

1. What is Html?



- 1 HTML stands for Hyper Text Markup Language.
- 2 It is the standard markup language for creating web pages.
- 3 It describes the structure of a web page.
- 4 HTML elements tell the browser how to display the content.
- 5 HTML files are saved with .html extension.

(Notes)

- 1 Frontend -> refers to how a web page looks.
- 2 Backend -> refers to how it works.
- 3 Frontend Developer -> is someone who creates websites and web applications.
- 4 Website -> is a collection of linked web pages that share a unique domain name.
- 5 Web Page -> is a document written in html that you see online, using a web browser.

2. Why do we need to Know HTML?

All browser understands only the mark-up language (HTML) and whatever code that we write like DotNet, React, Angular that will be converted into HTML and displayed on browser.

(Example)

.net, reactjs, angularjs => html => web browser
(code conversion)

3. Pros and Cons of HTML:

Advantages

- 1 Easy to learn and use.
- 2 Simple syntax.
- 3 SEO-Friendly.
- 4 Supported by all browsers.
- 5 Platform-independent.

Disadvantages

- 1 Extensive code.
 - 2 Static Language.
 - 3 Limited Security.
-

4. Purpose of Creating a Web Page

To share the information universally in a standard form without any software restrictions.

5. Boilerplate

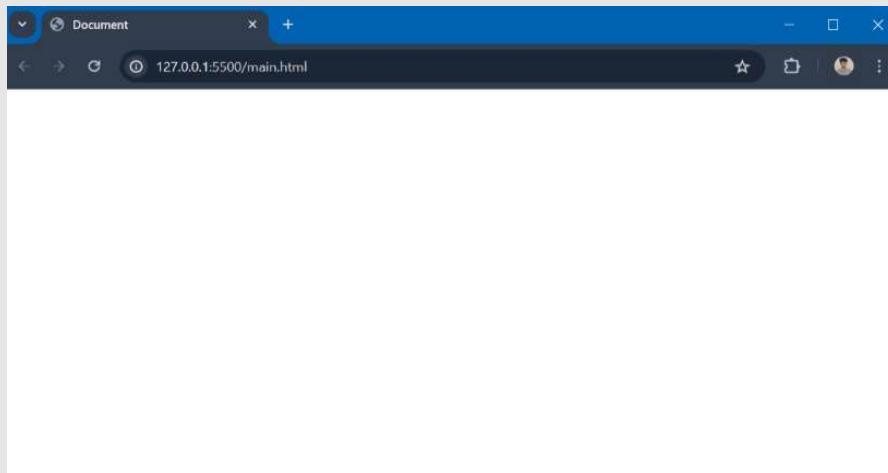
1 Boilerplate is a template you will add at the start of your project.

2 It helps you build fast, robust and adaptable web apps or sites.

6. Structure of html

Main.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
</body>
</html>
```



	ELEMENT	DESCRIPTION
1	<code><!DOCTYPE html></code>	* tells version of html.
2	<code><html lang="en"></code>	* <html> tag defines the root of an HTML document. * lang attribute specifies the language of the element's content. (en - english, es - spanish, fr - french)
3	<code><head></head></code>	* defines information about the html document.
4	<code><body></body></code>	* hold contents of the html document.
5	<code><title></title></code>	* defines the document title.
6	<code><meta charset="UTF-8"></code>	* charset attribute specifies the character encoding for the HTML document. (Unicode Transformation Format-8)
7	<code><meta name="author" content="Pon Pandian"> <meta name="description" content="My first web page"></code>	* <meta> tag provides metadata or information about an html document.
8	<code><meta name="viewport" content="width=device-width, initial-scale=1.0"></code>	* Responsive web design (RWD) refers to designing websites to adapt to a user's device. * A responsive web design will automatically adjust for
9	<code><!--...--></code>	* defines a comment.

-
7. Tags -----> 1 HTML tags are used to hold the html elements.
2 HTML tag starts with < and ends with >.

```

-----<Element>-----
  <p>      hello world      </p>
(tag name) (Contents)  (tag name)
(start tag)                (end tag)

```

8. Elements -----> 1 HTML elements holds the content.

2 Whatever written within a html tag are html elements.

9. Attributes -----> 1 HTML attributes are used to describe the characteristic of an html element in detail.

2 HTML attributes are found only in the starting tag.

