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# HTML

Basics to the Core Web Fundamentals  
by Sreejith

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# HTML is not a programming language.

# HTML is a markup language



Also,

HTML stands for **Hyper Text Markup Language**. It is transferred in the network using this famous protocol called **Hyper Text Transfer Protocol (HTTP)**

# It's interesting you know...

In HTML you have to write your content within **HTML tags** and Browser will take care of the way it's displayed. Infact, this is what happens every time you load a webpage.

In addition you can override the way it's styled and displayed using **CSS - Cascading Style Sheet**, also alter the behaviour using **Javascript - JS**.





# First tag to learn

In HTML, the first tag that must be used in an Web Page is HTML Tag itself.

→ **Syntax:** `<HTML> </HTML>`

→ **Also,**

HTML tags have opening tag and closing tags, within which you can nest other tags and the content itself.

→ **HTML and html are same**

HTML is **case insensitive**.

# Is there any strict way to write HTML. Actually no.

But to maintain a standard way of writing HTML, All web pages are written with HTML Tag in the first.



## Fact to know

Even if there is no html tag present as the first tag. Modern Browsers will restructure it automatically by adding necessary standard tags.

Some basic tag which forms a boilerplate structure of an HTML Document / Webpage are,

- HTML Tag
- HEAD Tag
- BODY Tag
- TITLE Tag

```
<html>

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

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

</html>
```



#### Tip

Title tag is where the title of the Page is written. It will be visible in browser tab name and window names



# Head and Body?

Head and Body tags are the very next child tags of HTML Tag.

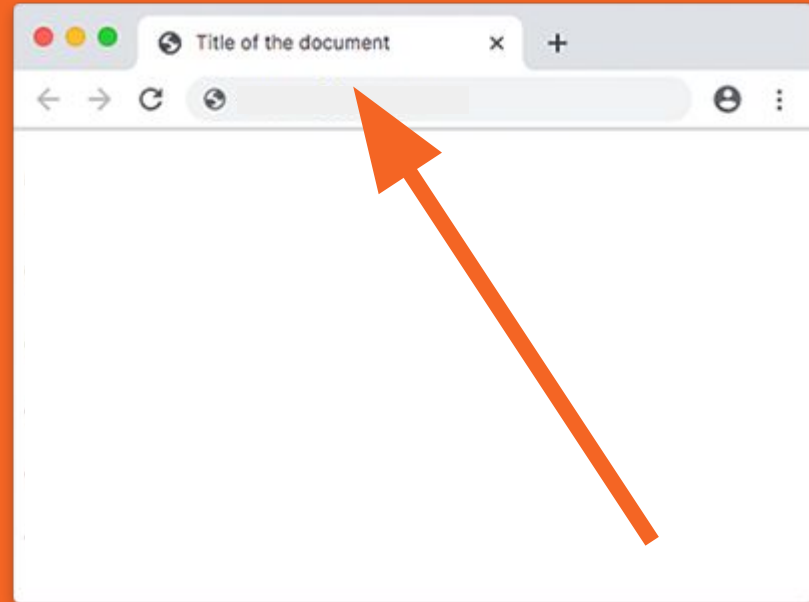
→ **<Head> ... </Head>**

Head tag consists of document informations like title, meta data and links to the CSS and JS files.

→ **Also,**

Head tag will not contain anything that is to be displayed within a webpage.

However title tag is used to specify the Title of the page and will be grabbed by the Browser to display in their respective parts.



