.
- Comments in HTML are written as follows:
 - Ex: `<!--This is the comment -->`
- Browsers ignore the comments. The comments are only for the users.
- The same syntax is used for multi line comment, as follows:
 - Ex: `<!-- This is
a Multi-line
comment -->`

18. HEADING

HTML heading tags are defined from <h1> to <h6>.

<h1> defines most important heading.

<h6> defines the least important heading.

Ex: < h1> This is H1 heading </h1>

< h2> This is H2 heading </h2>

< h3> This is H3 heading </h3>

< h4> This is H4 heading </h4>

< h5> This is H5 heading </h5>

<h6>jfdnfj</h6>

19.PARAGRAPH

- Text is often organized in paragraph.
- It is represented with `<p>`.
- Line break embedded in text are ignored by the browser.
- Ex: `<p> This is a paragraph tag </p>`

19.HTML style

- Use the style attribute for styling HTML elements
- Use background-color for background color
- Use color for text colors
- Use font-family for text fonts
- Use font-size for text sizes
- Use text-align for text alignment

20.HTML Formatting Elements

Formatting elements were designed to display special types of text:

https://www.w3schools.com/html/html_formatting.asp(practise)

- `` - Bold text
- `` - Important text
- `<i>` - Italic text
- `` - Emphasized text
- `<mark>` - Marked text
- `<small>` - Smaller text
- `` - Deleted text
- `<ins>` - Inserted text
- `<sub>` - Subscript text
- `<sup>` - Superscript text

21. HTML Images

- HTML Images Syntax
- The HTML **** tag is used to embed an image in a web page.
- Images are not technically inserted into a web page; images are linked to web pages. The **** tag creates a holding space for the referenced image.
- The **** tag is empty, it contains attributes only, and does not have a closing tag.
- The **** tag has two required attributes:
- **src** - Specifies the path to the image
- **alt** - Specifies an alternate text for the image

Syntax

- ``
- The **src** Attribute
- The required src attribute specifies the path (URL) to the image.

Example

```

```

22. HTML BACKGROUND IMAGES

- A background image can be specified for almost any HTML element.
- To add a background image on an HTML element, use the HTML style attribute and the CSS background-image property:

Example

- Add a background image on a HTML element:
- `<p style="background-image: url('img_girl.jpg');">`

CONTD.....

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<style>
```

```
body {
```

```
  background-image: url('img_girl.jpg');
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h2>Background Image</h2>
```

```
<p>By default, the background image will repeat itself if it is smaller than the element where  
it is specified, in this case the body element.</p>
```

```
</body>
```

```
</html>
```

23. HTML Comments

- HTML comments are not displayed in the browser, but they can help document your HTML source code.
- You can add comments to your HTML source by using the following syntax:
- **<!-- Write your comments here -->**

23.LISTS

- Lists are nothing but a group of elements. There are three types of Lists:

- Unordered list or Bulleted list (ul)
 - Ordered list or Numbered list (ol)
- Description list or Definition list (dl)

·

Attributes (cont..in next slide)

- [value](#)
 - This integer attribute indicates the **current ordinal value** of the list item as defined by the [](#) element. The only allowed value for this attribute is a number, even if the list is displayed with Roman numerals or letters.

LISTS

- Lists are nothing but a group of elements. There are three types of Lists:

- Unordered list or Bulleted list (ul)
 - Ordered list or Numbered list (ol)
- Description list or Definition list (dl)

·

Attributes (cont..in next slide)

- [value](#)
 - This integer attribute indicates the **current ordinal value** of the list item as defined by the [](#) element. The only allowed value for this attribute is a number, even if the list is displayed with Roman numerals or letters.

[type](#)

-*Deprecated

Non-standard

This character attribute indicates the numbering type:

- a: lowercase letters
- A: uppercase letters
- i: lowercase Roman numerals
- I: uppercase Roman numerals
- 1: numbers

This type overrides the one used by its parent [](#) element, if any.

Note: This attribute has been deprecated; use the CSS [list-style-type](#) property instead.

