

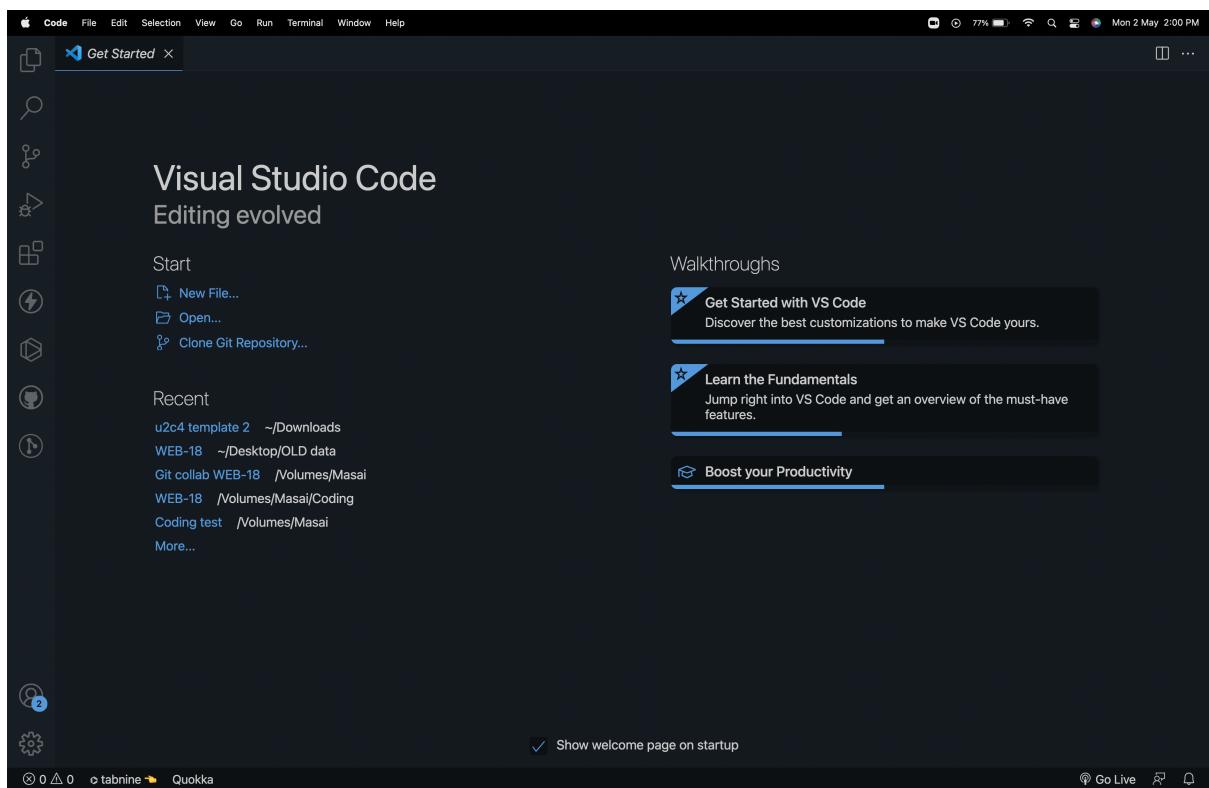
Day-6 HTML Intro and styles

Creating your first HTML file

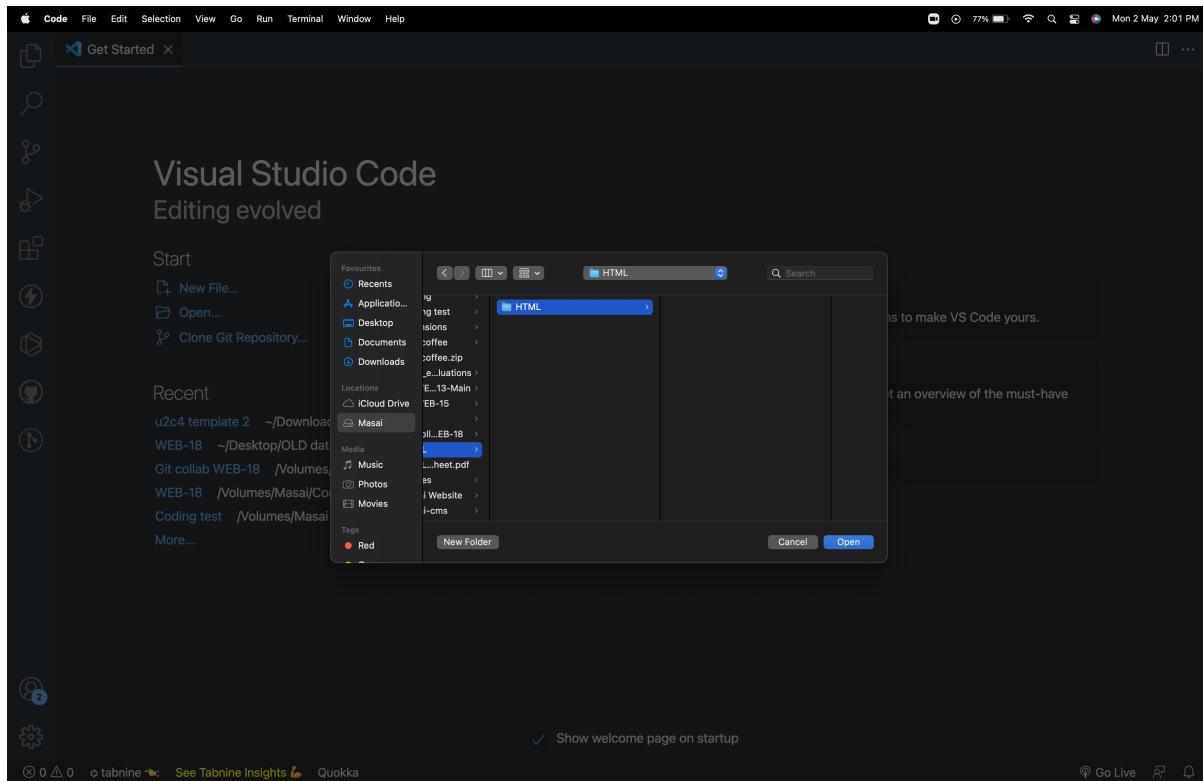
- Create a folder in your local system with any names of your choice