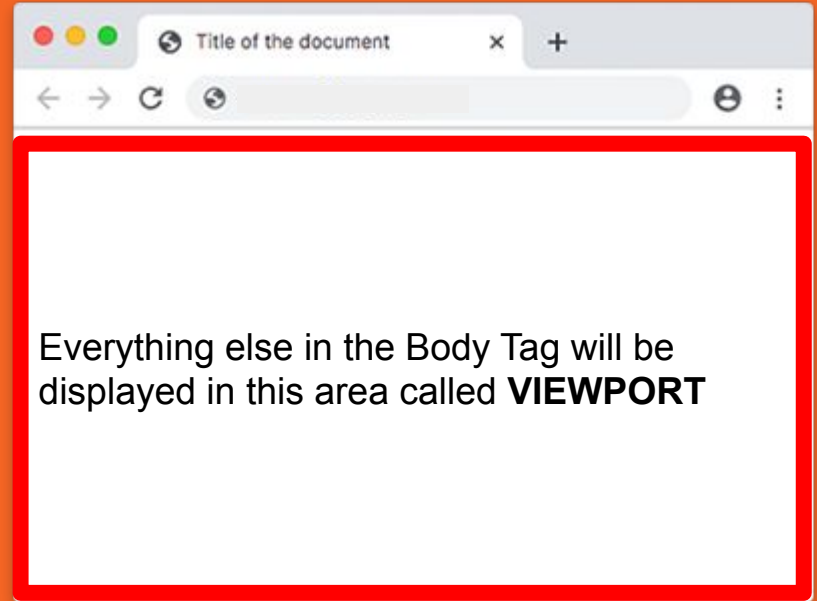


# Body Tag

Body tag holds the real visible contents of a Web Page.

→ **<Body> ... </Body>**

Tags that contains the content of the page





# Write my First HTML

No IDE is necessary.

- Open your Notepad
- Write the HTML.
- Save it with your desired name with a suffix **.html**
- **For example:** helloworld.html
- Just open the file you saved and Wala! Your first HTML Page

**You make use of online editors,**

To kick start you can use online editors like Codepen.io, W3Schools TryIT Editor etc.

LET'S GET  
STARTED



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# Write my First HTML

Written in W3Schools Tryit Editor

```
<html>
<head>
  <title>Title of my html page</title>
</head>
<body>
  The content of the body element is
  displayed in the browser.
</body>

</html>
```

The content of the body element is displayed in your browser.



# Heading tags

There are **Six Levels Predefined Heading Levels** available in HTML

→ `<h1> ... </h1>`

→ `<h2> ... </h2>`

→ `<h3> ... </h3>`

→ ...

→ `<h6>...</h6>`

```
<h1>I'm the biggest heading</h1>
```

```
<h2>I'm smaller than h1</h2>
```

```
<h3>I'm smaller than h2</h3>
```

```
<h4>I'm smaller than h3</h4>
```

```
<h5>I'm smaller than h4</h5>
```

```
<h6>I'm the smallest heading</h6>
```

# Try this by yourself

# I'm the biggest heading

## I'm smaller than h1

### I'm smaller than h2

#### I'm smaller than h3

##### I'm smaller than h4

###### I'm the smallest heading



# Paragraph Tag

All paragraphs below each heading is written within paragraph tag.

→ **Syntax:**

**<p> ... </p>**

To produce a line break **<br>** is used, which has a speciality, that is has no opening and closing, which is called **Empty Tag**

## Try this by yourself

```
<p>Lorem ipsum dolor sit amet,
consectetur adipiscing elit, sed do
eiusmod tempor incididunt ut labore et
dolore magna aliqua. Ut enim ad minim
veniam, quis nostrud exercitation
ullamco laboris nisi ut aliquip ex ea
commodo consequat. <br> Duis aute
irure dolor in reprehenderit in
voluptate velit esse cillum dolore eu
fugiat nulla pariatur. Excepteur sint
occaecat cupidatat non proident, sunt
in culpa qui officia deserunt mollit
anim id est laborum.</p>
```

## Paragraph with line breaks

```
<p>Lorem ipsum dolor sit amet,  
consectetur adipiscing elit, sed do  
eiusmod tempor incididunt ut labore et  
dolore magna aliqua. Ut enim ad minim  
veniam, quis nostrud exercitation  
ullamco laboris nisi ut aliquip ex ea  
commodo consequat. <br> Duis aute  
irure dolor in reprehenderit in  
voluptate velit esse cillum dolore eu  
fugiat nulla pariatur. Excepteur sint  
occaecat cupidatat non proident, sunt  
in culpa qui officia deserunt mollit  
anim id est laborum.</p>
```

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.



