

## Topic1: Introduction

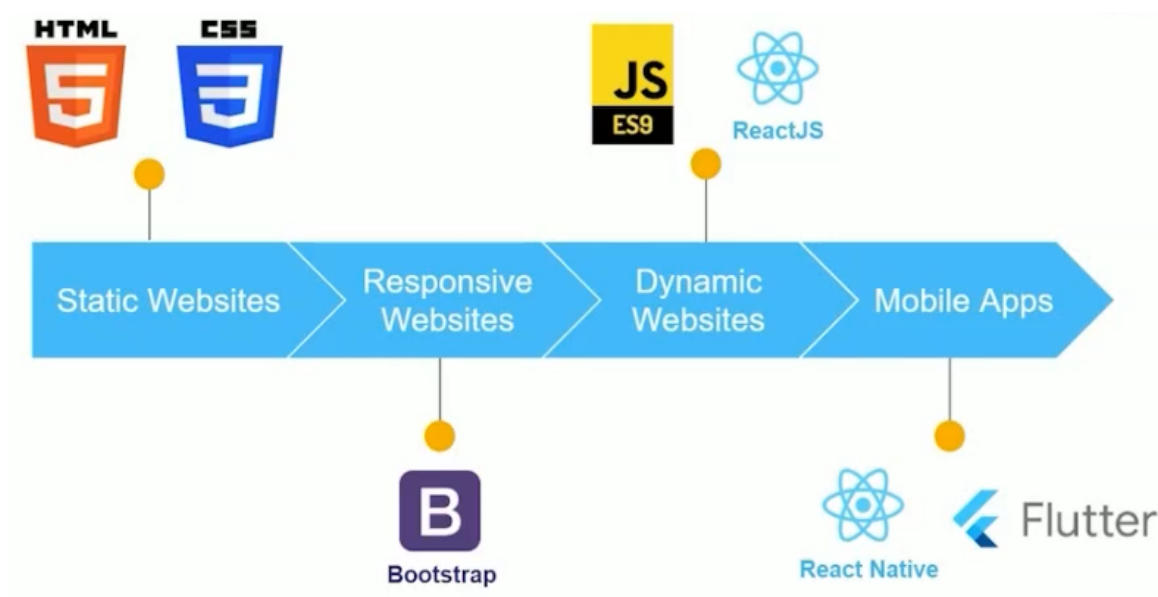
### 1. Introduction to Html and Css

- syntax : rules of the language
- bug : if the output of your code is doesn't meet your expected output.
- debugging : the process of fixing the bug.
  - html elements tag name
  - html elements closed properly or not
  - html attributes names and values
  - CSS property names and values
- Tweaking code : Making small changes in the code to understand the software behaviour

In [1]:

```
from IPython.display import Image  
Image("E:/code/frontend/img/html1.png")
```

Out[1]:

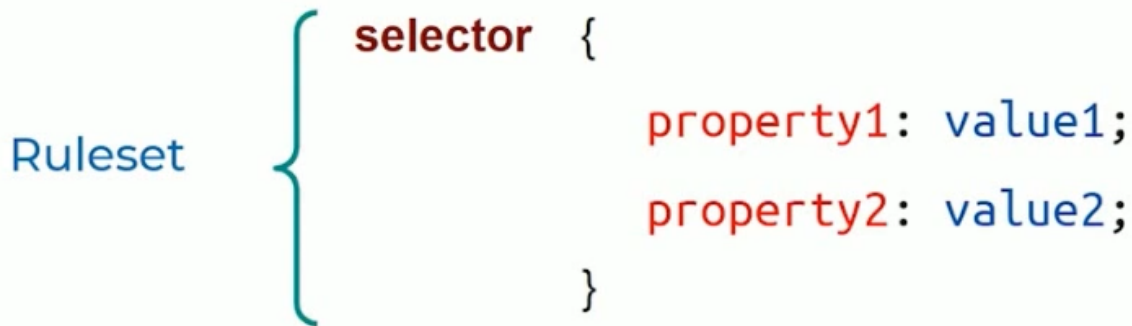




In [4]:

```
from IPython.display import Image
Image("E:/code/frontend/img/html4.png")
```

Out[4]:



In [5]:

```
from IPython.display import Image
Image("E:/code/frontend/img/html5.png")
```

Out[5]:

```
> <> pg1_tourism_main_page.html > ...
<!DOCTYPE html>
<html>
<head>
|...<link rel="stylesheet" type="text/css" href="pg1_style.css"/>
</head>
<body>
|...<div>
|...|...<h1 class="h-center">Tourism</h1>
|...|...<p class="h-center">plan your trip wherever you want to go.</p>
|...|...<button>Get Started</button>
|...</div>
</body>
</html>
```

```
· # pg1_style.css > ...
.h-center{
|...text-align:center;
}
```