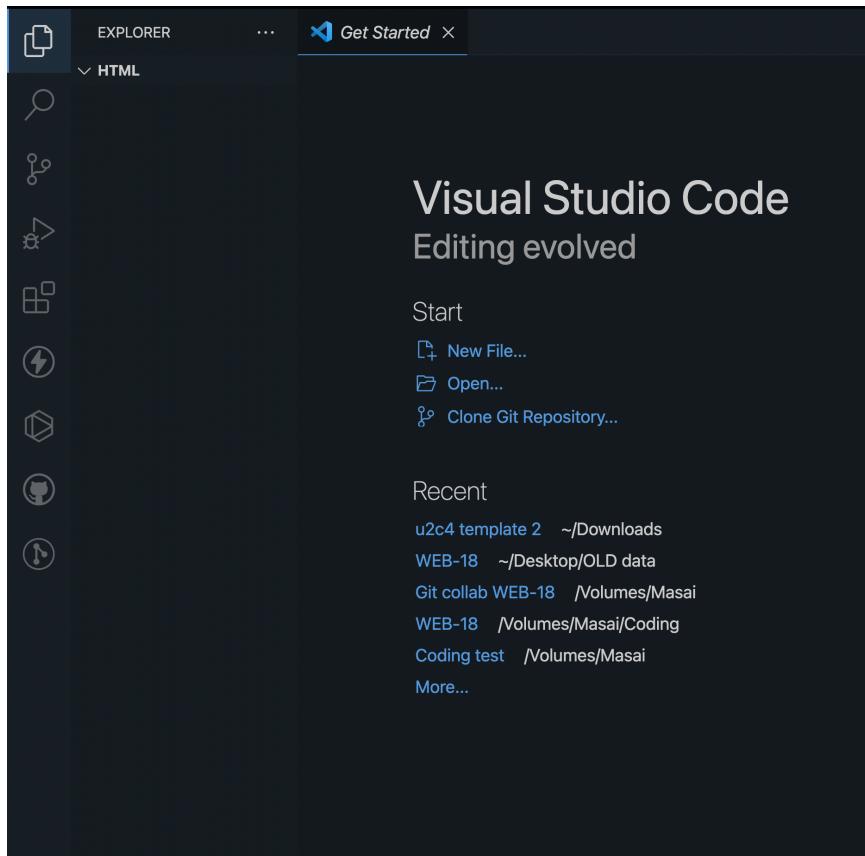
- Open VS code



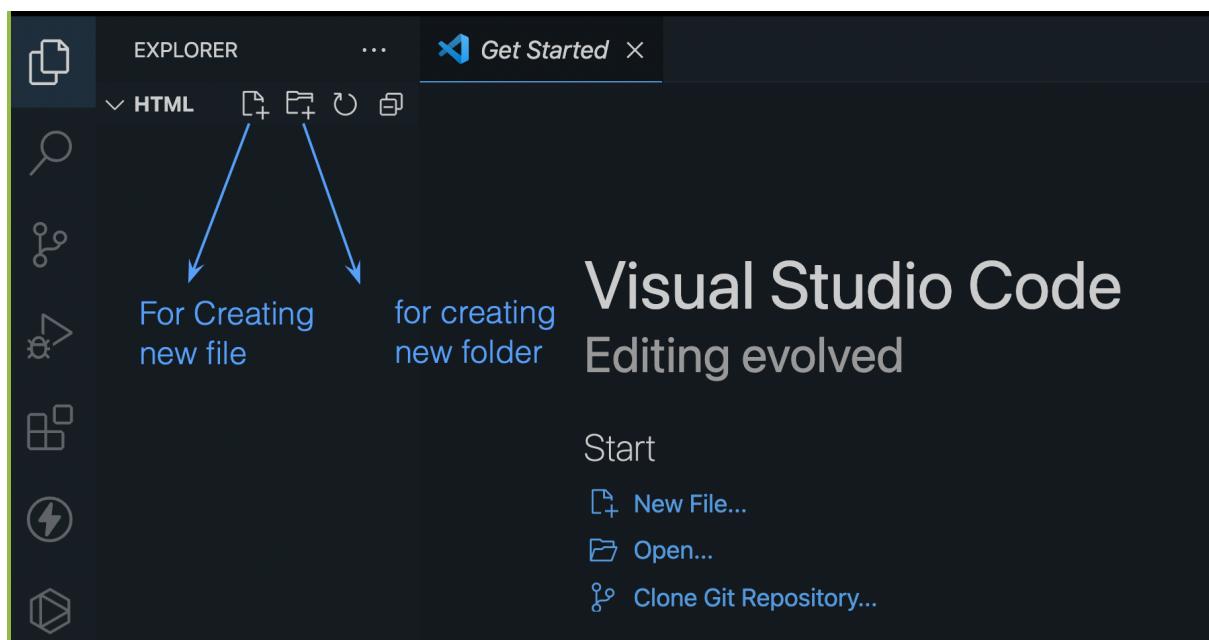
- Click on Open and go to your directory where you have created your folder and open that folder, in my case it is HTML folder