```
----(Attribute)-----      --(Attribute)--  
  
  (keyword)  (value)      (keyword)  (value)
```

10. Types of Tags

1 Paired tags -----> Contains closing tag.

(Example) <h1></h1>

2 Unpaired tag or Self-closing tag -> Closing tag is not required.

(Example)
,<hr>,

,<hr/>,

11. File Paths

1 Relative Path -> describes the location of a file relative to the current directory.

(Example) index.html

 /images/image.png

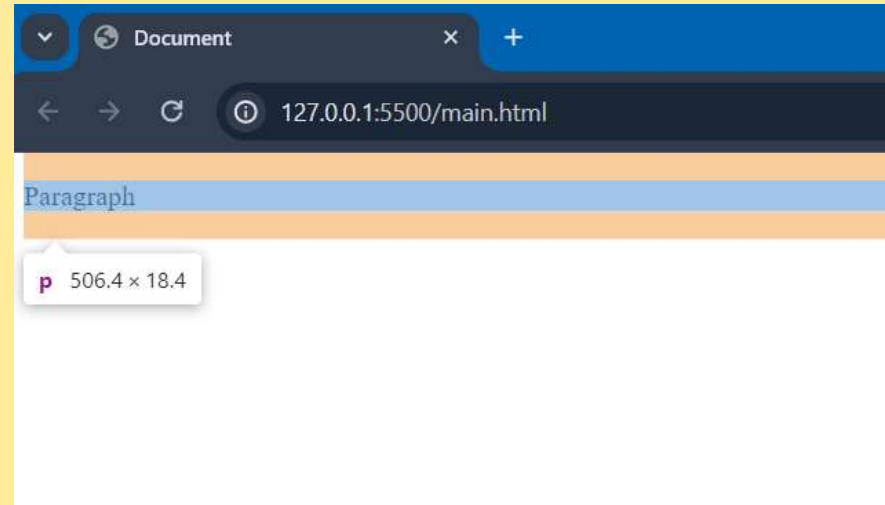
2 Absolute Path -> describes the location of a file relative to the root directory.

(Example) http://www.mysite.com

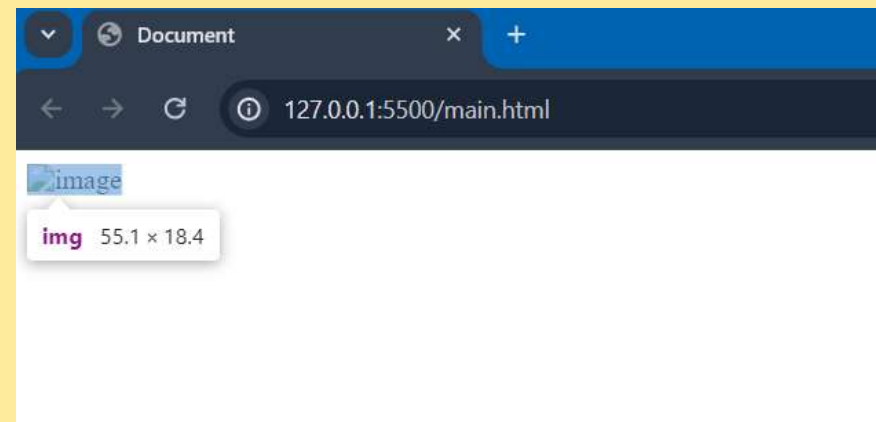
 http://www.mysite.com/images/image.png

12. Block Level and Inline Level Element

- 1 Block Level Element ---> always starts on a new line and takes up the full
(Example) `<div></div>`, `<p></p>`
`<p>Paragraph</p>`



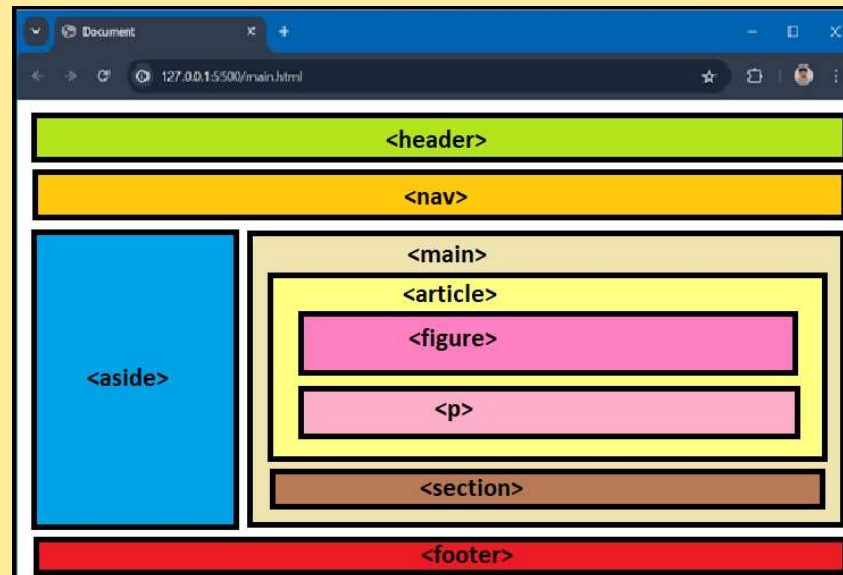
- 2 Inline Level Element --> does not start on a new line and it only takes up as much width as necessary.
(Example) `<a>`, ``
``



13. Semantic and Non-Semantic

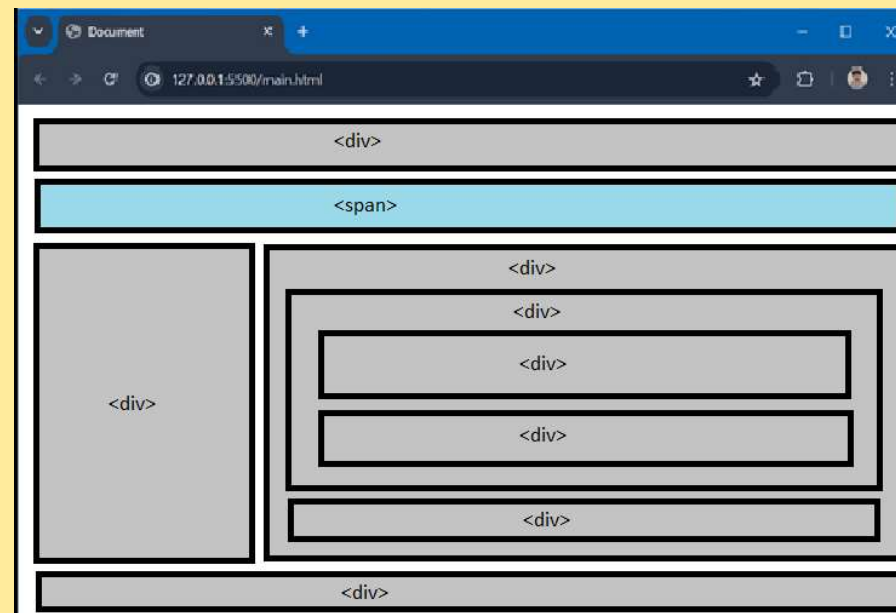
1 Semantic Element -----> A semantic element clearly describes its meaning to both the browser and the developer.

(HTML 5)



2 Non-Semantic Element --> Non-Semantic elements unlike semantic elements they don't have any meaning.

(HTML 4)



14. List ----> series of names or items arranged in a rows.

Types ----> Ordered lists, Unordered lists and Definition lists.

1 Orderd lists