In [6]:

```
from IPython.display import Image
Image("E:/code/frontend/img/ex1.png")
```

Out[6]:

← → ↻ ⓘ File | D:/Desktop/sample%20templates/zpractice/class2/ex1.html

## Tourism

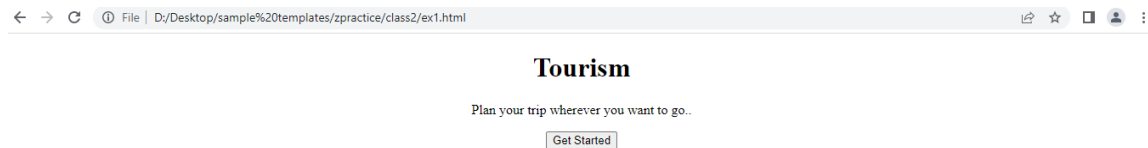
Plan your trip wherever you want to go..

Get Started

In [7]:

```
from IPython.display import Image
Image("E:/code/frontend/img/ex2.png")
```

Out[7]:

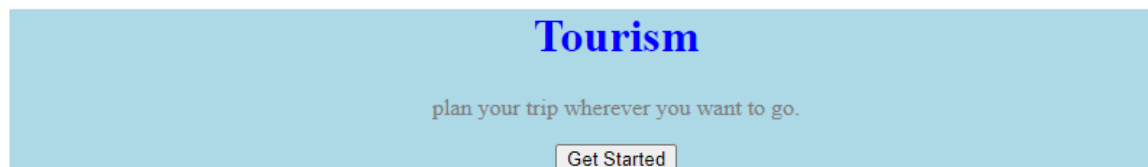


To move all elements at a time together we use container element called div

In [8]:

```
from IPython.display import Image
Image("E:/code/frontend/img/html6.png")
```

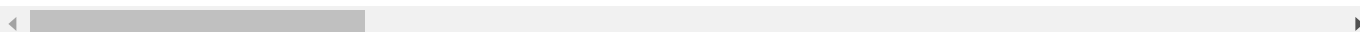
Out[8]:



### 3. Introduction to CSS part 3

#### 1. Font Family

- The CSS font-family property specifies the font for an element.
- add below in css file
- @import url("https://fonts.googleapis.com/css2?family=Bree+Serif&family=Caveat:wght@400;700&family=Lobster&family=Monoton&family=Open+Sans:ital(https://fonts.googleapis.com/css2?family=Bree+Serif&family=Caveat:wght@400;700&family=Lobster&family=Monoton&family=Open+Sans:it



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

- Value font-families-and-appearance

In [9]:

```
from IPython.display import Image  
Image("E:/code/frontend/img/html7.png")
```

Out[9]:

"Roboto"	<b>Tourism</b>
"Caveat"	<i>Tourism</i>
"Lobster"	<b><i>Tourism</i></b>
"Bree Serif"	<b>Tourism</b>
"Playfair Display"	<b>Tourism</b>
"Monoton"	<b>TOURISM</b>
"Playfair Display SC"	<b>TOURISM</b>

**Note:**

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

## 2. Font Size

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

**Note:**

- You must add px after the number in the value of the font-size property.
- There shouldn't be any space between the number and px.
- There shouldn't be any quotations around the value of the font-size property.

## 3. 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,
- font-style: normal; font-style: italic; font-style: oblique;

**Note:**

- There shouldn't be any spelling mistakes in the values of the font-style property.
- There shouldn't be any quotations around the value of the font-style property.

## 4. Font Weight

- The CSS font-weight property specifies how thick or thin characters in text should be displayed.
- font-weight: normal; bold; bolder; lighter; 100; 200; 300;

### Note:

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

## 5. Text Decoration

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

In [10]:

```
from IPython.display import Image
Image("E:/code/frontend/img/html8.png")
```

Out[10]:

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

### Note:

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

In [11]:

```
@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;0,700;1,700&family=Work+Sans:ital,wght@0,400;0,700;1,700&display=swap");
.h-center{
    text-align: center;
    background-color: lightblue;
}

.main-heading{
    color: blue;
    font-family: 'Roboto';
    font-size: 36px;
    font-style: normal;
    font-weight: bold;
    text-decoration: underline;
}

.paragraph{
    color: grey;
}
```

