Course Content
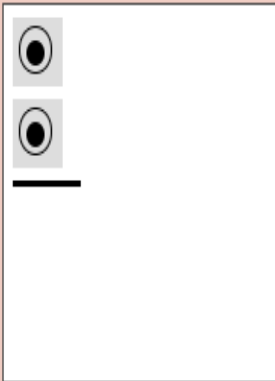
- HTML – creates static web pages
- CSS – Increases look and feel of web pages
- JS – makes web pages dynamic
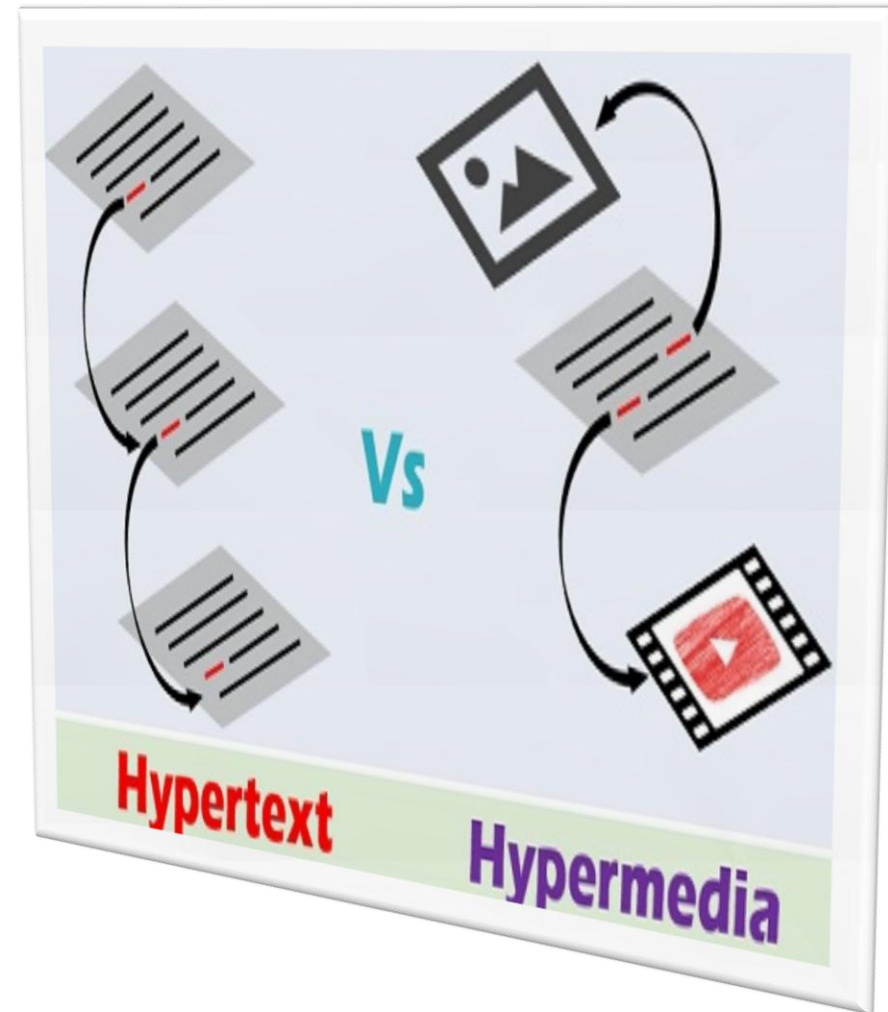- Cross Platform

https://html-css-js.com/

HTML

HTML

HYPER TEXT MARKUP LANGUAGE

Hypertext

- **Hypertext** is text which contains links to other texts. The term was coined by Ted Nelson around 1965.

- HyperMedia is a term used for **hypertext** which is not constrained to be text: it can include graphics, video and sound.

Markup Language

- **A markup language** - computer **language** that uses tags to define elements within a document.