```
<ol type="">
  <li>Bike</li>
  <li>Car</li>
</ol>
<ol type="a">
  <li>Bike</li>
  <li>Car</li>
</ol>
<ol type="i">
  <li>Bike</li>
  <li>Car</li>
</ol>
```

1. Bike
2. Car

a. Bike
b. Car

i. Bike
ii. Car

2 Unorderd lists

```
<ul type="">
  <li>Bike</li>
  <li>Car</li>
</ul>
<ul type="circle">
  <li>Bike</li>
  <li>Car</li>
</ul>
<ul type="square">
  <li>Bike</li>
  <li>Car</li>
</ul>
```

- Bike
- Car

- Bike
- Car

- Bike
- Car

3 Definition lists

```
<dl>
  <dt>Introduction</dt>
  <dd>This is my first
    web page.</dd>
  <dt>Conclusion</dt>
  <dd>This is my first
    web page.</dd>
</dl>
```

Introduction

This is my first web page.

Conclusion

This is my first web page.

	ELEMENT	DESCRIPTION
1	<code><ol type=""></code>	* defines ordered list or numbered list.
2	<code><ul type=""></code>	* defines unordered list or bulleted list.
3	<code><dl></dl></code>	* defines a definition list or description list.
4	<code></code>	* defines list item..
5	<code><dt></dt></code>	* defines a definition term.
6	<code><dd></dd></code>	* defines a definition description.

15. Table ----> a way of presenting data or information using rows and columns.

Types ----> Simple table, Inline table and Accordion table.

(Table)

(Description)

(Example)

1 Simple Table

data that must be displayed is limited.

<input type="checkbox"/>	ID	Name	About me	Location
<input type="checkbox"/>	1	Uriel Battle	Happy camper from Aqua Buena	7.8171332,-80.4005777
<input type="checkbox"/>	2	Emily Shepard	Just a random guy working the US at the ...	45.5227961,-122.7507364
<input type="checkbox"/>	3	Ruby Gonzales	A good old kind canadian lady living in ...	48.5249508,-64.2309142
<input type="checkbox"/>	4	Bernard Mendoza	I just love the nature we have here.	-44.4027692,-188.7328680
<input type="checkbox"/>	5	Pascale Aguilar	Lorem ipsum dolor sit amet, consectetur...	31.3725174,121.0294274

Rows per page: 5 0-5 of 99

2 Inline Table

edit or delete the existing data in all the rows.

Vin	Year	Brand	Color	
dsad231ff	2012	VW	Orange	<input checked="" type="checkbox"/> <input type="checkbox"/>
gwwregre345	2011	Ford	Black	<input type="checkbox"/>
h354htr	2005	Honda	Gray	<input type="checkbox"/>
j6w54qgh	2003	Jaguar	Blue	<input type="checkbox"/>
hrtwy34	1995	Mercedes	Orange	<input type="checkbox"/>

3 Accordion Table

a table that allows you to hide information until the user clicks on the heading to expand that heading.

ID	Name	Website	Contact
1	Wayne Enterprises	wayne.com	Bruce Wayne
4	Batmobile	High	Complete
5	Batarang	Low	Complete
6	New Grappling Hook	High	In Progress
7	Cowl	High	In Progress
2	Blue Feather	bluefeathergroup.com	David Nahodyl

Table (inside body tag)

table head