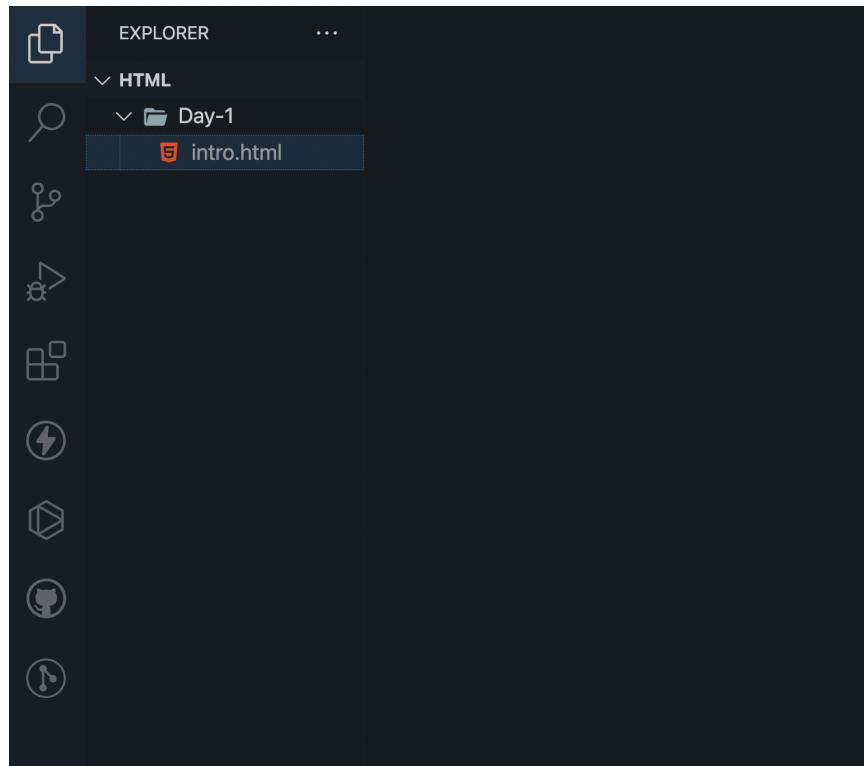
- Click on Open and now you are in HTML folder



- Now you can create files and folders



- Now I will create a folder called Day-1, inside Day-1 I will add a file called intro.html



- Your HTML file is now ready for coding. Happy Coding 😊

History of HTML

- HTML was created by **Sir Tim Berners-Lee in late 1991**.
- Before he created HTML, he used to send research documents via email.
- To make it easier for scientists at different universities to gain access to each other's documents, he created HTML.

Why has HTML become so popular and why not MS docs

- User-friendly
- Very lightweight
- Easy to learn
- Easy to integrate with all browsers

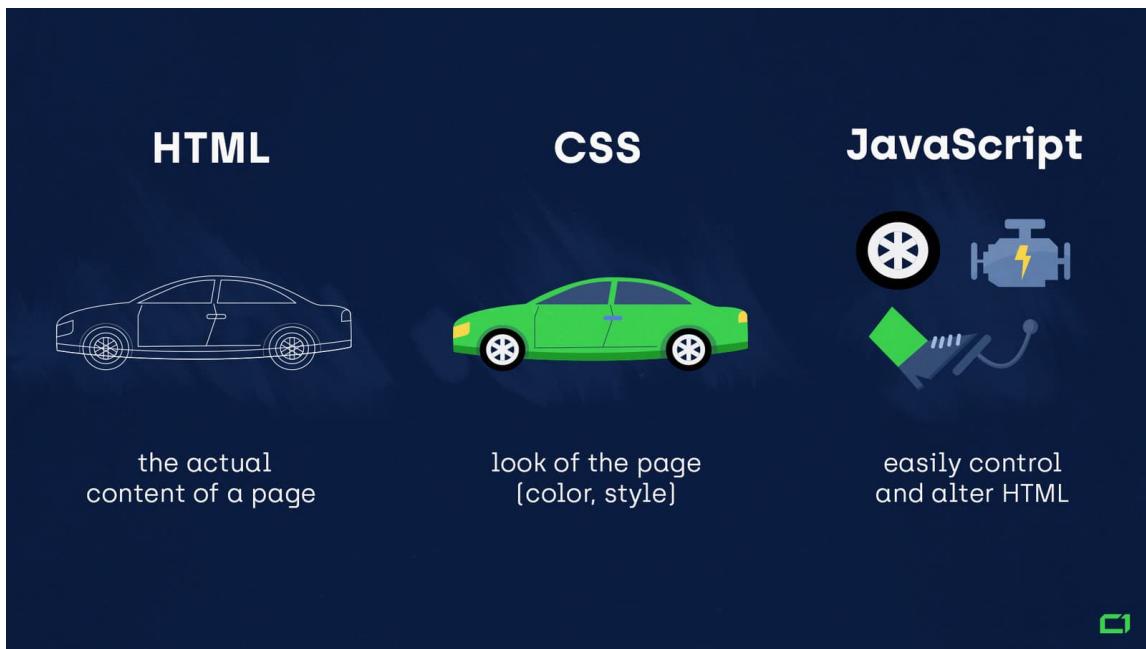
So is HTML a programming language or not?



- Think of it this way: you can't compute the sum of $2 + 2$ in HTML; that's not what it's for. This is because HTML is not a programming language.

