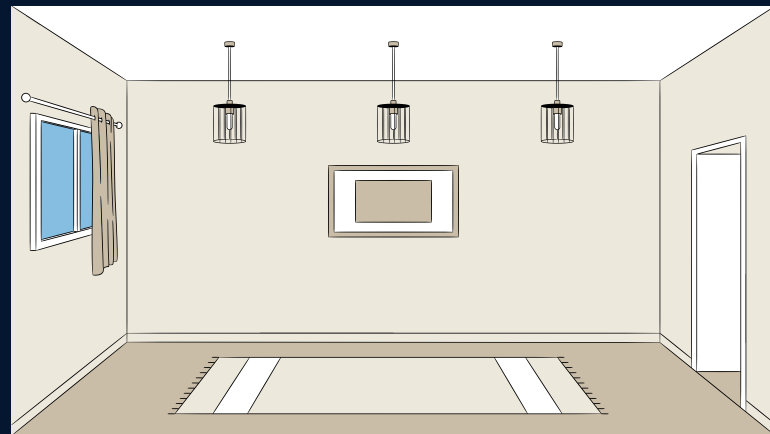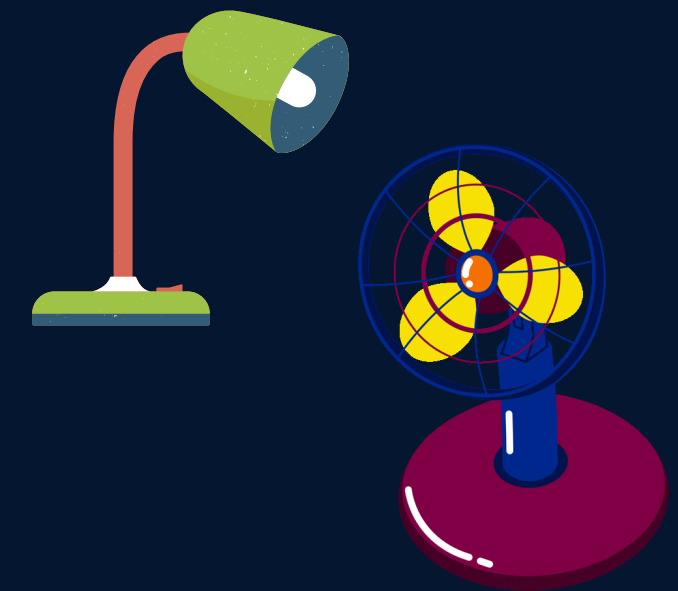# HTML

CSS

JS

Structure/layout
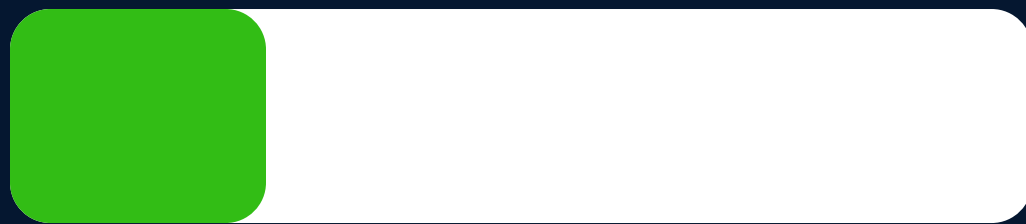
Style

Logic

Level 1

HTML

Hyper Text Markup Language

HTML is the code that is used to structure a web page and its content.