```
<table>
  <thead>
    <tr>
      <th rowspan="2">Colours</th>
      <th colspan="5">Items</th>
    </tr>
    <tr>
      <th>Ball</th>
      <th>Bat</th>
      <th>Helmet</th>
      <th>Jersey</th>
      <th>Pant</th>
    </tr>
  </thead>
```

Table (inside body tag)

table foot

```
<tfoot>
  <tr>
    <td>Total</td>
    <td>8</td>
    <td>4</td>
    <td>3</td>
    <td>2</td>
    <td>1</td>
  </tr>
</tfoot>
</table>
```

Table (inside body tag)

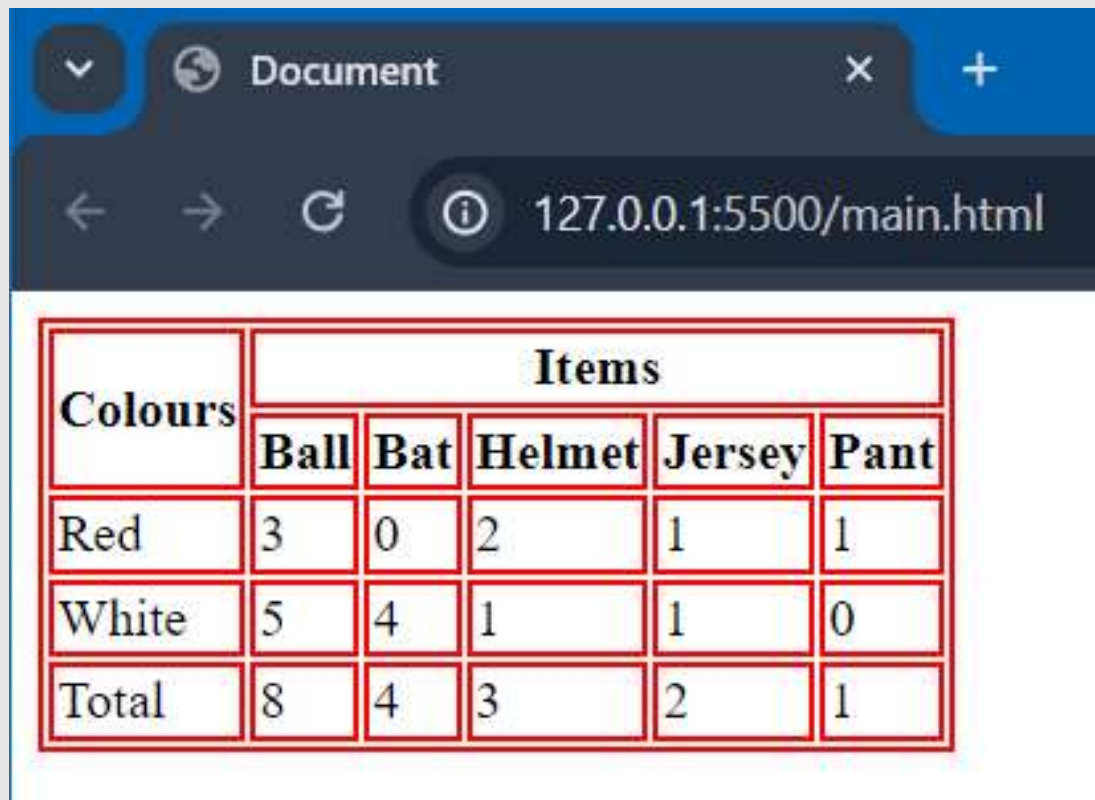
table body

```
<tbody>
  <tr>
    <td>Red</td>
    <td>3</td>
    <td>0</td>
    <td>2</td>
    <td>1</td>
    <td>1</td>
  </tr>
  <tr>
    <td>White</td>
    <td>5</td>
    <td>4</td>
    <td>1</td>
    <td>1</td>
    <td>0</td>
  </tr>
</tbody>
```

Table Style (inside head tag)

style (Internal css)

