HTML Basic Structure

 $\langle div \rangle$

The basic structure of any HTML document is as follows: <!DOCTYPE html> <*h*tm*l*> <head></head> <*body*> Your code goes here </body> </html> HTML Elements 1. Heading Element The HTML "h1" element defines a main heading. <*h1*>*Tourism*</*h1*> 2. Paragraph Element The HTML "p" element defines a paragraph. Plan your trip wherever you want to go 3. Button Element The HTML "button" element defines a button. <button>Get Started/button> 4. Container Element The HTML "div" element defines a container.

```
<h1>Tourism</h1>
Plan your trip wherever you want to go
<button>Get Started</button>
</div>
```

5. Image Element

The HTML "img" element defines an Image.

Syntax:

```
<img src="IMAGE_URL"/>
```

5.1. The "src" Attribute

The HTML Attribute "src" specifies the path (URL) of the Image.

<img src="https://d1tgh8fmlzexmh.cloudfront.net/ccbp-static-website/tajmahaling.png"

/>

6. Anchor Element

The HTML "a" element defines a Hyperlink.

We use Hyperlinks to navigate to other web resources or a specific element within the HTML document. They are also called links.

Syntax:

```
<a href="URL">Content</a>
```

6.1. HTML "href" Attribute

The HTML "href" Attribute specifies the URL/ path of the page where the link goes to.

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- 6.2. Different ways to use the "Anchor" Element
- 6.2.1. Navigate within the same HTML document
- The HTML anchor "a" element can also be used to navigate to different sections within the same HTML document.
- Add an HTML "id" attribute to the section that you want to navigate to. Provide the hash symbol "#", and the value of the "id" attribute of that section as a value to the link's HTML "href" attribute.

Note:

While navigating to a particular section within the same HTML document, the content of that section doesn't start from the starting of a page when

- 1. It has less content to fill the Viewport height and there are no sections after it.
- 2. The content of that section and the content of the sections after it has less content to fill the Viewport height.
- 6.2.2. HTML Image Element as Link

```
<a href="https://www.ccbp.in/">
```


7. Void Elements

The HTML elements that only have a start tag and do not contain content or end tag are called as Void Elements.

Syntax:

<tag />

For example, the HTML "img" element.

8. Line Break Element

The HTML "br" element helps to break the text and continue it in the next line.

<*p>*

*Twinkle, twinkle, little star,
*

How I wonder what you are!

9. Horizontal Rule Element

The HTML "hr" element inserts a horizontal line and helps to separate the content.

<h1 class="heading">

Twinkle Twinkle Little Star

</h1>

<hr/>

<*p>*

Twinkle, twinkle, little star.

 $\langle hr/ \rangle$

10. HTML Lists

The List is a way to group related pieces of information so that they are easy to read and understand.

For example, Shopping list, Todo list, etc.

There are mainly two types of Lists available in HTML.

• Unordered List • Ordered List

11. Unordered List

It is a collection of related items that have no special order or sequence.

For example, List of Hobbies

• Painting • Reading Books • Playing the Guitar

The Unordered List starts with "" tag. It wraps around all the list items and each list item starts with the "" tag.

```
Painting
Reading Books
```

By default, list items in the Unordered List are marked with bullets.

11.1. Styling Unordered List

The CSS "list-style-type" property is used to style the List.

```
.unordered-square-list {
  list-style-type: square;
}
```

You can use one of the below values of the CSS "list-style-type" property to style the Unordered List.

Values: square, circle, disc, none

12. Ordered List

It is a collection of related items that follow some order or have a sequence.

For example, Web Technologies

HTML

CSS

JavaScript

The Ordered List starts with "" tag. It wraps around all the list items and each list item starts with the "" tag.

```
\langle ol \rangle
```

```
Go through the HTML elements and CSS properties
```

```
Complete the Todolist Coding Practice
```

Go through the Bootstrap Concepts

By default, list items in the Ordered List are marked with numbers.

12.1. Styling Ordered List

The CSS "list-style-type" property is used to style the List.

```
.ordered-lower-roman-list {
```

```
list-style-type: lower-roman;
```

}

You can use one of the below values of the CSS "list-style-type" property to style the Ordered List.

Values: upper-alpha, lower-alpha, upper-roman, lower-roman, decimal, none

HTML Attributes

1. HTML "id" Attribute

The HTML "id" attribute specifies a unique id for an HTML element. The value of the "id" attribute must be unique within the HTML document.