- It is human- readable, meaning **markup** files contain standard words, rather than typical programming syntax.

- While several **markup languages** exist, the two most popular are **HTML** and XML

HTML5

- **HTML5 is a markup language used for structuring and presenting content on the World Wide Web.**

- **The current specification is known as the HTML Living Standard.**

- **It is maintained by a consortium of the major browser vendors (Apple, Google, Mozilla, and Microsoft), the Web Hypertext Application Technology Working Group (WHATWG).**

Tools to create HTML documents

- **Any Text Editors**
  - Notepad or TextEdit
- **We will use Notepad++ in this session.**

What is HTML?

- **HTML stands for Hyper Text Markup Language.**

- **HTML is the standard markup language for creating Web pages.**

- **HTML consists of a series of elements.**

- **HTML elements tell the browser how to display the content.**

HTML Documents

- **All HTML documents must start with a document type declaration:**
- **<!DOCTYPE html>.**
- **The HTML document**
- **begins with <html> and ends with </html>.**
- **<head><title></title></head>**
- **The visible part of the HTML document is between**
- **<body> and </body>.**

Structure of HTML Document

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

        <head>
            <title> Title here </title>
        </head>

        <body>
            Web page content goes here.
        </body>

    </html>
```

How to create a HTML Document?

1. **Open a Text Editor.**

2. **Write your HTML Code**

3. **Save with some file name and .html or .htm file extension**

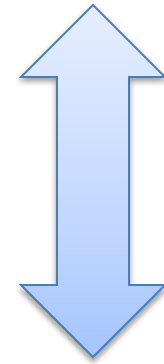4. **Run the .html or .htm file using a web browser.**

- <!doctype html>
- <html>
-     <head>
-         <title>Our Web page
-         </title>
-     </head>
-     <body>
-         Hello world
-     </body>
- </html>

In a HTML Documents you see tags, elements and attributes

<tagname attribute=value>

Content

</tag>

E
L
E
M
E
N
T

In a HTML Documents you see tags, elements and attributes

```
<!DOCTYPE HTML>
<html>
    <body bgcolor="red">

        "Hello World"

    </body>
</html>
```
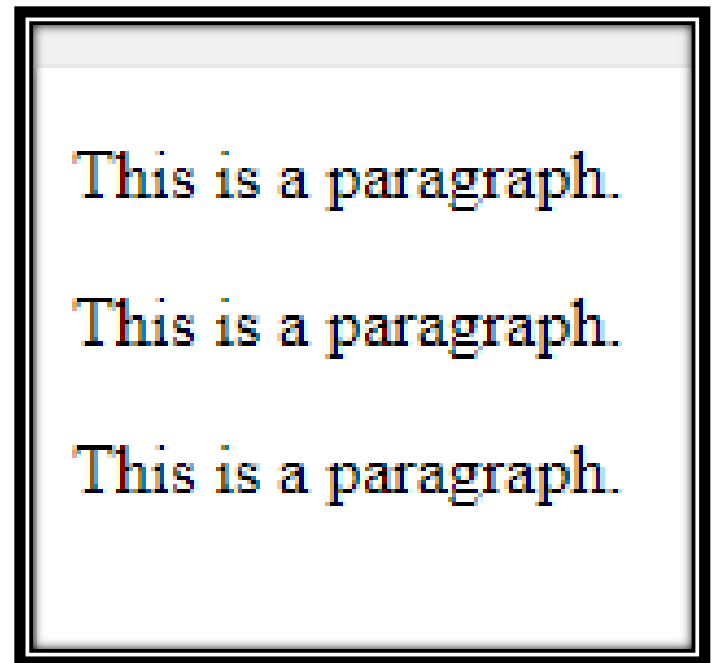
Paragraph Tag <p>

- A paragraph always starts on a new line, and is usually a block of text.

<p>This is a paragraph.</p>

<p>This is a paragraph.</p>

<p>This is a paragraph.</p>

This is a paragraph.

This is a paragraph.

This is a paragraph.

Heading Tags <h1> to <h6>

<h1>Heading 1</h1>

<h2>Heading 2</h2>

<h3>Heading 3</h3>

<h4>Heading 4</h4>

<h5>Heading 5</h5>

<h6>Heading 6</h6>

Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Heading 6

\<hr\>

\<h1\>This is heading 1\</h1\>
\<p\>This is some text.\</p\>
\<hr\>

\<h2\>This is heading 2\</h2\>
\<p\>This is some other text.\</p\>
\<hr\>

\<h2\>This is heading 2\</h2\>
\<p\>This is some other text.\</p\>

This is heading 1

This is some text.

This is heading 2

This is some other text.

This is heading 2

This is some other text.

Text Formatting

<b> - **Bold text**

<strong> - **Important text**

<i> - **Italic text**

<em> - **Emphasized text**

<mark> - **Marked text**

<small> - **Smaller text**

<del> - **Deleted text**

<ins> - **Inserted text**

<sub> - **Subscript text**

<sup> - **Superscript text**