# Link Tag

To link to other web pages from your HTML just create a clickable hyperlink using A tag.

→ **Syntax:**

**`<a href="location">...</a>`**

You can also link to a section in your own page by just providing that particular sections id prefixed with "#".

Eg. `<a href="#third">Link within page</a>`

## Try this by yourself

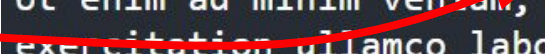
```
<p>Lorem ipsum dolor sit amet, consectetur  
adipiscing elit, sed do eiusmod tempor  
incididunt ut labore et dolore magna  
aliqua.<a href="google.co.in">Google</a>  
Ut enim ad minim veniam, quis nostrud  
exercitation ullamco laboris nisi ut  
aliquip ex ea commodo consequat. </p>
```



## Paragraph with links

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Google Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

```
<p>Lorem ipsum dolor sit amet, consectetur  
adipiscing elit, sed do eiusmod tempor  
incididunt ut labore et dolore magna  
aliqua.<a href="google.co.in">Google</a>  
Ut enim ad minim veniam, quis nostrud  
exercitation ullamco laboris nisi ut  
aliquip ex ea commodo consequat. </p>
```





# Image Tag

To display image from a file or remote location you can simply use Image Tag

→ **Syntax:**

**``**

Image Tag is also an Empty Tag, which is a tag without a closing tag.

Image tag can display almost all famous image file formats like png,jpg,svg,webp etc.