```
<head>
  <style>
    table,th,tr,td{
      border:2px solid red;
    }
  </style>
</head>
```



A screenshot of a web browser window. The address bar shows '127.0.0.1:5500/main.html'. The page displays a table with the following structure:

Colours	Items				
	Ball	Bat	Helmet	Jersey	Pant
Red	3	0	2	1	1
White	5	4	1	1	0
Total	8	4	3	2	1

ELEMENT	DESCRIPTION
1 <code><table></table></code>	* defines an html table.
2 <code><thead></thead></code>	* is used to group header content in a table.
3 <code><tbody></tbody></code>	* is used to group body content in a table.
4 <code><tfoot></tfoot></code>	* defines a table footer.
5 <code><tr></tr></code>	* defines a table row.
6 <code><th></th></code>	* defines a table header.
7 <code><td></td></code>	* defines a table data or table cell.
8 <code><th rowspan="2">Colours</th></code>	* rowspan attribute is used to make a cell span over multiple rows.(eg. rowspan="2")
9 <code><th colspan="5">Items</th></code>	* colspan attribute is used to make a cell span over multiple columns.(eg. colspan="5")

16. Form ----> To collect data and validate data using forms.

Types ----> Simple form, wizarded form, Tabbed form and Accordion form.

(Simple form)

Data that must be displayed is limited.

A simple form with two sections: 'PAYMENT DETAILS' and 'BILLING ADDRESS'. The 'PAYMENT DETAILS' section has a 'Name on card' field and three fields for 'Card number', 'Expiry', and 'CVV'. The 'BILLING ADDRESS' section has fields for 'Street address', 'City', 'State / Province' (a dropdown), and 'Zip code'. At the bottom, there is a 'Previous step' link and a blue 'Pay \$888' button.

(Wizarded form)

multiple steps of forms.

A wizarded form titled 'Sign Up Your User Account' with a progress bar showing four steps: Account, Personal, Payment, and Review. The 'Account' step is active. Below the progress bar is a box for 'Account Information' with fields for 'Email Id', 'UserName', 'Password', and 'Confirm Password'. A blue 'Next Step' button is at the bottom right.

(Tabbed form)

we can move any where we want without completing details.

A tabbed form titled 'Agent Registration' with four tabs: 'Personal Details', 'Agency Details' (active), 'contact Person Details', and 'Work Order Scope'. The 'Agency Details' tab contains a 'Profile Information' section with fields for 'Agency Name*', 'Agency Type*' (a dropdown with 'Agent' selected), 'Password*', 'Address*', 'City*', 'State*', 'Telephone Number*', 'Toll-Free Number*', 'Email ID*', 'Website*', 'Company Name*', 'Office Space' (with 'Owned' and 'Rental' radio buttons), and 'Company Logo*' (with a 'Choose File' button and 'No file chosen' text). At the bottom, there are 'CANCEL' and 'CONTINUE →' buttons.

(Accordion form)

used to simplify long forms by breaking them up into smaller sections.

An accordion form with three sections: '1 Name & Email', '2 Contact', and '3 Payment'. The '2 Contact' section is expanded, showing fields for 'Telephone:' and 'Mobile:'. There are 'Back' and 'Next' buttons. The '3 Payment' section is collapsed.

Form (inside body tag)

form

```
<form action="code.html"><!-- <form>tag is used to create an html form for user input.-->
    <!-- linking html form fields and labels using "for" attribute.-->
    <label for="name">name</label><!-- defines a label.-->
    <!-- <input>tag defines an input field.-->
    <input type="hidden">
    <input type="number" min="2" max="3">
    <input type="month">
    <input type="date">
    <input type="time">
    <input type="datetime-local">
    <input type="week">
    <input type="email" required>
    <input type="image">
    <input type="password">
    <input type="file">
    <input type="radio">
    <input type="checkbox">
    <input type="color">
    <input type="range" min="0" max="50" step="10">
    <input type="search">
    <input type="tel">
    <input type="url">
    <input type="button" value="button">
    <input type="reset">
    <!-- <form action="code.html">-->
    <input type="submit">
```

```
<!-- dropdown (multiple choices) -->
<select name="" multiple size="2">
    <option value="a">a</option>
    <option value="b">b</option>
    <option value="c">c</option>
</select>
<!-- dropdown -->
<select name="">
    <option value="a">a</option>
    <option value="b" selected>b</option>
    <option value="c">c</option>
</select>
<!-- radio button -->
<input type="radio" value="car" name="vehicles">car
<input type="radio" value="bike" name="vehicles" checked>bike
<input type="radio" value="cycle" name="vehicles">cycle
<!-- checkboxes -->
<input type="checkbox" name="hobbies">drawing
<input type="checkbox" name="hobbies">painting
<!-- text area field -->
<textarea name="comments" cols="100" rows="5"></textarea>
<!-- grouping html form fields with fieldset tag -->
<fieldset>
    <legend>forms</legend>
</fieldset>
<!--button-->
<button onclick="document.location='code.html'">code page</button>
```