```html
<!DOCtype html>
<html>
<body>

<p><b>This text is bold!</b></p>

<p><strong>This text is important!</strong></p>

<p><i>This text is italic</i></p>

<p><em>This text is emphasized</em></p>

<p><small>This is some smaller text.</small></p>

<p>Do not forget to buy <mark>milk</mark> today.</p>

<p>My favorite color is <del>blue</del> red.</p>

<p>My favorite color is <del>blue</del> <ins>red</ins>.</p>

<p>This is <sub>subscripted</sub> text.</p>

<p>This is <sup>superscripted</sup> text.</p>

</body>
</html>
```

This text is bold!

This text is important!

This text is italic

This text is emphasized

This is some smaller text.

Do not forget to buy <mark>milk</mark> today.

My favorite color is ~~blue~~ red.

My favorite color is ~~blue~~ <u>red</u>.

This is $_{subscripted}$ text.

This is ^{superscripted} text.

Comments

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

<!-- This is a comment -->
<p>This is a paragraph.</p>
<!-- Comments are not displayed in the browser -->

</body>
</html>
```

HTML Styles

- *<tagname* style="*property*:*value;*">

HTML Style attribute

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

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

<p>I am normal</p>
<p style="color:red;">I am red</p>
<p style="color:blue;">I am blue</p>
<p style="font-size:50px;">I am big</p>

</body>
</html>
```

I am normal

I am red

I am blue

I am big

```html
<!DOCTYPE html>
<html>
<body style="background-color:powderblue;">

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

This is a heading

This is a paragraph.

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

<h1 style="background-color:powderblue;">This
    is a heading</h1>
<p style="background-color:tomato;">This is a
    paragraph.</p>

</body>
</html>
```

This is a heading

This is a paragraph.

Inserting Images

- <img> tag is used.
- Src attribute contains relative or absolute address of the image.
- <img src="image1.jpg" alt="alternate text">
- <img src="img_girl.jpg" alt="Girl in a jacket" style="width:500px;height:600px;">

- Relative path includes
  - ❖/image1.jpg
  - ❖../image1.jpg
- Absolute path
  - ❖http:// full path pf the image

- <!DOCtype html>
- <html>
- <body>
- <img src="MRCET.jpg" alt="image cannot be displayed">
- </body>
- </html>

HTML Links

- **Links are found in nearly all web pages.**

- **Links allow users to navigate from one webpage to another webpage.**

- **You can click on a link and jump to another document.**

\<a\>

- **\<a href="*url*"\>*link text*\</a\>**
- The most important attribute of the \<a\> element is the **href attribute**, which indicates the link's destination.
- **The target attribute specifies where to open the linked document.**