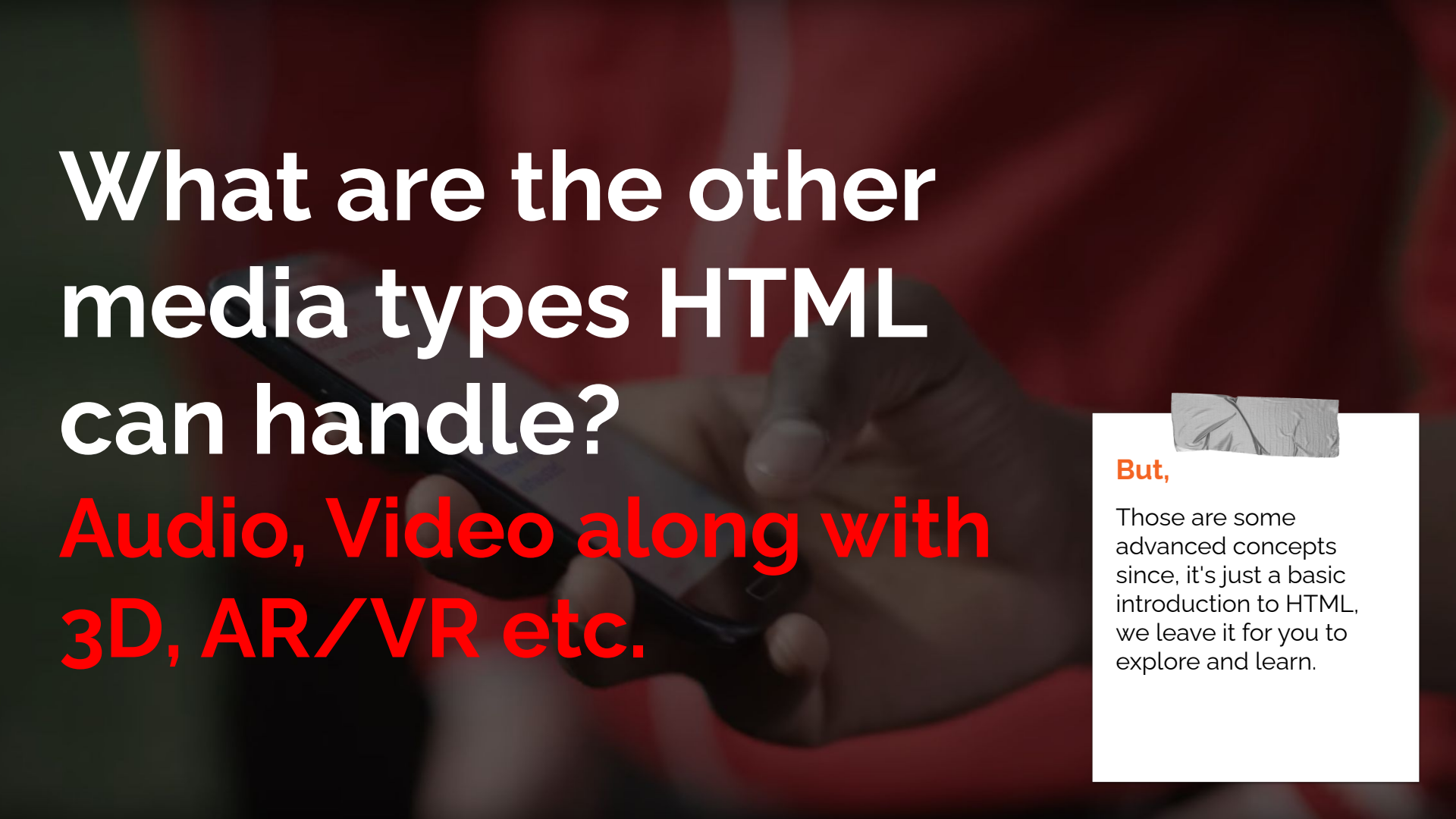


# Display Images

```

```



A hand holding a smartphone is visible in the background, with the screen showing some content. The background is a blurred red color.

# What are the other media types HTML can handle?

**Audio, Video along with 3D, AR/VR etc.**

A small piece of white tape is located above the 'But,' text.

**But,**

Those are some advanced concepts since, it's just a basic introduction to HTML, we leave it for you to explore and learn.

# Table Data in HTML

The thing we are gonna learn in this session is about HTML Tables.

To display table data in HTML, just the `<table>` tag is not enough, instead you need to define the table with some nested table data tags like `<tr>`, `<td>`, `<thead>`, `<tbody>` etc.

*Story for illustration purposes only*

User Name	Education	Location
Suresh Dasari	B.Tech	Chennai
Rohini Dasari	Msc	Chennai
Madhav Sai	MBA	Nagpur
Praveen Kumar	B.Tech	Guntur
Mahendra Dasari	CA	Chennai



# TR and TD

They stand for Table Row and Table Data.  
Which self explains the usage of those tags.

TD tag is nested within the TR tag, which says  
each Table Row will have its own set of Row  
Data.

→ **Syntax:**

**`<tr> <td>...</td> </tr>`**

Each TD in a TR is the represents the  
data for that particular Column.

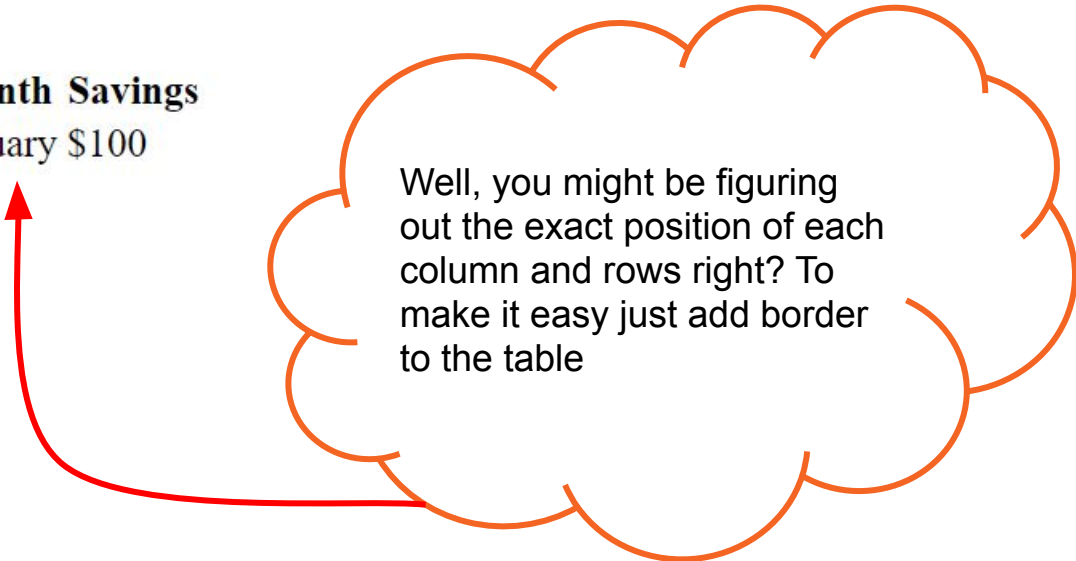
A DIY explains more than theories.