<div id="section1">Section 1</div>

Warning:

- 1. The CCBP UI kit works only if the value of the HTML `id` attribute of the container section has the prefix as `section`.
- 2. So, the id which we specify for any section should always contain its prefix as `section` if you are using CCBP UI Kit.
- 2. HTML "onclick" Attribute

The "onclick" event occurs when the user clicks on an HTML Element.

<button class="btn btn-primary" onclick="display('section3')">

Go to Section 3

</button>

The value of an HTML "onclick" attribute should be enclosed in double-quotes and the value inside the brackets of "display()" should be enclosed in single quotes.

3. The "src" Attribute

The HTML Attribute "src" specifies the path (URL) of the Image.

< img

src = "https://d1tgh8fmlzexmh.cloudfront.net/ccbp-static-website/tajmahalimg.png"

/>

4. HTML "href" Attribute

The HTML "href" Attribute specifies the URL/ path of the page where the link goes to.

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5. HTML "target" Attribute

The HTML "target" Attribute specifies where to open the linked web resource.

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```
CSS Syntax
```

```
selector {
  property1: value1;
  property2: value2;
}
```

CSS Text Properties

1. Text Align

The CSS "text-align" property specifies the horizontal alignment of the text in an HTML element.

```
.h-center {
  text-align: center;
```

Value	Description
center	Aligns the text to the center
left	Aligns the text to the left
right	Aligns the text to the right

2. Color

The CSS "color" property specifies the color of the text.

```
.main-heading {
  color: blue;
}
.paragraph {
  color: grey;
}
```

2.1. Sample Colors

Values: blue, grey, lightblue, orange, red, green

2.2. Hex Code

CSS Colors can be represented in multiple ways:

• Color names • Hex Code • HSL • RGB and many more...

Since few colors have the Color names, Hex Codes make a good alternative to pick a wide variety of colors.

Some of the Color names and their Hex Codes are:

Color Name	Hex Code
orange	#ffa500
red	#ff0000
blue	#0000ff
green	#008000
-	#012d36
_	#432711
-	#25b1cc

.button {

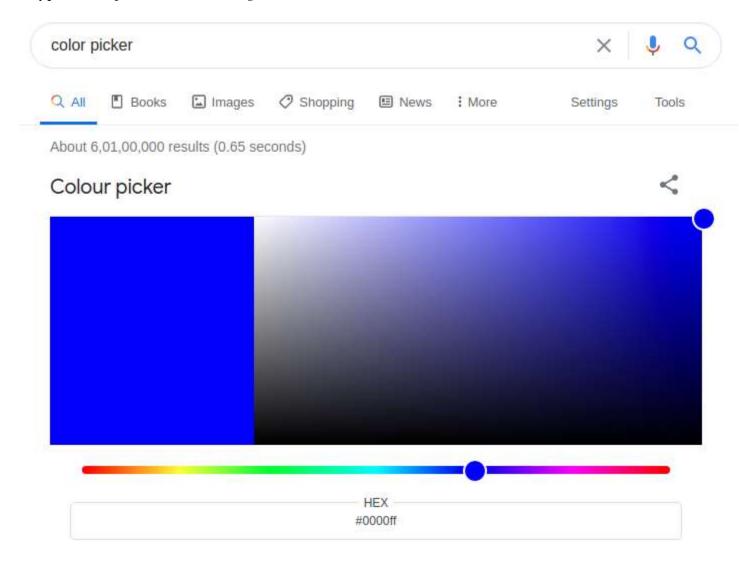
background-color: #25b1cc;

2.2.1 How to pick a color using Hex Code

The color picker lets you pick a color among the approximately 16,777,216 colors available.

One of the simplest ways to access a color picker is:

• Type color picker in the Google Search bar and search it.



3. Font Family

The CSS "font-family" property specifies the font for an element.

```
@import
url("https://fonts.googleapis.com/css2?family=Bree+Serif&family=Caveat:wght
@400;700&family=Lobster&family=Monoton&family=Open+Sans:ital,wght@0,
400;0,700;1,400;1,700&family=Playfair+Display+SC:ital,wght@0,400;0,700;1,
700&family=Playfair+Display:ital,wght@0,400;0,700;1,700&family=Roboto:ital
,wght@0,400;0,700;1,400;1,700&family=Source+Sans+Pro:ital,wght@0,400;0,7
00;1,700&family=Work+Sans:ital,wght@0,400;0,700;1,700&display=swap");
.main-heading {
font-family: "Roboto";
.paragraph {
font-family: "Roboto";
You can use one of the below values of the "font-family" property,
Value
                           Tourism
 "Roboto"
                           Tourism
 "Caveat"
                           Tourism
 "Lobster"
                           Tourism
 "Bree Serif"
                           Tourism
 "Playfair Display"
                           TOURISM
 "Monoton"
 "Playfair Display SC"
                           TOURISM
```

Note:

- 1. To use font families, you need to import their style sheets into your CSS file.
- 2. There shouldn't be any spelling mistakes in the values of the `font-family` property.
- 3. There must be quotations around the value of the `font-family` property.
- 4. Font Size

The CSS "font-size" property specifies the size of the font.