Overview of HTML

- Let's take analogy of car with HTML
 - Car body : Structure of HTML
 - Car color : Styling (CSS)
 - Gears, breaks : Functionality (JS)



HTML Elements

The three main parts of the HTML elements are:

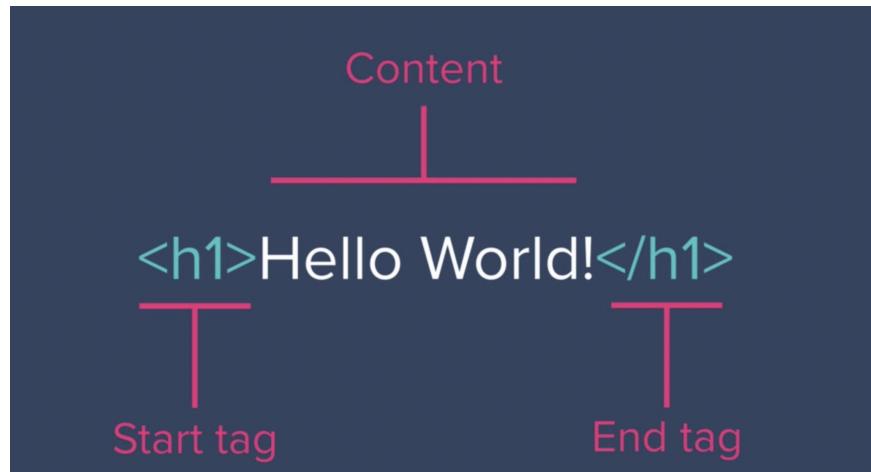
- Opening Tag : It marks the start of the element.
- Content : The contents that is visible on the browser
- Closing Tag : It marks the end of the element. Usually it starts with a backward slash '/'

Syntax :

```
<opening tag> Content </closing tag>
```

Example :

```
<h1> Hello World! </h1>
```



HTML Page Structure

You are one step away from building your first website in HTML. You need to add `<html>`, `<head>`, `<title>` and `<body>` tags to successfully build your website.

Let's see what each tag means:

- The `<!DOCTYPE html>` declaration defines the version of HTML document, in this case it is 5
- The `<html>` element is the root element of an HTML page
- The `<head>` element contains meta information about the HTML page
- The `<title>` element specifies a title for the HTML page.
- The `<body>` element defines the document's body, and is a container for all the visible contents, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
- The `<h1>`, `<h2>` element defines a headings.

```

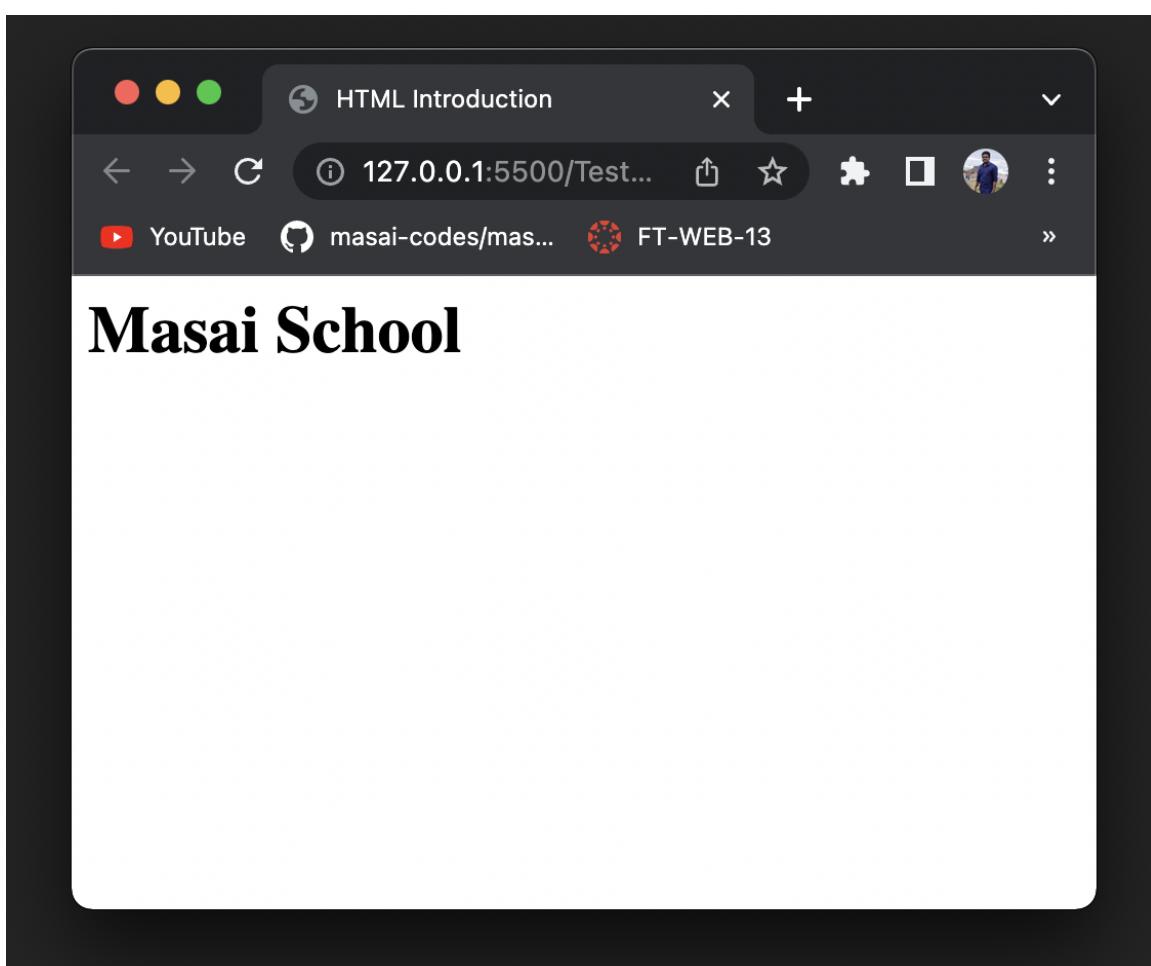
<html>
  <head>
    <title> HTML Introduction </title>
  </head>
  <body>
    <h1>Masai School</h1>
  </body>
</html>