# Write my First Table

```
<table>
  <tr>
    <th>Month</th>
    <th>Savings</th>
  </tr>
  <tr>
    <td>January</td>
    <td>$100</td>
  </tr>
</table>
```

**Month Savings**

January \$100



Well, you might be figuring out the exact position of each column and rows right? To make it easy just add border to the table

# Write my First Table

```
<table border=1>
  <tr>
    <th>Month</th>
    <th>Savings</th>
  </tr>
  <tr>
    <td>January</td>
    <td>$100</td>
  </tr>
</table>
```

Month	Savings
January	\$100

Now you can see the  
table with some detail  
:D

# Write my First Table

```
<table border=1>
  <thead>
    <tr>
      <th>Month</th>
      <th>Savings</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>January</td>
      <td>$100</td>
    </tr>
    <tr>
      <td>February</td>
      <td>$80</td>
    </tr>
  </tbody>
  <tfoot>
    <tr>
      <td>Sum</td>
      <td>$180</td>
    </tr>
  </tfoot>
</table>
```

Month	Savings
January	\$100
February	\$80
Sum	\$180

To make it more specific groups of data, you can make use of THead, TBody, TFoot tags.

## Also

This doesn't make any visual changes but makes better SEO.

## Coming next some few common recipes of HTML

- Link an image to its source.
- Get user input in a form
- Text Formattings



## Use Image as Link

Just nest an <img> Tag within <a> tag

```
<a href="https://picsum.photos/200">  
    
</a>
```

# Get user input from Form

Using Input Tag with Form.

```
<form action="/submit.php" method="post">
  <label for="fname">First name:</label>
  <input type="text" id="fname" name="fname"><br>
  <input type="submit" value="Submit">|
</form>
```

First name:

Submit

# Basic Text Formatting

B for bold, I for Italic, U for underline

```
<p>  
This text is normal.<br>  
<b>This text is bold.</b><br>  
<i>This text is italic.</i><br>  
<u>This text is underlined.</u><br>  
</p>
```

This text is normal.

**This text is bold.**

*This text is italic.*

This text is underlined.

# But the most used tag...

In the current Modern Web where HTML is used to write Web Application there is this one tag which is used as multipurpose tag.

`<div> ... </div>`





# DIV Tag

It defines a division or a section in an HTML document.

It is used as a container for HTML elements - which is then styled with

**Any sort of content can be put inside the <div> tag!**

Note: By default, browsers always place a line break before and after the <div> element.

```
<div style="border: 5px outset red;  
background-color: lightblue;  
text-align: center;">  
  <h2>This is a heading in a div element</h2>  
  <p>This is some text in a div element.</p>  
</div>  
|  
<p>This is some text outside the div element.</p>
```



**This is a heading in a div  
element**

This is some text in a div element.

This is some text outside the div element.

—

Don't worry about the CSS that will be continued after this session.

That's it for now, **We**  
**can't wait to see**  
**what you build next.**

Produced and Edited by Sreejith N S



#### Tip

W3Schools.com - my personally preferred reference website for all HTML Stuffs.

Infact, some of the content in this guide itself is referred from it.