```
.main-heading {
  font-size: 36px;
}
.paragraph {
  font-size: 28px;
}
```

Note:

- 1. You must add `px` after the number in the value of the `font-size` property.
- 2. There shouldn't be any space between the number and `px`.
- 3. There shouldn't be any quotations around the value of the `font-size` property.
- 5. Font Style

The CSS "font-style" property specifies the font style for a text.

You can use one of the below values of the "font-style" property,

```
Value: normal, italic, oblique

.main-heading {

font-style: italic;
```

```
}
.paragraph {
font-style: normal;
Note:
1. There shouldn't be any spelling mistakes in the values of the `font-style`
property.
2. There shouldn't be any quotations around the value of the `font-style` property.
6. Font Weight
The CSS "font-weight" property specifies how thick or thin characters in text
should be displayed.
.main-heading {
font-weight: bold;
.paragraph {
font-weight: 200;
You can use one of the below values of the "font-weight" property,
Values: normal, bold, bolder, lighter, 100, 200, 300, 400, 500, 600, 700, 800, 900
```

Note:

- 1. There shouldn't be any spelling mistakes in the values of the `font-weight` property.
- 2. There shouldn't be any quotations around the value of the `font-weight` property.

3. The numerical values given to the `font-weight` property must be in the range from `100` to `900` and should be the multiples of `100`.

7. Text Decoration

The CSS "text-decoration" property specifies the decoration added to the text.

```
.main-heading {
  text-decoration: underline;
}
.paragraph {
  text-decoration: overline;
}
```

You can use one of the below values of the "text-decoration" property,

Value	Description
underline	Underline the text
line-through	Strike through the text
overline	Overline the text

Note:

- 1. There shouldn't be any spelling mistakes in the values of the `text-decoration` property.
- 2. There shouldn't be any quotations around the value of the `text-decoration` property.
- 3. Ensure that `text-decoration` and `line-through` are hyphenated.

CSS Background Properties

1. Background Color

The CSS "background-color" property specifies the background color of an HTML element.

```
.card {
  background-color: lightblue;
}
```

2. Background Image

The CSS "background-image" property specifies the background image of an HTML element.

```
.card {
```

background-image: url("https://d1tgh8fmlzexmh.cloudfront.net/ccbp-static-website/ocean.jpg");

}

Value	Description
url (URL)	The URL to the image.

Warning:

- 1. The background image takes the height of the content of an HTML element if you don't specify the height to it.
- 2. The URL given to the `background-image` must be a valid URL to display the image.
- 3. Background Size

The CSS "background-size" property specifies the size of the background image of an HTML element.

```
.card {
   background-size: cover;
}
```

Value	Description
	Scales the image to the smallest size while maintaining the same aspect ratio (width/height) and covers the entire width and height even if the
	image is cropped.

Note:

Aspect Ratio is the ratio of the width and height (width/height) of an image.

CSS Box Properties

```
1. Height
```

The CSS "height" property specifies the height of an HTML element.

```
.card {
  height: 200px;
}
```

2. Width

The CSS "width" property specifies the width of an HTML element.

```
.card {
    width: 250px;
}
```

3. Border Width

The CSS "border-width" property specifies the width of the border for all four sides of an HTML element.

```
.button {
border-width: 2px;
```

The CSS Property and value pair "border-width: 0px;" removes the border of an HTML element.

Warning:

Specifying the CSS `border-style` property for an HTML element is mandatory. Otherwise, the CSS properties like `border-color`, `border-width` will not appear in the browser. The HTML `button` element is an exception as it appears with a border in the browser by default.

4. Border Radius

The CSS "border-radius" property specifies the roundness of the corners of an HTML element.