```

Explanation:

- The `<html>` element contains all the contents of the webpage.
- The `<head>` element contains additional information about the HTML page like the page title.
- The `<title>` element specifies a title for the webpage which is shown in the browser's window. **HTML Introduction** title will be shown on the browser's title bar.
- The `<body>` element contains all the contents of the webpage like the heading and the paragraph.
- The `<h1>` element specifies a heading

And finally your website looks like this!



HTML Headings

- HTML headings are defined with the `<h1>` to `<h6>` tags.

- `<h1>` defines the most important heading. `<h6>` defines the least important heading:

Example

```
<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
<h4>This is heading 4</h4>
<h5>This is heading 5</h5>
<h6>This is heading 6</h6>
```

Read more:https://developer.mozilla.org/en-US/docs/Web/HTML/Element/Heading_Elements

HTML Paragraphs

HTML paragraphs are defined with the `<p>` tag:

Example

```
<p> Welcome to Masai School.</p>
```

Read more:<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/p>

Empty HTML Elements

HTML elements with no content are called empty elements.

The `
` tag defines a line break, and is an empty element without a closing tag:

Example

```
<p>This is a <br> paragraph with a line break.</p>
```

For instance, the horizontal ruling tag `<hr>` is an Empty HTML tag.

Syntax

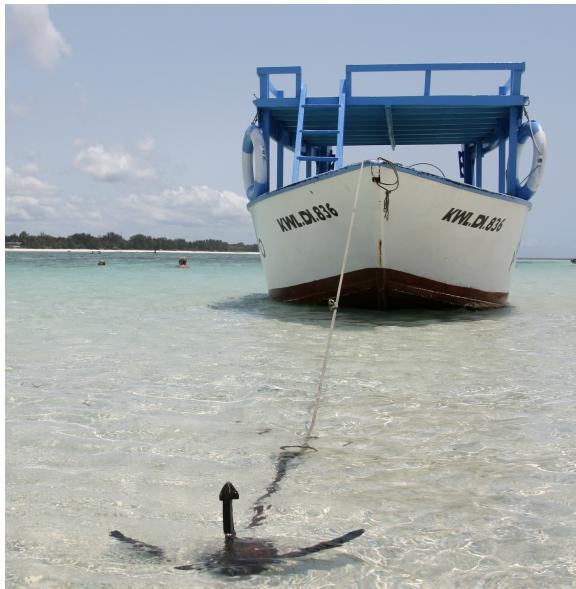
```
<hr>
```

Attributes

- It is basically additional features, take an example of mobile and ask attributes of mobile for eg: battery, camera, ram, rom etc.
- Each and every tag in HTML will have some attributes (additional features)



Anchor Tag



- The above example is the anchor which connects the ship to the shore
- Similarly, an anchor tag connects one website to other websites using an anchor tag - [codepen](#)
- The [tag](#) is used to add external or internal links as content in your HTML document.
- You could also include external links to other websites in your HTML document. Here's an example that demonstrates this:

```
<a href="www.google.com">Visit Google</a>
```

- Above code will redirect you to [google.com](#) in same page, if you want to redirect to new blank page you should add an attribute known as target.
- `target="_blank"` will open your page in new tab

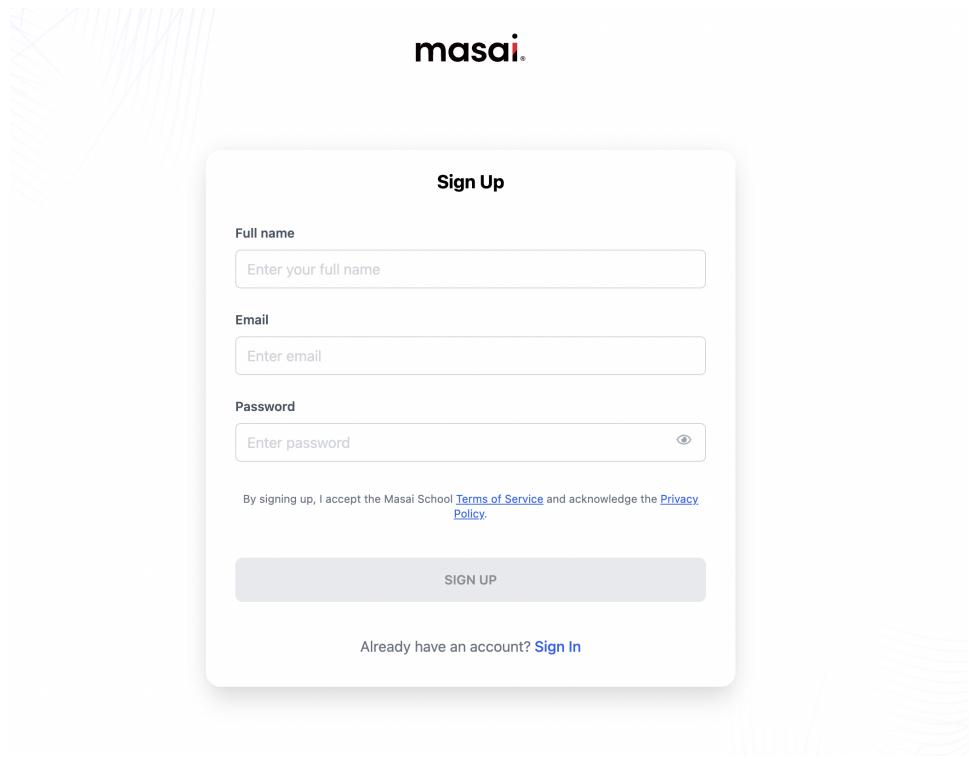
```
<a target="_blank" href="www.google.com">Visit Google</a>
```