```
<ol type="I">
```

```
<li value="3">third item</li>
```

```
<li>fourth item</li>
```

```
<li>fifth item</li>
```

```
</ol>
```

III. third item
IV. fourth item
V. fifth item

ORDERED LIST

- An ordered list starts with the `` tag. Each list item starts with the `` tag. The list items will be marked with numbers by default:
- Ex 1: Ordered List
- ``
 - `Coffee`
 - `Tea`
 - `Milk`
 - ``

ORDERED LIST

```
<!DOCTYPE html>
<html>
<body>

<h2>An ordered HTML list</h2>

<ol>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>

</body>
</html>
```

An ordered HTML list

1. Coffee
2. Tea
3. Milk

UNORDERED LIST

- An unordered list starts with the `` tag. Each list item starts with the `` tag. The list items will be marked with bullets (small black circles) by default:
- **Ex:** Unordered List
- ``
 `Coffee`
 `Tea`
 `Milk`
 ``

UNORDERED LIST

```
<!DOCTYPE html>
<html>
<body>

<h2>An unordered HTML list</h2>

<ul>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ul>

</body>
</html>
```

An unordered HTML list

- Coffee
- Tea
- Milk

DESCRIPTION LIST

- A description list is a list of terms, with a description of each term. The `<dl>` tag defines the description list, the `<dt>` tag defines the term (name), and the `<dd>` tag describes each term:
- **Ex:** Description Lists

```
<dl>  
  <dt>Coffee</dt>  
  <dd>- black hot drink</dd>  
  <dt>Milk</dt>  
  <dd>- white cold drink</dd>  
</dl>
```

DESCRIPTION LIST

```
<!DOCTYPE html>
<html>
<body>

<h2>A Description List</h2>

<dl>
  <dt>Coffee</dt>
  <dd>- black hot drink</dd>
  <dt>Milk</dt>
  <dd>- white cold drink</dd>
</dl>

</body>
</html>
```

A Description List

Coffee

- black hot drink

Milk

- white cold drink

HYPERLINKS

- ◆ Hyperlinks are produced by the anchor element `a`

See

```
<a href="http://www.w3.org/TR/html4/index/elements.html">the  
  W3C HTML 4.01 Element Index</a>  
for a complete list of elements.
```

- ◆ Clicking on a hyperlink causes browser to issue GET request to URL specified in `href` attribute and render response in client area
- ◆ Content of anchor element is text of hyperlink (avoid leading/trailing space in content)

[type](#)

-*Deprecated

Non-standard

This character attribute indicates the numbering type:

- a: lowercase letters
- A: uppercase letters
- i: lowercase Roman numerals
- I: uppercase Roman numerals
- 1: numbers

This type overrides the one used by its parent [](#) element, if any.

Note: This attribute has been deprecated; use the CSS [list-style-type](#) property instead.

```
<ol type="I">
```

```
<li value="3">third item</li>
```

```
<li>fourth item</li>
```

```
<li>fifth item</li>
```

```
</ol>
```

III. third item
IV. fourth item
V. fifth item

ORDERED LIST

- An ordered list starts with the `` tag. Each list item starts with the `` tag. The list items will be marked with numbers by default:
- Ex 1: Ordered List
- ``
 - `Coffee`
 - `Tea`
 - `Milk`
 - ``

24.TABLES

- Tables allows the users to arrange the data in rows and columns. Each tag has a start and end tag
- For tables, <table> tag is used.
 - eg <table border=5 bgcolor = "yellow" width=100%>
 - Each table row is defined with a <tr> tag.
- Each table header is defined with a <th> tag.
- Each table data/cell is defined with a <td> tag.
- By default, the text in <th> elements are bold and centered.
- By default, the text in <td> elements are regular and left-aligned.

TABLES

```
<!DOCTYPE html>
<html>
<body>

<h2>Basic HTML Table</h2>

<table style="width:50%">
  <tr>
    <th>S.No</th>
    <th>Branch</th>
    <th>Section</th>
  </tr>
  <tr>
    <td>1</td>
    <td>CSE</td>
    <td>A</td>
  </tr>
</table>

</body>
</html>
```

Basic HTML Table

S.No	Branch	Section
1	CSE	A
2	ECE	B

COLSPAN AND ROWSPAN

Tables