```
.button {
  border-radius: 20px;
}
```

You can use the below CSS properties to round a specific corner of an HTML element.

Properties: border-top-left-radius, border-top-right-radius, border-bottom-left-radius, border-bottom-right-radius

Quick Tip:

Specifying the background color for an HTML element makes the border radius more visible.

5. Border Color

The CSS "border-color" property specifies the color of the border for all four sides of an HTML element.

```
.button {
  border-color: orange;
}
```

Warning:

Specifying the CSS `border-style` property for an HTML element is mandatory. Otherwise, the CSS properties like `border-color`, `border-width` will not appear in the browser. The HTML `button` element is an exception as it appears with a border in the browser by default.

6. Border Style

The CSS "border-style" property specifies the style of the border for all four sides of an HTML element.

```
.button {
  border-style: dashed;
}
```

You can use one of the below values of the CSS "border-style" property.

```
Value: dotted, dashed, solid, none (default)
```

7. Padding

The CSS "padding" property specifies the space around the content of an HTML element.

```
.card {
   padding: 10px;
}
```

8. Margin

The CSS "margin" property specifies the space around the four sides of an HTML element.

```
.card-container {
  margin: 10px;
```

You can use the below CSS properties to apply a margin on the specific side of an HTML element,

Properties: margin-top, margin-right, margin-bottom, margin-left

Viewport

The browser's viewport is the area of the window in which web content can be seen.

1. Viewport Height

The CSS Viewport Height "vh" Unit equals to 1% of the height of the Viewport (browser window size).

```
.card {
   height: 50vh;
}
```

Note:

The height `100vh` sets an HTML element to the entire height of the Viewport (browser window size).

2. Viewport Width

The CSS Viewport Width "vw" Unit equals to 1% of the width of the Viewport (browser window size).

```
.card {
width: 100vw;
}
```

Note:

The width `100vw` sets an HTML element to the entire width of the Viewport (browser window size).

Reusability

1. Reusability of CSS Rulesets

border-radius: 10px;

If we want the same style for multiple HTML elements, we can write the CSS Ruleset once and use it for different HTML elements.

```
.button {
 width: 138px;
 height: 36px;
 border-width: 0px;
 border-radius: 10px;
}
<button class="button">Get Started</button>
<button class="button">Visit Now</button>
2. Multiple class names as an HTML attribute value
We can provide multiple class names separated by space as a value to the HTML
class attribute.
Syntax:
<tag class = "name1 name2 name3 name4 ...">Content</tag>
HTML attribute value: name1 name2 name3 name4 ...
class names: name1, name2, name3, and name4
.button {
 width: 138px;
 height: 36px;
 border-width: 0px;
```

```
}
.button-green {
  background-color: #8cc63f;
}
<button class="button button-green">Get Started</button>
Bootstrap
```

Bootstrap is a large collection of predefined reusable Code Snippets written in HTML, CSS, and Javascript. The Code Snippets include Buttons, Cards,

How to use Bootstrap?

Carousels, etc.

To use the Code Snippets provided by Bootstrap, we need to add the below piece of code within the HTML head element. We call it BootstrapCDN.

```
<link rel="stylesheet"</pre>
```

href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity="sha384-

JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9U J0Z" crossorigin="anonymous"/>

<script src="https://code.jquery.com/jquery-3.5.1.slim.min.js" integrity="sha384-DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXaRk fj" crossorigin="anonymous"></script>

```
<script
```

src = "https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js" integrity = "sha384-

9/reFTGAW83EW2RDu2S0VKaIzap3H66lZH81PoYlFhbGU+6BZp6G7niu735Sk7lN" crossorigin="anonymous"></script>

<script

src = "https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js" integrity = "sha384-

B4gt1jrGC7Jh4AgTPSdUtOBvfO8shuf57BaghqFfPlYxofvL8/KUEfYiJOMMV+rV" crossorigin="anonymous"></script>

Flexbox Properties

1. Flexbox Container

The Bootstrap class name d-flex defines a Flexbox Container. The direct HTML elements in the Flexbox Container are called flex items.

```
<div class="d-flex">
<div>
<div>
<h1>Tourism</h1>
Plan your trip.
<button>Get Started</button>
</div>
</div>
```

The HTML container element with the class="d-flex" is a Flexbox Container.

The HTML container element div in Flexbox Container is a flex item. Because it is directly inside the Flexbox Container.

The HTML main heading, paragraph, and button elements are not flex items. Because these elements are not directly inside the Flexbox Container.

Note:

Wrapping HTML elements in the Flexbox Container is mandatory to apply other flex properties.</MultiLineNote>

2. Flex Direction

The Flex Direction specifies the direction of the flex items in the Flexbox Container.

Class Name	Direction of the flex items in a Flexbox Container
flex-row	Horizontal
flex-column	Vertical

2.1. *flex-row*

The Bootstrap class name "flex-row" is used to move the flex items horizontally in the Flexbox Container.