```html
1  <!DOCTYPE html>
2  <html>
3  <body>
4
5  <h1><a href="http://www.cricinfo.com"> click here for Cricinfo website</a></h1>
6
7  </body>
8  </html>
```

← → C ⌂   ⓘ File | D:/MRCET/HTML/Examples/Links.html

click here for Cricinfo website

Navigation using hyperlinks Example

Keeping image instead of hypertext

```
<!DOCTYPE html>
<html>
<body>
<h1>This is Home Page<h1><br>


<a href="LinkSignup.html"><img src="s.png" width=150 height=150></a></<br>
<a href="LinkLogin.html"><img src="L.png" width=150 height=150></a>


</body>
</html>
```

Showing text when courson moves over the link

- Visit our college website

Visit our college website

Go to MRCET Website

HTML Lists

- **HTML lists allow web developers to group a set of related items in lists.**

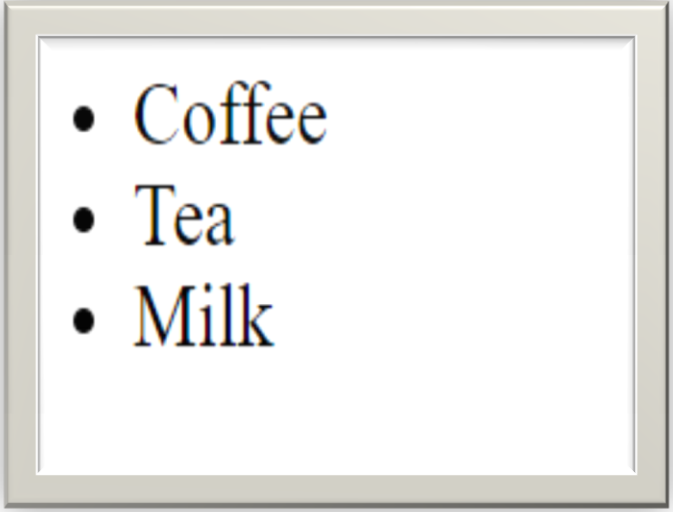An unordered HTML list:

- Item
- Item
- Item
- Item

An ordered HTML list:

1. First item
2. Second item
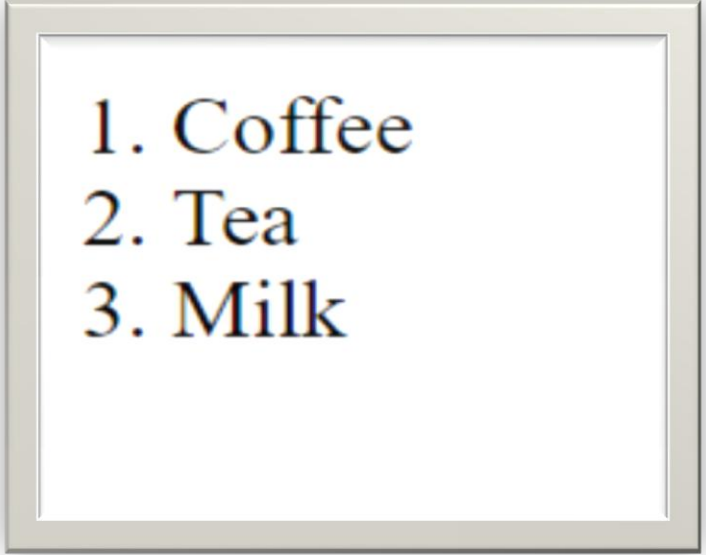3. Third item
4. Fourth item

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

- Coffee
- Tea
- Milk

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

1. Coffee
2. Tea
3. Milk

HTML Description Lists

- 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:

```html
<!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

Tables

- HTML tables allow web developers to arrange data into rows and columns.
- The **\<table>** tag defines an HTML table.
- 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.**