HTML Input

- So far we have found a great way of formatting whatever we want to share. This worked great for the scientific community to share their documents. But as

HTML grew in popularity, it started getting used for a lot of other applications like filling online applications, online voting, etc.... . Now these applications needed user input! How do we do that?

- Take example of form which they generally fill online before joining masai



- Different input tags

```
<input type="text"/> (default value)
<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"/>
<input type="password"/>
<input type="radio"/>
<input type="range"/>
<input type="reset"/>
<input type="search"/>
<input type="submit"/>
<input type="tel"/>
<input type="time"/>
```

```
<input type="url"/>
<input type="week"/>
```

HTML List Tags

Lists are used quite often in websites to display a set of data or items in an ordered or unordered fashion.

HTML provides us with three types of list tags:

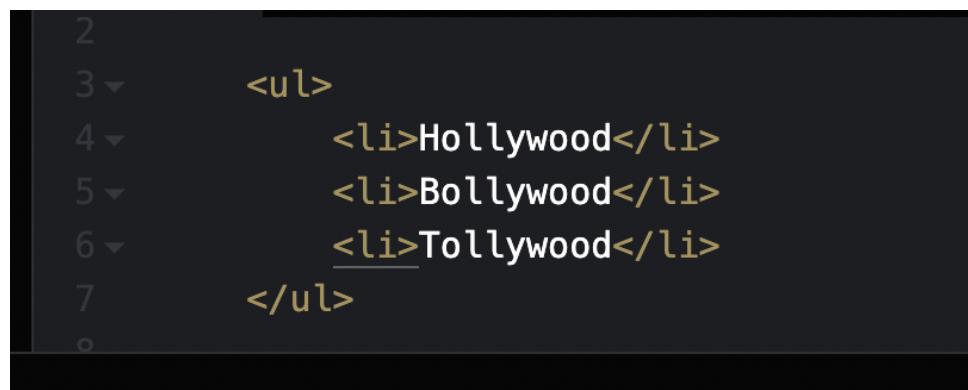
- Unordered List
- Ordered List

Let's learn a bit about each of these.

Unordered List

```
<ul>
<li>Hollywood</li>
<li>Bollywood</li>
<li>Tollywood</li>
</ul>
```

Output:



```
2
3 ▾      <ul>
4 ▾          <li>Hollywood</li>
5 ▾          <li>Bollywood</li>
6 ▾          <li>Tollywood</li>
7      </ul>
8
```

- Hollywood
- Bollywood
- Tollywood

Ordered List

```
<ol>
<li>Hollywood</li>
<li>Bollywood</li>
<li>Tollywood</li>
</ol>
```

Output:

The screenshot shows a code editor with a dark theme. On the left, there are line numbers from 3 to 8. The code itself is as follows:

```
3 ▾      <ol>
4 ▾          <li>Hollywood</li>
5 ▾          <li>Bollywood</li>
6 ▾          <li>Tollywood</li>
7           </ol>
8
```

On the right, the rendered output of the code is displayed, showing a numbered list:

1. Hollywood
2. Bollywood
3. Tollywood

1. Hollywood
2. Bollywood
3. Tollywood

- For nested list refer to this [codepen](#)
- To know more about type attribute read this <https://developer.mozilla.org/en-US/docs/Web/HTML/Element/ul>

HTML Image tag

- Have you ever wondered how to images in websites



HTML IMAGE TAG

```

```

Tag
Name

Attribute
Name

Attribute
Value

Attribute
Name

Attribute
Value

- The `` tag in HTML is used to output or render images on the webpage. It specifies the source of the image using the `src` attribute as shown below:

```

```

The above would render the image specified inside the `src` attribute:

```
1 
```



HTML Tables:

- Basic Excel sheet

S.No	Name	English	Maths	Science
1	Nrupul	100	100	100
2	Prateek	100	100	100
3	Aman	100	100	100
4	Albert	100	100	100

The `<table>` tag defines an HTML table.

An HTML table consists of one `<table>` element and one or more `<tr>`, `<th>`, and `<td>` elements.

The `<tr>` element defines a table row, the `<th>` element defines a table header, and the `<td>` element defines a table cell.

Codepen Link : <https://codepen.io/vchandu111/pen/qBVbdQO>

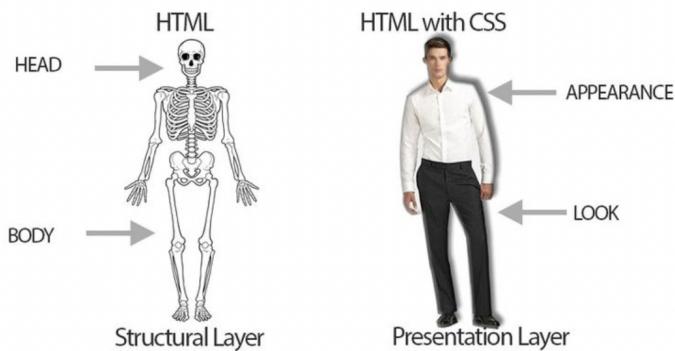
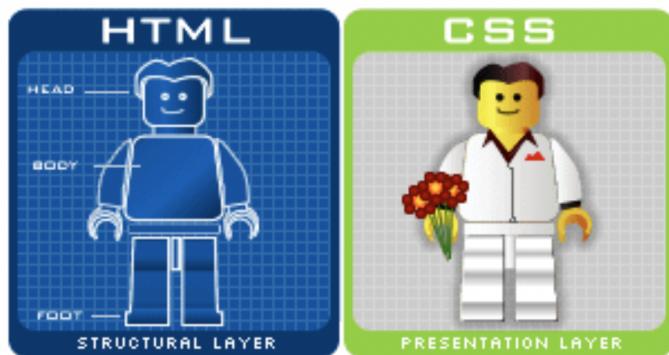
Read more:

- Table
- Table Head
- Table Body
- TH
- TR
- ID

Introduction to styles (CSS):

History of CSS

- Before CSS we used to have black and white layouts, just like emails



- There are various properties in CSS to set and change the color of the elements.

Types of CSS color values

- There are various color values in CSS through which you can specify the color to your HTML elements. These values are in different formats, which are explained below.

CSS Color Keywords

- Using a keyword (such as `blue` or `transparent`).
- Color keywords are case-insensitive identifiers that represent a specific color, such as `red`, `blue`, `black`, or `lightseagreen`. Although the names more or less describe their respective colors, they are essentially artificial, without a strict rationale behind the names used.
- The complete list of such keywords is available [here](#).

Example:

```
<p style="color:"blue">I am paragraph</p>
```

CSS RGB Colors

- RGB value is the combination of Red, Green, and Blue colors.
- An RGB color value is specified with : `rgb(red, green, blue)`. The range of these three colors is defined from 0 to 255 and it defines the intensity of the color. The colors can be changed by changing these values.

Example:

```
<p style="color:"rgb(0, 0, 255)">I am paragraph</p>
```

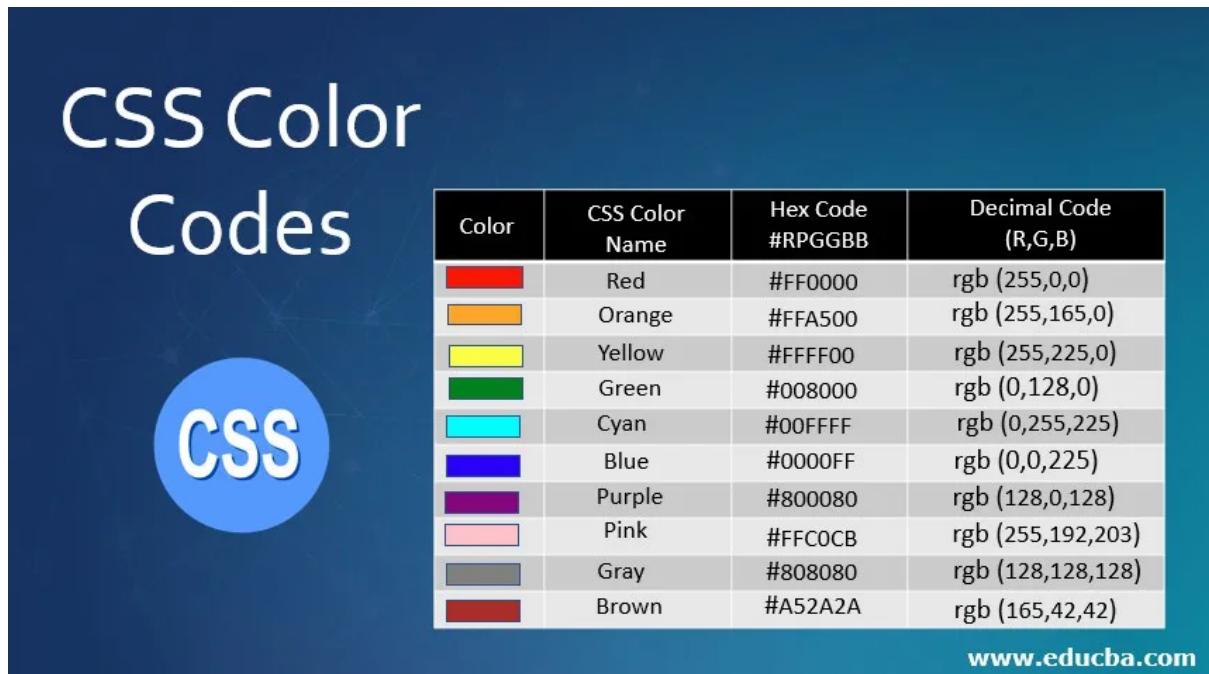
CSS HEX Colors

- The colors in CSS can be specified in Hexadecimal values also.
- A hexadecimal color is a 6 digit representation of the color.
- The notation of the HEX value starts with the "#" symbol followed by the six characters within the range of 0 to F.

Example:

```
<p style="color:#bfff00">I am paragraph</p>
```

- Overview of all types of colors



The slide has a dark blue background with a large white 'CSS' logo in a blue circle on the left. The title 'CSS Color Codes' is centered in large white font. A table is on the right.