```
<table border="5">
  <caption>
    COSC 400 Student Grades
  </caption>
  <tr>
    <td>&nbsp;</td><td>&nbsp;</td><th colspan="2">Grades</th>
  </tr>
  <tr>
    <td>&nbsp;</td><th>Student</th><th>Exam 1</th><th>Exam 2</th>
  </tr>
  <tr>
    <th rowspan="2">Undergraduates</th><td>Kim</td><td>100</td><td>89</td>
  </tr>
  <tr>
    <td>Sandy</td><td>78</td><td>92</td>
  </tr>
  <tr>
    <th>Graduates</th><td>Taylor</td><td>83</td><td>73</td>
  </tr>
</table>
```



COSC 400 Student Grades

		Grades	
	Student	Exam 1	Exam 2
Undergraduates	Kim	100	89
	Sandy	78	92
Graduates	Taylor	83	73

25.HTML FORMS

- Forms are used to collect data from the users.
- The user input is often sent to the server for processing.
- The <form> element is used to create forms for the user.
- It is a container of different elements: text fields, text boxes, radio buttons, etc.

HTML FORMS

Type	Description
<code><input type="text"></code>	Displays a single-line text input field
<code><input type="radio"></code>	Displays a radio button (for selecting one of many choices)
<code><input type="checkbox"></code>	Displays a checkbox (for selecting zero or more of many choices)
<code><input type="submit"></code>	Displays a submit button (for submitting the form)
<code><input type="button"></code>	Displays a clickable button

LABEL TAG

- The `<label>` tag defines a label for many form elements.
- The `<label>` element is useful for the users to identify the input.
- The `for` attribute of the `<label>` tag should be equal to `id` attribute of the `<input>` tag to bind them together.

TEXT FIELD

- The `<input type =“text”` defines a single-line input field for text input.
 - Ex: `<form>`
 `<label for="fname">First name:</label>
`
 `<input type="text" id="fname" name="fname"`
 `value = “”>`
 - `</form>`

RADIO BUTTON

- The `<input type="radio">` defines a radio button. Radio button lets a user to select only one of the choices.

- Ex: `<form>`

```
    <input type="radio" id="male" name="gender"
value="male">
```

```
    <label for="male">Male</label><br>
```

```
    <input type="radio" id="female" name="gender"
value="female">
```

```
    <label for="female">Female</label><br>
```

```
</form>
```

CHECK BOXES

- The `<input type =“checkbox”>` defines a check.box.
- User can select zero or more options out of the choices.
- Ex: form>

```
<input type="checkbox" id="vehicle1" name="vehicle1" value="Bike">
```

```
<label for="vehicle1"> I have a bike</label><br>
```

```
<input type="checkbox" id="vehicle2" name="vehicle2" value="Car">
```

```
<label for="vehicle2"> I have a car</label><br>
```

```
<input type="checkbox" id="vehicle3" name="vehicle3" value="Boat">
```

```
<label for="vehicle3"> I have a boat</label></form>
```

SUBMIT BUTTON

- The `<input type = “submit”>` defines a button for submitting the data to a form handler.
- The form-handler is typically a file on the server with a script for processing input data.
- Ex: `<form>`

`<input type="submit" value="Submit">`

`</form>`

EXAMPLES/TUTORIALS

```
<!DOCTYPE html>
<html>
<body>

<h2>HTML Forms</h2>

<form action="">
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname" value=" "><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname" value=" "><br><br>
  <input type="submit" value="Submit">
</form>

</body>
</html>
```

HTML Forms

First name:

Last name:

Submit

Example (input type=password)

```
<!DOCTYPE html>
<html>
<body>

<h2>Password field</h2>

<p>The <strong>input type="password"</strong> defines a
password field:</p>

<form action="/action_page.php">
  <label for="username">Username:</label><br>
  <input type="text" id="username" name="username"><br>
  <label for="pwd">Password:</label><br>
  <input type="password" id="pwd" name="pwd"><br><br>
  <input type="submit" value="Submit">
</form>

<p>The characters in a password field are masked (shown as
asterisks or circles).</p>

</body>
</html>
```

Password field

The `input type="password"` defines a password field:

Username:

Password:

Submit

The characters in a password field are masked (shown as asterisks or circles).

Submitted Form Data

Your input was received as:

```
username=anusha&pwd=dsad
```

The server has processed your input and returned this answer.

Example of text area, select, email, range, reset -->

select—-- >(Menu)>

```
<select id="cars" name="cars">
  <option
value="volvo">Volvo</option>
  <option
value="saab">Saab</option>
  <option
value="fiat">Fiat</option>
  <option
value="audi">Audi</option>