- **Note:** The <td> elements are the data containers of the table. They can contain all sorts of HTML elements; text, images, lists, other tables, etc.

```html
<!DOC HTML>
<html>
<head>
<title>
 "Tables Demo"
</title>
</head>
<body>
<table>
    <caption><h1>Students Details</caption>
    <tr><th>Rollno</th><th>Name</th><th colspan=2>Ph no.</th></tr>
    <tr><td>501</td><td>Ram</td><td>9999999999</td><td>8888888888</td></tr>
    <tr><td>502</td><td>Shaam</td><td>7777777777</td><td>6666666666</td></tr>
</table>
</html>
```

Students Details

Rollno	Name	Ph no.	
501	Ram	9999999999	8888888888
502	Shaam	7777777777	6666666666

HTML Block and Inline Elements

- Every HTML element has a default display value, depending on what type of element it is.

- There are two display values: block and inline.

Block-level Elements

- **A block-level element always starts on a new line and takes up the full width available (stretches out to the left and right as far as it can).**

Inline Elements

- **An inline element does not start on a new line and it only takes up as much width as necessary.**

Hello world Iam Back

Hello World

Iam Back Hello world I am Back Hello Word Iam Back

```html
<!DOC HTML>
<html>
<head>
<title>
Block & Inline
</title>
</head>
<body>
Hello
world Iam Back
<div>Hello World</div>Iam Back
Hello world
<span>I am Back</span>
Hello Word Iam Back
</body>
</html>
```

HTML Iframes

- An HTML iframe is used to display a web page within a web page.

- <iframe src="URL"></iframe>

- <iframe src="demo_iframe.htm" height="200" width="300"></iframe>

```html
<!DOC HTML>
<html>
    <body>
        <iframe src="http://www.mrcet.com" height=300 width=1200></iframe>
        <iframe src="tabl.html" height=300 width=600></iframe>
    </body>
</html>
```

𝕏 🔲 ▶ 📞 7207034237 ✉ mrcet2004@gmail.com

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Autonomous Institution - UGC, Govt. of India

EAMCET/ICET/PGECET Code MLRD

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Students Details

Rollno	Name	Ph no.	
501	Ram	9999999999	8888888888
502	Shaam	7777777777	6666666666

```html
<!DOC HTML>
<html>
    <body>
        <iframe src="http://www.mrcet.com" height=300 width=600></iframe>
        <iframe src="tabl.html" height=300 width=600></iframe>
        <iframe src="http://www.cricinfo.com" height=300 width=600></iframe>
        <iframe src="Frames.html" height=300 width=600></iframe>
    </body>
</html>
```

ARIIA-2020   PRE-QUALIFIERS   NIRF-2020   QUICK LINKS ▾

STUDENT LOGIN

Malla Reddy College of Engineering & Technology

Autonomous Institution - UGC, Govt. of India

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EAMCET & JEE

Mock Tests

Students Details

Rollno	Name	Ph no.
501	Ram	9999999999 8888888888
502	Shaam	7777777777 6666666666

ESPN cricinfo

Which players have played the most Tests together?

And what is the most consecutive Tests played by a pair for a team?

HOME   MATCHES   SERIES   MORE

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Activate Windows
Go to Settings to activa

Iframe - Target for a Link

```
1   <!DOCTYPE html>
2   <html>
3   <body>
4
5   <iframe height="300px" width="100%" name="iframe_a"></iframe>
6
7   <p><a href="http://www.cricinfo.com" target="iframe_a"> click here for Cricinfo website</a></p>
8
9
10  </body>
11  </html>
```

click here for Cricinfo website

HTML Forms

- An **HTML form** is used **to collect user input**.
- The user input can then be sent to a server for processing.
- The HTML **<form>** element defines a form that is used to collect user input.

<form tag>

A <form> has three attributes.

1. **action** - defines the action to be performed when the form is submitted.

2. **target** - specifies if the submitted result will open in a new browser tab, a frame, or in the current window.