```
</form>
```

The screenshot shows a web browser window with a single tab titled "Document". The address bar displays "127.0.0.1:5500/main.html?". The page content includes a form with the following elements:

- A "name" label followed by a text input field containing "enter your name".
- A date input field showing "mm/dd/yyyy".
- A time input field showing "--:--:--".
- A "Week" label followed by a text input field.
- A "Submit" button with a document icon.
- A "Choose File" button next to the text "No file chosen".
- A radio button and a checkbox.
- A "button" label next to a black rectangular button.
- A "Reset" button.
- A "Submit" button.
- A dropdown menu with options "a" and "b".
- A radio button labeled "car".
- A selected radio button labeled "bike".
- A radio button labeled "cycle".
- A checkbox labeled "drawing".
- A checkbox labeled "painting".
- A large text area with a "forms" label and a "code page" button below it.

17. Entity ----> is a piece of text that begins with an ampersand(&) and ends with a semicolon(;;).

(Example)

	non-breaking space	
<	less than	<
>	greater than	>
&	ampersand	&

Char	Number	Entity	Description
©	©	©	COPYRIGHT SIGN
®	®	®	REGISTERED SIGN
€	€	€	EURO SIGN
™	™	™	TRADEMARK
←	←	←	LEFTWARDS ARROW
↑	↑	↑	UPWARDS ARROW
→	→	→	RIGHTWARDS ARROW
↓	↓	↓	DOWNWARDS ARROW
♠	♠	♠	BLACK SPADE SUIT
♣	♣	♣	BLACK CLUB SUIT
♥	♥	♥	BLACK HEART SUIT
♦	♦	♦	BLACK DIAMOND SUIT

(MATHEMATICAL SYMBOLS)

Char	Number	Entity	Description
∀	∀	∀	FOR ALL
∂	∂	∂	PARTIAL DIFFERENTIAL
∃	∃	∃	THERE EXISTS
∅	∅	∅	EMPTY SETS
∇	∇	∇	NABLA
∈	∈	∈	ELEMENT OF
∉	∉	∉	NOT AN ELEMENT OF
⊃	∋	∋	CONTAINS AS MEMBER
∏	∏	∏	N-ARY PRODUCT
Σ	∑	∑	N-ARY SUMMATION

(EMOJIS)

Emoji	Value
👤	🗻
🗼	🗼
🏠	🗽
🇯🇵	🗾
🗑️	🗿
😊	😀
😬	😁
😏	😂
😄	😃
😁	😄
😂	😅

(GREEK LETTERS)

Char	Number	Entity	Description
Α	Α	Α	GREEK CAPITAL LETTER ALPHA
Β	Β	Β	GREEK CAPITAL LETTER BETA
Γ	Γ	Γ	GREEK CAPITAL LETTER GAMMA
Δ	Δ	Δ	GREEK CAPITAL LETTER DELTA
Ε	Ε	Ε	GREEK CAPITAL LETTER EPSILON
Ζ	Ζ	Ζ	GREEK CAPITAL LETTER ZETA

18. ELEMENTS AND ITS DESCRIPTION

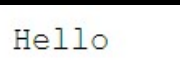
* `<tt>` (HTML4) - `<tt>` tag defines teletype text.

```
<tt>Hello</tt>
```



* `MonoSpace` (HTML5)