</select>
```

Text Area

```
<textarea
id="w3review"
name="w3review"
rows="4" cols="50">
  you will learn how to
  make a website. They
  offer free tutorials in
  all web development
  technologies.
</textarea>
```

Input type=email/url/range/submit/reset

```
<input type="email" id="email" name="email">
```

```
<input type="url" name="url" id="url"  
  placeholder="https://example.com"  
  pattern="https://.*" size="30"  
  required>
```

```
<input type = "range" id = "myAge" name = "myAge" min = "18" max = "110" >
```

```
<input type="submit" value="Submit">
```

```
<input type="reset" value="reset form">
```

```
<!DOCTYPE html>
<html>
<body>
<! example of textarea,select,email,range,reset -->
```

```
</select>
  <br><br>
  <label for="email">Enter your
  email:</label>
  <input type="email" id="email"
  name="email">
  <label for="url">Enter an https://
  URL:</label>

  <input type="url" name="url" id="url"
    placeholder="https://example.com"
    pattern="https://.*" size="30"
    required>
  <input type = "range" id = "myAge"
  name = "myAge" min = "18" max =
  "110" >

  <input type="submit" value="Submit">
  <input type="reset" value="reset
  form">
</form>

<p>The characters in a password field
are masked (shown as asterisks or
circles).</p>
```

Password field

The **input type="password"** defines a password field:

Username:

Password:

you will learn how to make a website. They offer free tutorials in all web development technologies.

Choose a car:

Enter your email:

Enter an https:// URL:



The characters in a password field are masked (shown as asterisks or circles).

Use of Field set and legend

Definition and Usage

The `<fieldset>` tag is used to group related elements in a form.

The `<fieldset>` tag draws a box around the related elements.

Tips and Notes

Tip: The `<legend>` tag is used to define a caption for the `<fieldset>` element.

Global Attributes

The `<fieldset>` tag also supports the [Global Attributes in HTML](#).

Event Attributes

The `<fieldset>` tag also supports the [Event Attributes in HTML](#).

```

<!DOCTYPE html>
<html>
<head>
<style>
fieldset {
  background-color: #eeeeee;
}

legend {
  background-color: gray;
  color: white;
  padding: 5px 10px;
}

input {
  margin: 5px;
}
</style>
</head>

```

```

<body>

<h1>The fieldset element + CSS</h1>

<form action="/action_page.php">
  <fieldset>
    <legend>Personalia:</legend>
    <label for="fname">First
name:</label>
    <input type="text" id="fname"
name="fname"><br><br>
    <label for="lname">Last name:</label>
    <input type="text" id="lname"
name="lname"><br><br>
    <label for="email">Email:</label>
    <input type="email" id="email"
name="email"><br><br>
    <label
for="birthday">Birthday:</label>
    <input type="date" id="birthday"
name="birthday"><br><br>
    <input type="submit" value="Submit">

```


The fieldset element + CSS

Personalia:

First name:

Last name:

Email:

Birthday: 


```

<html>
<body>
<form action="" method="GET">
  <fieldset>
    <legend>Personal
information</legend>
    <TABLE BORDER="1">
      <TR>
        <TD>Your name</TD>
        <TD>
          <INPUT TYPE="TEXT" NAME="name"
SIZE="50">
        </TD> </TR>
      <TR>
        <TD>Your email</TD> <TD>
          <INPUT TYPE="EMAIL" NAME="name"
SIZE="50"> </TD>
      </TR> <TR> <TD>address</TD>
        <TD> <textarea id="w3review"
name="w3review" rows="4" cols="50">
          </textarea>
        </TD> </TR></TABLE> </fieldset>
  </table>
  </fieldset>

```