Color	CSS Color Name	Hex Code #RPGGBB	Decimal Code (R,G,B)
Red	Red	#FF0000	rgb (255,0,0)
Orange	Orange	#FFA500	rgb (255,165,0)
Yellow	Yellow	#FFFF00	rgb (255,225,0)
Green	Green	#008000	rgb (0,128,0)
Cyan	Cyan	#00FFFF	rgb (0,255,225)
Blue	Blue	#0000FF	rgb (0,0,225)
Purple	Purple	#800080	rgb (128,0,128)
Pink	Pink	#FFC0CB	rgb (255,192,203)
Gray	Gray	#808080	rgb (128,128,128)
Brown	Brown	#A52A2A	rgb (165,42,42)

www.educba.com

CSS Font-size

- In CSS the font-size property is used to set or tweak the size of the font.
- It can have several values that can be absolute (eg.- xx-small, medium, xx-large.) or relative (larger, smaller, %) or length (numbered- 12px, 1em, etc.)

The screenshot shows a code editor interface with a dark theme. On the left, the code editor displays an HTML file named 'test.html'. The code includes a DOCTYPE declaration, an HTML element with a 'lang' attribute set to 'en', a head section, and a body section containing two paragraphs. The first paragraph has a style of 'font-size: 40px' and contains the text 'Masai School'. The second paragraph has a style of 'font-size: 20px' and contains the text 'Masai School - The Coding School that cares ab...'. On the right, a browser window titled 'Document' shows the rendered HTML. The main title 'Masai School' is displayed in large, bold, black font. Below it, a smaller subtitle 'Masai School - The Coding School that cares about you - Masai School' is visible. The browser's status bar at the bottom indicates the URL 'http://127.0.0.1:3000/test.html' and the date 'Wed 4 May 10:45 AM'. The bottom of the screen shows various status icons and toolbars.

Text-align:

- We use the CSS `text-align` property to align content inside a block-level element.
- This alignment affects the horizontal axis only.

Basic Syntax

- The `text-align` property accepts `left`, `center`, `right`, `justify` as values.
- The `left` Value: The `left` value of the `text-align` property is the default. So, every content inside a block-level element is aligned to the left by default.
- The `center` Value: With the center value, spaces are created on the left and right, so, everything gets pushed to the center.
- The `right` Value: Assigning a value of `right` to the `text-align` property pushes the content inside a block-level element to the right.

The screenshot shows a code editor interface with a dark theme. On the left is the code editor pane displaying an HTML file named 'test.html'. The code is as follows:

```
<!DOCTYPE html>
<html lang="en">
<head> ...
</head>
<body>
    <p style="text-align:left">Masai School</p>
    <p style="text-align:center">Masai School</p>
    <p style="text-align:right">Masai School</p>
</body>
</html>
```

On the right is a browser-like preview pane titled 'Document' showing the rendered HTML. The preview displays three paragraphs: the first is aligned left, the second is centered, and the third is aligned right. Below the preview, the status bar shows 'Masai School' repeated three times.

- The `justify` Value: The `justify` value of the `text-align` property lines up the content on the left and right edges of the block-level element (the box). If the last line isn't a full line, then it leaves it alone. It's easier to see how this works in the image below:

The screenshot shows a code editor interface with a dark theme. On the left, the code editor displays the file `test.html` containing the following HTML and CSS:

```
<!DOCTYPE html>
<html lang="en">
<head>...
</head>
<body>
    <h1>Normal Alignment</h1>
    <p style="text-align: left">
        Lorem ipsum, dolor sit amet consectetur adipisicing elit. Volupta
        earum aspernatur minima optio, quidem ex, laudantium ipsam vitae
        praesentium deleniti laboriosam esse asperiores dignissimos modi
        magnam. Eaque, repellendus! Repellat error quae amet sint pariatur
        repellendus ipsam asperiores adipisci ullam illum obcaecati earum
        molestiae ipsum libero querat facere neque, eligendi voluptate.
        dolorem impedit culpa ea cum. Dolore eos, odit et itaque dolor re
    </p>
    <hr />
    <h1>Text-align:justify</h1>
    <p style="text-align: justify">
        Lorem ipsum, dolor sit amet consectetur adipisicing elit. Volupta
        earum aspernatur minima optio, quidem ex, laudantium ipsam vitae
        praesentium deleniti laboriosam esse asperiores dignissimos modi
        magnam. Eaque, repellendus! Repellat error quae amet sint pariatur
        repellendus ipsam asperiores adipisci ullam illum obcaecati earum
        molestiae ipsum libero querat facere neque, eligendi voluptate.
        dolorem impedit culpa ea cum. Dolore eos, odit et itaque dolor re
    </p>
</body>
</html>
```

On the right, a browser window titled "Document" shows the rendered HTML. The first `h1` tag is aligned to the left, and the second `h1` tag is aligned to the center (justify). The text within the `p` tags is also aligned to the left.

Normal Alignment

Lorem ipsum, dolor sit amet consectetur adipisicing elit. Voluptatem quos earum aspernatur minima optio, quidem ex, laudantium ipsam vitae praesentium deleniti laboriosam esse asperiores dignissimos modi facilis magnam. Eaque, repellendus! Repellat error quae amet sint pariatur facilis repellendus ipsam asperiores adipisci ullam illum obcaecati earum iste molestiae ipsum libero querat facere neque, eligendi voluptate. Ad dolorem impedit culpa ea cum. Dolore eos, odit et itaque dolor recusandae

Text-align:justify

Lorem ipsum, dolor sit amet consectetur adipisicing elit. Voluptatem quos earum aspernatur minima optio, quidem ex, laudantium ipsam vitae praesentium deleniti laboriosam esse asperiores dignissimos modi facilis magnam. Eaque, repellendus! Repellat error quae amet sint pariatur facilis repellendus ipsam asperiores adipisci ullam illum obcaecati earum iste molestiae ipsum libero querat facere neque, eligendi voluptate. Ad dolorem impedit culpa ea cum. Dolore eos, odit et itaque dolor recusandae