File "<ipython-input-11-6a528a6f6342>", line 1

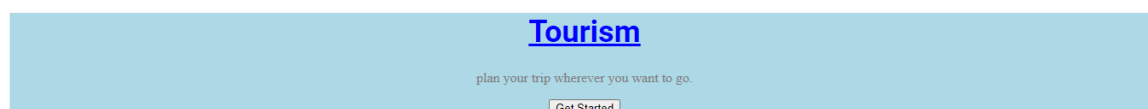
```
@import url("https://fonts.googleapis.com/css2?family=Bree+Serif&family=Caveat:wght@400;700&family=Lobster&family=Monoton&family=Open+Sans:ital,wght@0,400;0,700;1,400;1,700&family=Playfair+Display+SC:ital,wght@0,400;0,700;1,700&family=Playfair+Display:ital,wght@0,400;0,700;1,700&family=Roboto:ital,wght@0,400;0,700;1,400;1,700&family=Source+Sans+Pro:ital,wght@0,400;0,700;1,700&family=Work+Sans:ital,wght@0,400;0,700;1,700&display=swap");
^
```

**SyntaxError:** invalid syntax

In [12]:

```
from IPython.display import Image
Image("E:/code/frontend/img/ex4.png")
```

Out[12]:



## Topic 2: Intro to CSS Box Model part 1

### CSS Box Model :

- every HTML element on a web page is a rectangular box.
- if we want to curved the corners we use css

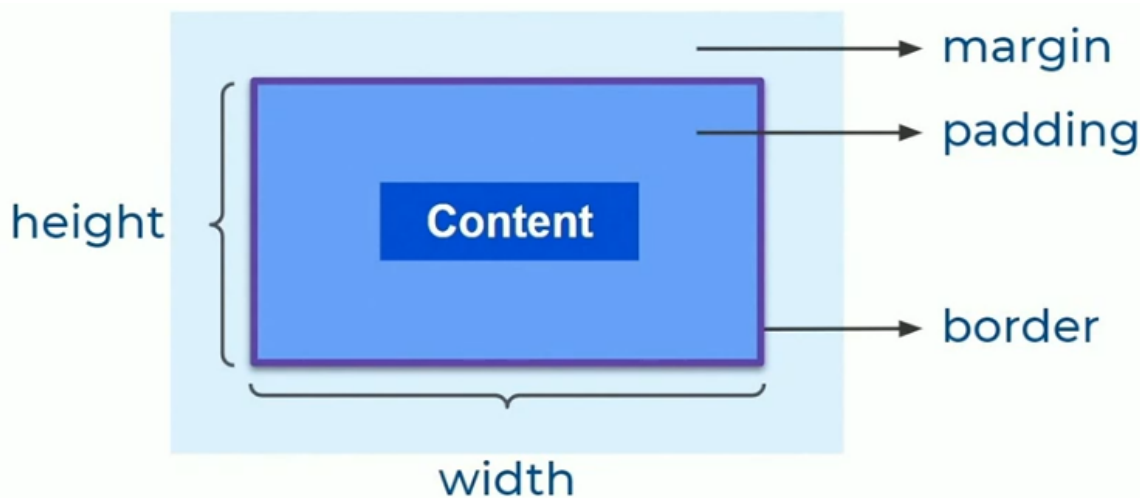
### CSS Box Properties

- Each rectangular box has different properties
  - height : rectangular box height
  - width : rectangular box width
  - margin : space above the rectangular box
  - border : rectangular box border
  - padding : space between the content and border of the rectangular box

In [13]:

```
from IPython.display import Image
Image("E:/code/frontend/img/html9.png")
```

Out[13]:



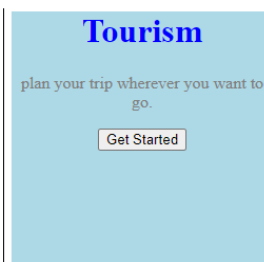
In [14]:

```
from IPython.display import Image
Image("E:/code/frontend/img/html10.png")
```

Out[14]:

```
<> pg1_tourism_main_page.html > ...
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" type="text/css" href="pg1_style.css"/>
</head>
<body>
<div class="h-center">
<h1 class="main-heading">Tourism</h1>
<p class="paragraph">plan your trip wherever you want to go.</p>
<button>Get Started</button>
</div>
</body>
</html>
```

```
# pg1_style.css > ...
@import url("https://fonts.googleapis.com/css?family=Roboto:400,500,700");
.h-center{
text-align:center;
background-color: lightblue;
height: 250px;
width:250px;
}
.main-heading{
color: blue;
}
.paragraph{
color: grey;
}
```





# CSS Background Properties

## 1. Background Image

- The CSS background-image property specifies the background image of an HTML element.
- `.h-center { background-image: url("D:/Tech/0.UI/code/HtmlCss1/img/ocean.jpg"); }`

### Note:

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

## 2. Background Size

- The CSS background-size property specifies the size of the background image of an HTML element.
- `.h-center { background-size: cover; }`

### Note:

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

# 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).
- `.h-center { 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).
- `.h-center { width: 100vw; }`

### Note:

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

In [15]:

```
from IPython.display import Image
Image("E:/code/frontend/img/html11.png")
```