3. **method** - specifies the HTTP method (**GET** or **POST**) to be used when submitting the form data.

```html
<form action="/action_page.php"
target="_blank"
method="get">
```
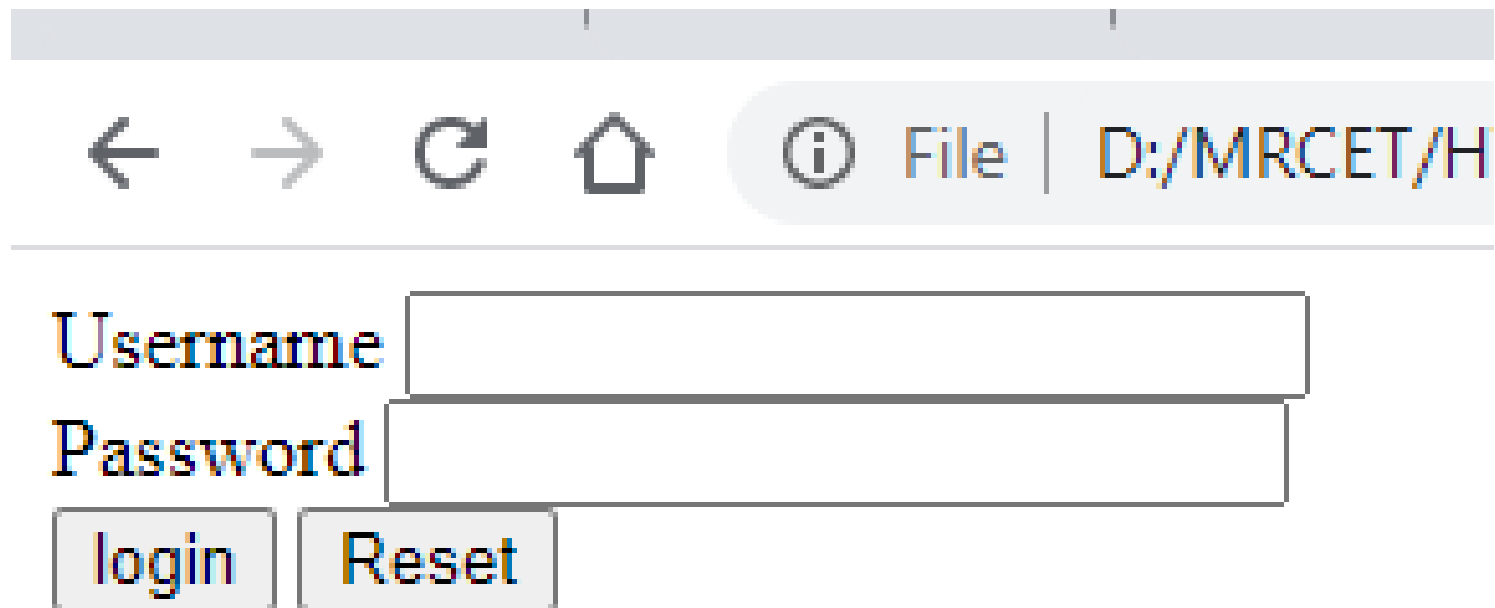
HTML Form Elements

- The <input> Element can be displayed in several ways, depending on the type attribute.

```html
<input type="button">
<input type="checkbox">
<input type="color">
<input type="date">
<input type="datetime-local">
<input type="email">
<input type="file">
<input type="hidden">
<input type="image">
<input type="month">
<input type="number">
```

```html
<input type="password">
<input type="radio">
<input type="range">
<input type="reset">
<input type="search">
<input type="submit">
<input type="tel">
<input type="text">
<input type="time">
<input type="url">
<input type="week">
```

```html
<!doctype html>
<html>
<body>
<form>
    <label>Username
    <input type=text><br>
    <label>Password
    <input type=password><br>
    <input type=submit value="login">
    <input type=reset value="Reset">

</form>
</body>
</html>
```

Username [_____]
Password [_____]
[login] [Reset]