The component used to design the structure of websites are called HTML tags.
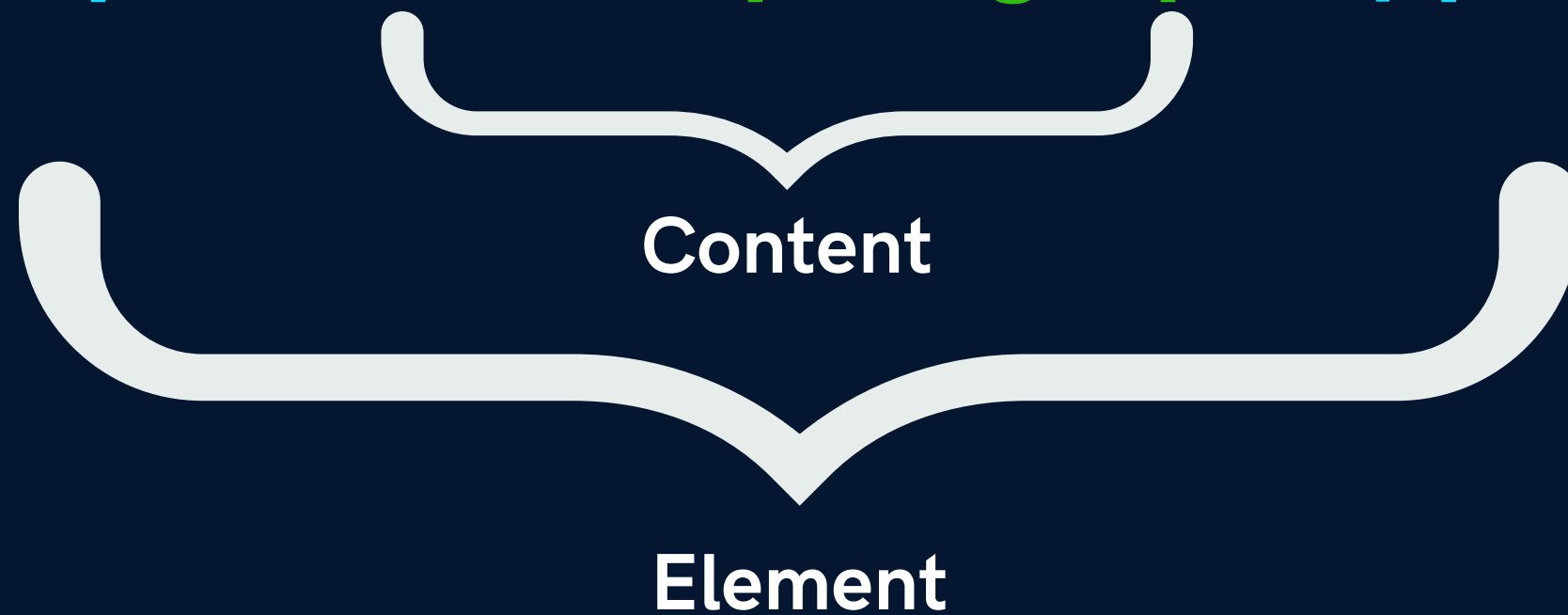
First HTML File

index.html

It is the default name for a website's homepage

HTML Tag

A container for some content or other HTML tags

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

Content

Element

Basic HTML Page

```html
<!DOCTYPE html>          tells browser you are using HTML5

<html>                    root of an html document

    <head>                        container for metadata

        <title>My First Page</title>    page title

    </head>

    <body>                  contains all data rendered by the browser

        <p>hello world</p>      paragraph tag

    </body>

</html>
```

Quick Points 🚀

Html tag is parent of head & body tag

Most of html elements have opening & closing tags
with content in between

Some tags have no content in between, eg -

We can use inspect element/view page source to edit html

Comments in HTML

This is part of code that should not be parsed.

`<!--` This is an HTML Comment `-->`

HTML is NOT case sensitive

\<html\> = \<HTML\>

\<p\> = \<P\>
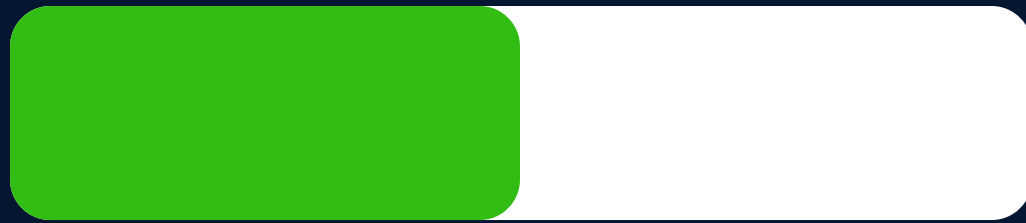
\<head\> = \<HEAD\>

\<body\> = \<BODY\>

Level 2

Basic HTML Tags

HTML Attributes

Attributes are used to add more information to the tag

`<html lang="en">`

Heading Tag

Used to display headings in HTML

h1   **(most important)**

h2

h3

h4

h5

h6   **(least important)**

Paragraph Tag

Used to add paragraphs in HTML

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

Anchor Tag

Used to add links to your page

```html
<a href="https://google.com"> Google </a>
```

Image Tag

Used to add images to your page

```
<img src="/image.png" alt="Random Image">
```

relative url

Br Tag

Used to add next line(line breaks) to your page

`<br>`

Bold, Italic & Underline Tags

Used to highlight text in your page

** Bold **

<i> Italic </i>

<u> Underline </u>

Big & Small Tags

Used to display big & small text on your page

<big> Big </big>

<small> Small </small>

Hr Tag

Used to display a horizontal ruler, used to separate content

`<hr>`

Subscript & Superscript Tag

Used to display a horizontal ruler, used to separate content

_{subscript}

$$H_2O$$

^{superscript}

$$A^n + B$$

Pre Tag

Used to display text as it is (without ignoring spaces & next line)

<pre> This

    is a sample

    text.