```
<p style="font-family:'Courier New', Courier, monospace">Hello</p>
```



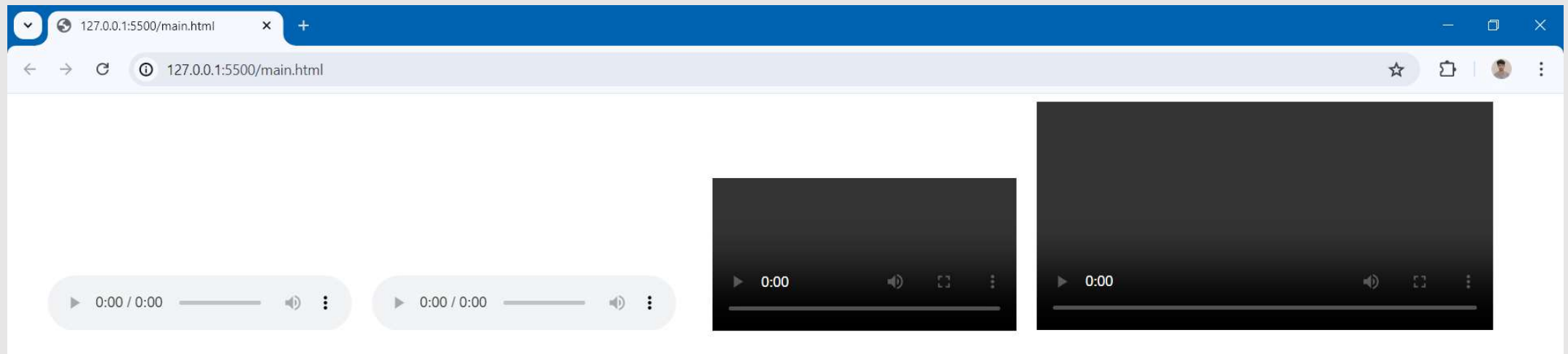
MIME - Multipurpose Internet Mail Extensions

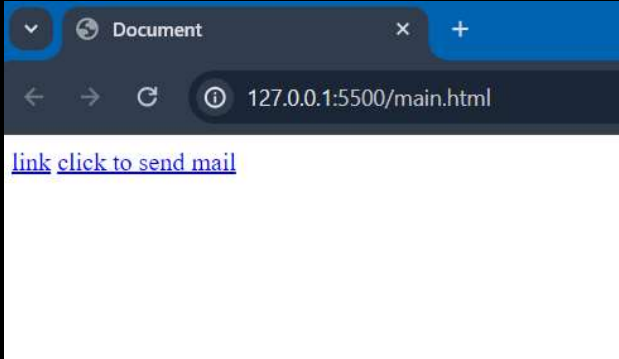

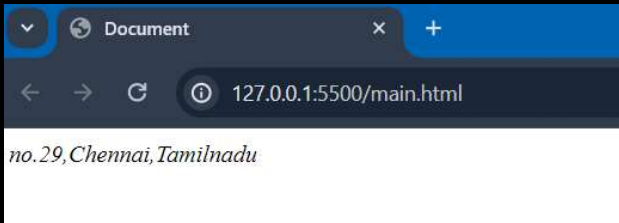
audio tag

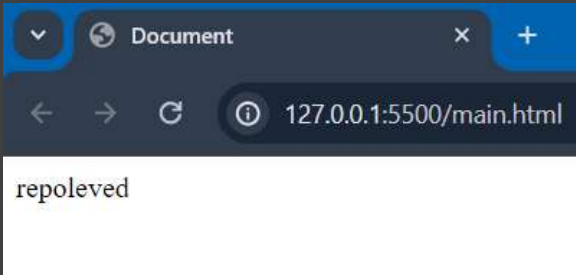
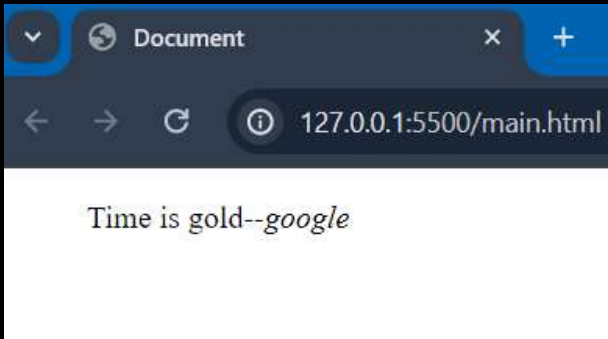
```
<audio src="" controls></audio>  
<audio controls>  
  <source src="" type="audio/wav">  
  <source src="" type="audio/mp3">  
  <source src="" type="audio/m4a">  
  <source src="" type="audio/ogg">  
</audio>
```

video tag

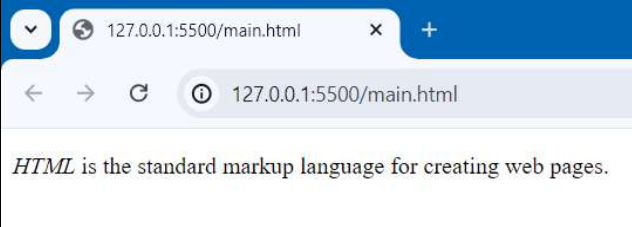
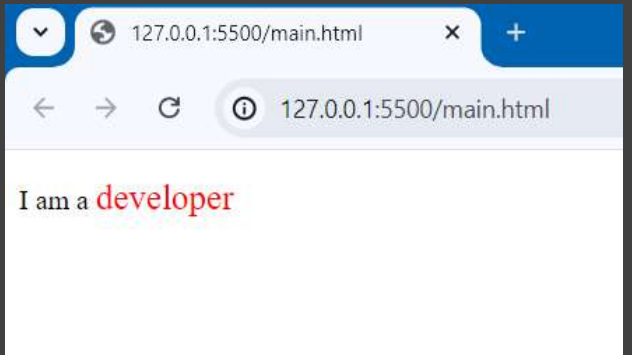
```
<video src="" controls></video>  
<video controls width="450">  
  <source src="" type="video/avi">  
  <source src="" type="video/mp4">  
  <source src="" type="video/webm">  
</video>
```



	ELEMENT	DESCRIPTION	OUTPUT
1	<pre>link click to send mail</pre>	<ul style="list-style-type: none"> * anchor tag defines a hyperlink. * href attribute specifies the location of the linked document. * target attribute is used to open a link in new window. 	
2	<pre><abbr title="doctor">Dr. </abbr> <abbr title="Indian space research organisation"> ISRO</abbr></pre>	<ul style="list-style-type: none"> * defines an abbreviation or acronym. (HTML 5) <abbr> tag defines an abbreviation. (HTML 4) <acronym> tag defines an acronym. (HTML 4) 	
3	<pre><address>no.29,Chennai, Tamilnadu</address></pre>	<ul style="list-style-type: none"> * <address> tag defines the contact information. 	
4	<pre><aside></aside></pre>	<ul style="list-style-type: none"> * The aside content should be indirectly related to the surrounding content. 	
5	<pre> or </pre>	<ul style="list-style-type: none"> (defines bold text) (defines important text) 	

	ELEMENT	DESCRIPTION	OUTPUT
6	<code><bdo dir="rtl">developer</bdo></code>	<ul style="list-style-type: none"> * <code><bdo></code> tag is used to override the current text direction. (BDO - Bi Directional Override) * <code>dir</code> attribute specifies the text direction. ("ltr","rtl") 	
7	<code><blockquote cite="https://www.google.com"> Time is gold<cite>--google </cite></blockquote></code>	<ul style="list-style-type: none"> * <code><blockquote></code> tag defines a section that is quoted from another source. * <code>cite</code> attribute specifies the source of a quotation. * <code><cite></code> tag (citation) is to identify the source of a quote. 	
8	<code>
</code>	* inserts a single line break.	
9	<code> or <s></s></code>	(defines deleted text) (defines strike through text)	
10	<code><div></div></code>	(defines a division or a section in an html document) (is used as a container for html elements)	
11	<code><h1></h1> to <h6></h6></code>	* defines the headings which are titles or subtitles.	