```
<div class="d-flex flex-row">
  <div>
  <h1>Tourism</h1>
  Plan your trip.
  <button>Get Started</button>
  </div>
</div>
```

2.2. flex-column

Note:

The Bootstrap class name "flex-column" is used to move the flex items vertically in the Flexbox Container.

```
<div class="d-flex flex-column">
  <div>
  <h1>Tourism</h1>
  Plan your trip.
  <button>Get Started</button>
  </div>
</div>
```

The Bootstrap class name `flex-row` is the default Flex Direction for the Flexbox Container. So, once `d-flex` is specified, all the flex items in the Flexbox Container display horizontally.

3. Justify Content

The Justify Content specifies the alignment of flex items along the Flex Direction in a Flexbox Container.

3.1. justify-content-start

The Bootstrap class name "justify-content-start" is used to align the flex items at the start of the Flexbox Container either horizontally or vertically based on the Flex Direction.

Flex Direction	Alignment of flex items in a Flexbox Container
flex-row	Align flex items horizontally to the left
flex-column	Align flex items vertically to the top

3.2. justify-content-center

The Bootstrap class name "justify-content-center** is used to align the flex items at the center of the Flexbox Container either horizontally or vertically based on the Flex Direction.

Flex Direction	Alignment of flex items in a Flexbox Container
flex-row	Align flex items horizontally to the center
flex-column	Align flex items vertically to the center

<div class="d-flex flex-column justify-content-center">

```
<div>
<h1>Tourism</h1>
Plan your trip.
<button>Get Started</button>
</div>
</div>
```

3.3. justify-content-end

The Bootstrap class name "justify-content-end" is used to align the flex items at the end of the Flexbox Container either horizontally or vertically based on the Flex Direction.

Flex Direction	Alignment of flex items in a Flexbox Container
flex-row	Align flex items horizontally to the right
flex-column	Align flex items vertically to the bottom

3.4. justify-content-between

The Bootstrap class name "justify-content-between" is used to get equal space between the HTML elements.

```
<\!div\;class = "d-flex\;flex-column\;justify-content-between"\!>
```

```
<div>
<h1>Tourism</h1>
Plan your trip.
<button>Get Started</button>
</div>
</div>
```

Predefined Styles in Bootstrap

1. Button

The Bootstrap class "btn" is used to style the HTML "button" element.

<button class="btn">Submit</button>

To apply different background colors to the HTML "button" element, you can use the below bootstrap classes.

class names: btn-primary, btn-secondary, btn-success, btn-danger, btn-info, btn-dark, btn-warning, btn-light

Bootstrap provides us different types of buttons. One of them is Outline buttons, that don't have a background color.

To add the outline buttons in our HTML document, just replace "btn" in the above classes with the "btn-outline".

for example,

button Class name	outline button class name
btn-primary	btn-outline-primary
btn-secondary	btn-outline-secondary
btn-success	btn-outline-success
btn-danger	btn-outline-danger

<button class="btn btn-primary">Get Started</button>

<button class="btn btn-outline-primary">Get Started</button>

Note:

By default, Bootstrap class name `btn` has no background color.

2. Text colors

To apply different colors to the text, you can use the below bootstrap classes.

class names: text-primary, text-warning, text-secondary, text-success, text-danger, text-dark, text-white

<h1 class="text-primary">Tourism</h1>

3. Text transform

To apply different cases like upper case, lower case etc to the text, you can use the below bootstrap classes.

class names: text-lowercase, text-uppercase, text-capitalize

PLAN your TRIP wherever YoU wAnT to GO.

4. Background colors

To apply different background colors to an HTML element, you can use the below bootstrap classes.

class names: bg-primary, bg-warning, bg-secondary, bg-success, bg-danger, bg-info, bg-dark, bg-white

 $<\!\!div\;class = "bg\text{-}warning"\!\!> <\!\!h1\!\!> \!\!Tourism <\!\!/h1\!\!> <\!\!/div\!\!>$

Bootstrap provides us with many predefined class names. Some of them are:

class names: card, carousel, alert, alert-success, alert-link, bg-danger, card-body and many more...

You can find the list of class names provided by the bootstrap here

Warning:

Using predefined bootstrap class names as a selector in our CSS Ruleset may give unexpected results.

Bootstrap Components

Carousel

The Carousel is a slideshow for cycling through images, text, etc. Slides will change every few seconds.

To add the Carousel to our Favourite Place Detailed View Section Page, we used Bootstrap Carousel Component with the Indicators.

You can add the different images in the Carousel by changing the image URL in the value of the HTML src attribute.