</pre>

Level 3

Page Layout Techniques

using Semantic tags for layout

using the Right Tags

<header>

<main>

<footer>

Inside Main Tag

Section Tag   For a **section on your page**

   <section>

Article Tag   For an a**rticle on your page**

   <article**>**

Aside Tag   For **content** aside ma**in content**(ads**)**

   <asi**de>**

Revisiting Anchor Tag

```html
<a href="https://google.com" target="_main"> Google </a>
```

↑

for new tab

```html
<a href="https://google.com"> <img src="link"> </a>
```

↑

clickable pic

Revisiting Image Tag

`<img src="link" height=50px >`

↑

set height

`<img src="link" width=50px >`

↑

set width

Div Tag

Div **is** a **container used for ot**her HTML **ele**ments

Block Element (takes full width)

List : Div Tags

<address>

<article>

<aside>

<blockquote>

<canvas>

<dd>

<div>

<dl>

<dt>

<fieldset>

<figcaption>

<figure>

<footer>

<form>

<h1>-<h6>

<header>

<hr>

<main>

<nav>

<noscript>

<p>

<pre> <se

<table>

<tfoot>

<video>

Span Tag

Span is also a container used for other HTML elements

Inline Element (takes width as per size)
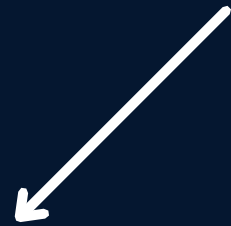
List : Span Tags

<a>

<abbr>

<acronym>

<b>

<bdo>

<big>

 <butt

on> <cite>

<code>

<dfn>

<em>

<i>

<input>
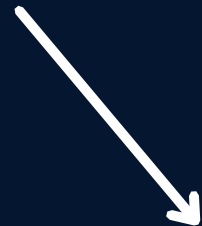
<kbd>

<label>

<map>

<object>

<tt>

<var>

<q>

<samp>

<script>

<select>

<small>

<span>

<strong>

<sub>

<sup>

<textarea>

<time>

Level **Pro**

List in HTML

Lists are used to represent real life list data.

unordered

```
<ul>
  <li> Apple </li>
  <li> Mango </li>
</ul>
```

ordered

```
<ol>
  <li> Apple </li>
  <li> Mango </li>
</ol>
```

Tables in HTML

Tables are used to represent real life table data.

\<tr\>   **used to display table row**

\<td\>   **used to display table data**

\<th\>   **used to display table header**

Tables in HTML

Name	Roll No
Pravin	2034

```
<table>

    <tr>

        <th> Name </th>
        <th> Roll No </th>
    </tr>

     <tr>

        <td> Pravin </th>
        <th> 2034 </th>
    </tr>

</table>
```

Caption in Tables

<caption> Student Data **</caption>**

Student Data

Name	Roll No
Pravin	2034

thead & tbody in Tables

<thead> to wrap table head

<tbody> to wrap table body

colspan attribute

colspan="n"

used to create cells which spans over multiple columns

Data	
Pravin	2**034**
Om	2**000**

Form in HTML

Forms are used to collect data from the user

Eg- sign up/login/help requests/contact me

```
<form>

    form content

</form>
```

Action in Form

Action attribute is used to define what action needs to be performed when a form is submitted

`<form action="/action.php" >`

Form Element : Input

```
<input type="text" placeholder="Enter Name">
```

Label

```
<label for="id1">

        <input type="radio" value="class X" name="class"  id="id1">

</label>


<label for="id2">

        <input type="radio" value="class X" name="class"  id="id2">

</label>
```

Class & Id

```
<div id="id1" class="group1">


</div>



<div id="id2"> class="group1">

</div>
```

Checkbox

```html
<label for="id1">

    <input type="checkbox" value="class X" name="class" id="id1">

</label>


<label for="id2">

    <input type="checkbox" value="class X" name="class" id="id2">

</label>
```

Textarea

```
<textarea name="feedback" id="feedback" placeholder="Please add Feedback">

</textarea>
```

Select

```html
<select name="city" id="city">

        <option value="Delhi">  Delhi </option>

        <option value="Mumbai">  Delhi </option>

        <option value="Banglore">  Delhi </option>

</select>
```

iframe Tag

website inside website

`<iframe src="link">` Link `</option>`

Video Tag

`<video src="myVid.mp4">` My Video `</video>`

Attributes

- controls

- height

- width

- loop

- autoplay

- Pravin Gaikwad