12	<code><hr></code>	(horizontal rule) is used to create a horizontal line.	

	ELEMENT	DESCRIPTION
13	<code><figure> <figcaption>figure 1.0 </figcaption></figure></code>	<ul style="list-style-type: none">* <code><figure></code> tag defines self-contained contents, like diagrams, photos, illustrations, code listings, etc.* <code></code> tag defines an image.* <code>src</code> attribute specifies the location of the external resource.* <code>alt</code> attribute specifies an alternate text, if the image cannot be displayed.* <code><figcaption></code> tag is used to add caption for the <code><figure></code> element.
14	<code><i></i> or </code>	(defines italic text) or (defines emphasized text)
15	<code><iframe src="main.html"> </iframe></code>	<ul style="list-style-type: none">* <code><iframe></code> tag defines an inline frame.* It is used to embed another document within the current html document.
16	<code><link rel="stylesheet" type="text/css" href="css/main.css"></code>	<ul style="list-style-type: none">* <code><link></code> tag defines the relationship between the current document and an external resource.* <code>rel</code> attribute specifies the relationship between the current document and the linked document.* <code>type</code> attribute specifies the type of the linked document.
17	<code><mark></mark></code>	* defines marked or highlighted text
18	<code><marquee direction="right" scrollamount="20"> news headline</marquee></code>	<ul style="list-style-type: none">* <code><marquee></code> tag is used to create scrolling text or image.* <code>direction</code> attribute is used to set the direction of scrolling. (right, left, up, down)* <code>scrollamount</code> attribute is used to change speed of a marquee.

	ELEMENT	DESCRIPTION	OUTPUT
19	<code><p title="html definition"> <dfn>HTML</dfn> is the standard markup language for creating web pages.</p></code>	<ul style="list-style-type: none">* title attribute specifies extra information about an element.* <code><dfn></code> tag defines the definition element.	
20	<code><p>I am a developer </p></code>	<ul style="list-style-type: none">* <code><p></code> tag defines a paragraph.* <code></code> tag is an inline container used to mark up a part of a text.* style attribute specifies an inline style for an element.	
21	<code><pre></pre></code>	defines preformatted text.	
22	<code><quote></quote></code>	defines a short quotation.	
23	<code><style></style></code>	is used to define style information for a document.	
24	<code><sub></sub></code>	defines a subscripted text.	
25	<code><sup></sup></code>	defines a superscripted text.	
26	<code><u></u></code> or <code><ins></ins></code>	(defines underline text) (defines inserted text)	