Out[15]:

```
# pg1_style.css > .h-center
@import url("https://fonts.googleapis.com/css2?family=Bree+Serif&fami:
.h-center{
  text-align: center;
  height: 100vh;
  background-size: cover;
  background-image: url("D:/Tech/0.UI/code/HtmlCss1/img/ocean.jpg");
}

.main-heading{
  color: blue;
}

.paragraph{
  color: grey;
}
```



How to get url of an images : <https://www.freepik.com/> (<https://www.freepik.com/>)

## Intro to Box Model part 2

- Adding background image to a container
- Adding background color to a card
- Styling a Button
  - adding height and width to button
  - adding background color to the button
  - adding color to the button text
  - add rounded corners to the button(border-radius)
  - achieve the button without a border(border-width)
- How to get rounded corners to entire card(border-top-left-radius, border-top-right-radius)
- how to get spacing inside the card b/w button(padding)

## CSS Border Properties

### 1. 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.

#### Note:

- 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.

### 2. 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.
- `border-top-left-radius`, `border-top-right-radius`, `border-bottom-left-radius`, `border-bottom-right-radius`

#### Note:

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

### 3. 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; }`

#### Note:

- 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 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.
- `dotted`, `dashed`, `solid`, `none` (default)

### 5. Padding

- The CSS padding property specifies the space around the content of an HTML element.
- `.card { padding: 10px; }`

## CSS Colors

### 1. 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.

### 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.

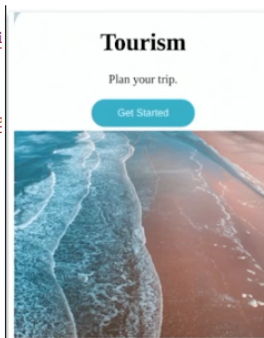
In [16]:

```
from IPython.display import Image
Image("E:/code/frontend/img/html12.png")
```

Out[16]:

```
<> pg2_tourism_main_page.html > ...
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" type="text/css" href="pg2_style.css"/>
</head>
<body>
<div class="bg-container">
<div class="card">
<h1>Tourism</h1>
<p>plan your trip wherever you want to go.</p>
<button class="button">Get Started</button>
</div>
</div>
</body>
</html>
```

```
# pg2_style.css > ...
@import url("https://fonts.googleapis.com/css?family=Roboto:400,700");
.bg-container{
height: 100vh;
background-size: cover;
background-image: url("D:/Tech/E");
}
.card{
text-align: center;
background-color: white;
border-top-left-radius: 25px;
border-top-right-radius: 25px;
padding: 5px;
}
.button{
height: 36px;
width: 138px;
background-color: #25b1cc;
color: white;
border-radius: 25px;
border-width: 0px;
}
```



### Task: ToDoList page

In [17]:

```
from IPython.display import Image
Image("E:/code/frontend/img/htmlpractice1.png")
```

Out[17]:

```
> <> practice1_todolist.html > ...
<!DOCTYPE html>
<html>
<head>
|...<link rel="stylesheet" type="text/css" href="practice1_style.css"/>
</head>
<body>
|...<div class="todo-bg-container">
|...<h1 class="main-heading"> Todolist </h1>
|...<p class="main-description"> Each day I will accomplish one thing on my todolist.</p>
|...<h4 class="sub-heading"> Read a Book </h4>
|...<p class="sub-description"> I don't think that human race will survive the
|...next thousand years, unless we spread into space.
|...There are too many accidents that can behalf life on
|...a single planet. But I'm an optimist...
|...</p>
|...<div class="button-c">
|...<button class="button"> Start </button>
|...</div>
|...<p class="end-description"> Don't skip introduction </p>
|...</div>
</body>
</html>
```

In [18]:

```
from IPython.display import Image
Image("E:/code/frontend/img/htmlpractice2.png")
```

Out[18]:

```
> # practice1_style.css > $ .end-desc > # practice1_style.css > ...
@import url("https://fonts.g...
.todo-bg-container{
|... background-image: url("D:
|... height: 100vh;
|... background-size: cover;
}

.main-heading{
|... color: white;
|... font-family: "Roboto";
|... font-size: 38px;
|... text-align: center;
}

.main-description{
|... color: #d7dbd9;
|... font-family: "Roboto";
|... font-size: 14px;
|... padding: 12px;
}

.sub-heading{
|... color: white;
|... font-family: "Roboto";
}

.sub-description{
|... color: white;
|... font-family: "Roboto";
|... font-size: 14px;
}

.button{
|... height: 32px;
|... width: 75px;
|... color: white;
|... background-color: orange;
|... font-family: "Roboto";
|... font-size: 16px;
}

.button-c{
|... text-align: center;
}

.end-description{
|... color: #ffffff;
|... font-family: "Roboto";
|... text-align: center;
|... text-decoration: underline;
}
```