← → C ⓘ localhost:8080/login?logout ⚷ ☆ ⋮

You have been logged out

Login with Username and Password

User: sara

Password: •••

Login

```html
<!doctype html>
<html>
<body>
<form>
    <h1>Select your gender</h1>
    <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>
    <hr>
    <h1>Select your Vehcle</h1>
    <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>

</form>
</body>
</html>
```

Select your gender

◉ Male
◯ Female

Select your Vehcle

☑ I have a bike
☑ I have a car

ColorPicker

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

<h2>Show a Color Picker</h2>

<form action="/action_page.php">
  <label for="favcolor">Select your favorite color:</label>
  <input type="color" id="favcolor" name="favcolor" value="#ff0000">
  <input type="submit" value="Submit">
</form>

</body>
</html>
```
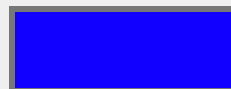
Show a Color Picker

Select your favorite color: [■] Submit

Date

```
<form>
  <label for="birthday">Birthday:</label>
  <input type="date" id="birthday"
    name="birthday">
  <input type="submit" value="Submit">
</form>
```

email type

```
<form action="/action_page.php">
  <label for="email">Enter your email:</label>
  <input type="email" id="email" name="email">
  <input type="submit" value="Submit">
</form>
```

Enter your email: `abcde`   Submit

! Please include an '@' in the email address. 'abcde' is missing an '@'.

file type

```html
<form action="/action_page.php">
  <label for="myfile">Select a file:</label>
  <input type="file" id="myfile" name="myfile">
<br><br>
  <input type="submit" value="Submit">
</form>
```

Select a file: [Choose File] No file chosen

[Submit]

number type

```
<form action="/action_page.php">
  <label for="quantity">Quantity (between 1 and 5):</label>
  <input type="number" id="quantity" name="quantity" min="1"
max="5">
  <input type="submit" value="Submit">
</form>
```

Quantity (between 1 and 5): [ ] Submit

range type

```html
<form action="/action_page.php" method="get">
  <label for="vol">Volume (between 0 and 50):
</label>
  <input type="range" id="vol" name="vol" min="0"
max="50">
  <input type="submit" value="Submit">
</form>
```

Volume (between 0 and 50): [slider]   Submit

Important <input> Attributes

- value Attribute – **initial value of an element**
- readonly Attribute -
  <input type="text" id="fname" name="fname" value="John" readonly>
- size Attribute – **visible width of a input element.**
- placeholder Attribute – **hints what value an element is expecting.**

- required Attribute – **the value of that element is mandatory.**

- autofocus Attribute – **focus shifts to that attribute when the webpage is loaded.**

- list Attribute – **user can select from a predefined set of values only.**

- The form Attribute – **to associate element to a form.**

- formaction Attribute – **when an element is processed by a different server file.**

- formmethod Attribute – **to use get or post method.**

- formtarget – **where to display the response after submit.**

Audio content in HTML Document

- To play an audio file in HTML, use the <audio> element.

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

<audio controls>
  <source src="A1.ogg" type="audio/ogg">
  <source src="A1.mp3" type="audio/mpeg">
Your browser does not support the audio element.
</audio>


</body>
</html>
```

← → C ⌂   ⓘ File | D:/MRCET/HTML

▶   0:00 / 0:15 ━━━━━━━━━ 🔊

Video Content in HTML document

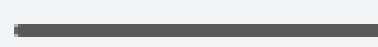- The HTML <video> element is used to show a video on a web page.

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

<video controls width="320" height="240">
    <source src="SV2.mp4" type="video/mp4">
    <source src="SV2.ogg" type="video/ogg">
Your browser does not support the video tag.
</video>

</body>
</html>
```

HTML head Elements

Tag	Description
<head>	Defines information about the document
<title>	Defines the title of a document
<base>	Defines a default address or a default target for all links on a page
<script>	Defines a client-side script
<style>	Defines style information for a document

Layouts