```

<legend> Card information</legend>
  <TABLE BORDER="1">
    <TR> <td> credit card</td>
      <TD><select id="cards" name="card" >
        <option value="default" selected>SELECT A
CREDIT CARD</option>
        <option value="MASTER CARD">master
card</option>
        <option value="VIVA">viva</option>
      </select> </TD </TR>
    <tr> <td> Account number</td>
      <td> <input type=text name=account
size="25"> </td>
    <tr> <td>date</td> <td><input type=date
name=date size="25"> </tr></TABLE>
  </fieldset> </table>
  <span> "please keep me informed of further
ordering" </span> <input type="checkbox">
checked><input type=submit
value=Submit><input type=reset
value="clear">

```

Output

Personal information	
Your name	<input type="text"/>
Your email	<input type="text"/>
address	<input type="text"/>

Card information	
credit card	<input type="text" value="SELECT A CREDIT CARD ▼"/>
Account number	<input type="text"/>
date	<input type="text" value="dd/mm/yyyy"/> 

"Please keep me informed about further ordering" ☒

HTML MEDIA TAGS : The audio Element :

The only commonly used attribute of the audio element is controls, which we always set to "controls". This attribute, when present, creates a display of a start/stop button, a clock, a slider of the progress of the play, the total time of the file, and a slider for volume control.

*Audio information is coded into digital streams with encoding algorithms called audio codecs. There are a large number of different audio codecs. Among these the most commonly used on the Web are MPEG-3 (MP3), Vorbis, and Wav.

Coded audio data is packaged in containers. A container can be thought of as a zip file; it is a way to pack data into a file, but the encoding of the data in the file is irrelevant to the container. A zip file may contain textual data coded in ASCII or it might contain floating-point numbers coded in

binary. Likewise, an audio container may contain MP3 or Vorbis coded data. There are three different audio container types: Ogg, MP3, and Wav.

<audio attributes>
<source src = "filename₁">
<audio
<source src = "filename_n">

Your browser does not support the audio element

</audio>

HTML MEDIA TAGS: Audio tag and video tag

```
<!DOCTYPE html> <!--  
audio.html
```

```
test the audio element  -->
```

```
<html lang = "en">
```

```
<head>
```

```
<title> test audio element </title>
```

```
<meta charset = "utf-8" />
```

```
</head>
```

```
<body>
```

This is a test of the audio
element <audio controls =
"controls" >

```
<source src = "nineoneone.ogg"  
/>
```

```
<source src = "nineoneone.wav"  
/>
```

```
<source src =  
"nineoneone.mp3" />
```

Your browser does not support
the audio element

```
</audio>
```

```
</body>
```

The Video Element

Video information, like audio information, must be digitized into data files before it can be played by a browser, this time by algorithms called *video codecs*. As is the case with audio, video data is stored in **containers**.

There are many different **video containers** and many different **video codecs**. Further complicating the situation is the fact that not all video codecs can be stored in all video containers.

The most common video containers used on the Web are MPEG-4 (.mp4 files), Flash Video (.flv files), Ogg (.ogv files), WebM (.webm files), and Audio Video Interleave (.avi files).

The most common video codecs used on the Web are H.264 (also known as MPEG-4 Advance Video Coding, or MPEG-4 AVC), which can be embedded in MP4 containers, Theora, which can be embedded in any container, and VP8, which can be embedded in WebM containers.

In addition to video data, video containers also store audio data, because most video is accompanied by audio. The three most common container/video codec/audio codec combinations used on the Web are the

Ogg container with Theora video codec and Vorbis audio codec, MPEG-4 container with H.264 video codec and AAC audio codec, and WebM

HTML: MEDIA TAGS- VIDEO

```
<!DOCTYPE html> <!--  
testvideo.html  
  
    test the video element  
-->  
  
<html lang = "en">  
  
<head>  
  
<meta charset = "utf-8" />  
  
<title> test video element  
</title>  
  
</head>  
  
<body>
```

This is a test of the video element.....

```
<video width = "600" height = "500"  
autoplay = "autoplay"  
controls = "controls" preload =  
"preload">  
  
<source src =  
"NorskTippingKebab.mp4" />  
  
<source src =  
"NorskTippingKebab.ogv" />  
  
<source src =  
"NorskTippingKebab.webm" />
```

**Your browser does not support
the video element**

</video>

[https://stackoverflow.com/questions/7055393/center-image-using-text-align-center#:~:text=In%20response%20to%20your%20question,containing%20span%20\(or%20div%20\).&text=A%20span%20element%20is%20display,center%3B%20on%20the%20img%20itself.](https://stackoverflow.com/questions/7055393/center-image-using-text-align-center#:~:text=In%20response%20to%20your%20question,containing%20span%20(or%20div%20).&text=A%20span%20element%20is%20display,center%3B%20on%20the%20img%20itself.)

<https://www.geeksforgeeks.org/container-and-empty-tags-in-html/>