```
<img
class="d-block w-100"

src="https://d1tgh8fmlzexmh.cloudfront.net/ccbp-static-website/tajmahal-c1-
img.png"

alt="...">
/>
```

You can find the Bootstrap Carousel code here

Note:

- 1. To use multiple Carousels in the same HTML document, we have to provide a unique id to each Carousel.
- 2. So while adding a new Carousel, you need to change the id of the Carousel. Else, the Carousel controls don't work.

Bootstrap Utilities

Embed

The given code snippet is the Youtube embed code provided by Bootstrap. You can add the different Youtube Videos by changing the Video ID in the value of the HTML "src" attribute.

The Video ID is in between the "https://www.youtube.com/embed/" and "?rel=0".

Note:

- 1. Be careful while pasting the video ID. The video ID must be in between the `https://www.youtube.com/embed/` and `?rel=0`. You won't get the video if any character is missed in the value of the HTML `src` attribute.
- 2. To embed the Youtube Videos in a smaller size, replace the class name embed-responsive-16by9 with embed-responsive-1by1 in the Bootstrap Video Embed Code. You can find the reference [here](https://getbootstrap.com/docs/4.5/utilities/embed/#aspect-ratios)

CCBP UI Kit

It is a collection of reusable code snippets similar to Bootstrap. It is specially designed for CCBP training.

1. Adding CCBP UI Kit to the Web Page

<!DOCTYPE html>

< html >

```
<head>
...

<script src="https://code.jquery.com/jquery-3.5.1.slim.min.js"
integrity="sha384-
DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXaRk
fj" crossorigin="anonymous"></script>
...

</head>
<body>
<script type="text/javascript"
src="https://d1tgh8fmlzexmh.cloudfront.net/ccbp-static-website/js/ccbp-ui-kit.js"></script>
</body>
</html>
</html>
```

The CCBP UI Kit Script Code should be placed just before the HTML "body" end tag.

2. Display Utility

It is a reusable code snippet to display or hide Section Containers based on user actions.

You can find the Display Utility code here

More Details

1. Getting URLs for Your Images

You can get the URLs to your images using Cloudinary. Cloudinary lets you easily upload the images and provide the image URLs.

Cloudinary Website URL: https://cloudinary.com/

Note:

To Sign up, copy the Cloudinary Website URL and open in new tab.

2. Install Visual Studio Code

Windows Operating System

Ubuntu/Linux Operating System (Watch only for 2 minutes)

Mac Operating System (Watch only for 2 minutes 30 seconds)

3. Linking HTML and CSS Files

We use the HTML link element to link the HTML and CSS files. It is a void element.

Syntax:

<link rel="stylesheet" href="tourism.css">

Note

You need to add the HTML `link` element in the HTML `head` element.

4. HTML Image vs CSS Background Image

Ways to add Images in Website:

HTML Image

CSS Background Image

When to use HTML Image:

When there are no content or HTML elements over the Image.

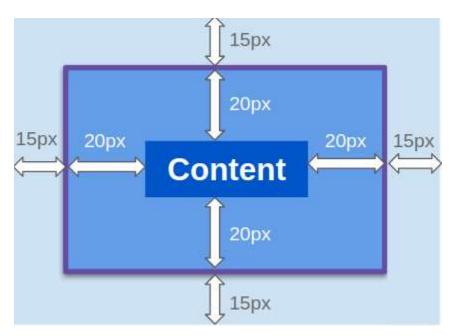
When Image is a part of the content on a page.

When to use CSS Background Image:

When Image is not a part of the content on a page.

When there are content or HTML elements over the Image.

5. CSS Margin vs CSS Padding



When to use CSS Padding:

To specify the space around the four sides of the content of an HTML element.

To add the space between the content and border of an HTML element.

When to use CSS Margin:

To specify the space around the four sides of an HTML element.

 $To \ add \ the \ space \ between \ HTML \ elements.$

For example, let's take an HTML button element.

```
<button class="button">View More</button>
.button {
  padding: 20px;
  margin: 15px;
}
```