

# USER INTERFACE AND USER EXPERIENCE (UI/UX)



# What is our GOAL for this MODULE?

We learned to style a website using Bootstrap framework applying it to various embedded elements on the personal portfolio website.

# What did we ACHIEVE in the class TODAY?

• Styled website elements with Bootstrap.

# Which CONCEPTS/ CODING BLOCKS did we cover today?

- **Bootstrap:** Bootstrap is used for building a website framework efficiently. It helps to make our website responsive.
- **Responsive:** The website will look proper in all devices from bigger screens of the laptop to a small screen of mobile.

#### How did we DO the activities?

1. For using Bootstrap we need to include 3 links inside the head section of html.

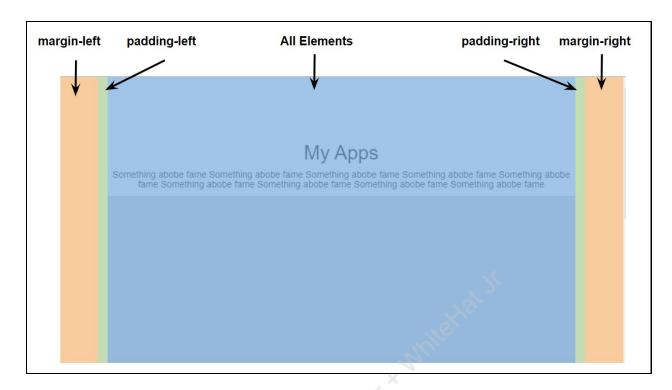
```
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/css/bootstrap.min.css">
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/js/bootstrap.min.js"></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></scr
```

Two of these links are for using javascript functionality and 1 link is for using css functionality.

- 2. In Bootstrap any code which we write will come inside the class container div.
  - Container will add a margin-left, margin-right, padding-right and padding-left to all the elements inside it.

```
<div class="container">
```





Container class tag is already added in the code for you.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <link rel="stylesheet" type="text/css" href="style.css">
  <link rel="stylesheet"</pre>
 href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/js/bootstrap.min.js">
  </script>
</head>
<body>
<div class="container">
    <section id="app">
        <h1>Apps</h1>
        <div class="line"></div>
        <iframe width="400" height="620" style="border: 0px;"</pre>
        src="https://studio.code.org/projects/applab/AmAIOlod-
        80aGvVFcBdbfjebPGUlVaYjI8ECZcJtZks/embed"></iframe>
        <iframe width="400" height="620" style="border: 0px;"</pre>
        src="https://studio.code.org/projects/applab/U9AQsuLnTixFr5caYUBM9qmkuaPCvmuWblFMcUP
        rC14/embed"></iframe>
    </section>
```



This website has 3 parts:

- 1. Apps you have built (Which is already given.)
- 2. Games you have built.
- 3. Showing your Play Store apps available for download.

Let's move to the second part of the website.

## 1. HTML:

- **h2 tag**: For the heading of the games section.
- **h5 tag**: For the description of the games section.
- 2. Now we will start with the bootstrap slideshow.
  - Wrap the whole code of the slideshow of games section inside a div which is
     <div id="myCarousel" class="carousel slide" data-ride="carousel" >
    - In this, we have given an **id** that is for the **identification** of this slideshow.
    - Then the class carousel slide helps to add a CSS transition and animation effect, which makes the items move when the next or previous buttons are clicked.
    - Then **data-ride="carousel"** attribute tells Bootstrap to begin animating the carousel immediately when the page loads.
    - Then we have to add all the images and links of the slide show inside
       div class="carousel-inner"> one by one.



- class="carousel-inner" says that all the contents of the slides will be inside this div.
- Then we will wrap the first slide we need to show as soon as the page loads inside <div class="item active">
  - Class **item** will define the contents of the slide and **active** means this slide will be shown first when the page loads.
  - So inside this div, we can place whatever we want to be shown on the first slide.
- We will be putting an **image tag** wrapped inside **anchor tag** so we will have the image of our game and anchor tag will have the **link of the game**.
- Then we will put some text content for this slide to be shown on the slide, inside <div class="carousel-content">
  - carousel-content means it will contain the text content of the respective slide.
- After the first slide, we will add our 2nd slide. Everything will be the same as we did while adding slide 1. The only difference will be:
  - o instead of <div class="item active"> we will have <div class="item">
  - As this slide does not have an active class, this will not be an active slide and will not appear when the page loads as we want only the first slide to load and displayed when the page load so we sent only the first slide to active item.

• Like this, we can keep adding 'n' number of slides we want.



- 3. Now we start with the second part navigation of the slideshow. We will add the next and previous button to it.
  - So for the next and previous button we will have 2 anchor tags respectively.

```
<a class="left carousel-control" href="#myCarousel" data-slide="prev">
    <span class="glyphicon glyphicon-chevron-left"></span>
  </a>
```

- Previous button:
  - class="left carousel-control"
    - **left** says it should be placed on the left of the screen.
    - **carousel-control** gives the style to the anchor tag.
  - href="#myCarousel": in href we pass the id of the slideshow for the reference so that this anchor tag knows which window to refer to when it is clicked.
  - o data-slide="prev": This gives the functionality of getting the previous slide
- Follow the same for Next Button.

```
<a class="right carousel-control" href="#myCarousel" data-slide="next">
  <span class="glyphicon glyphicon-chevron-right"></span>
  </a>
```

4. Now we will code CSS for this slider.

```
#myCarousel
{
    background-color: red;
}

#myCarousel img
{
    height: 300px;
    margin-top: 35px;
}
```

- We will give CSS to the main div of the slider where we gave Id = "myCarousel"
  - We are setting the background color to red.



- We will give CSS to the **image** inside the slider where we gave **Id = "myCarousel"** 
  - We have given a fixed **height of 300 px** to all the images of this div.
  - And margin-top: 35px;

```
.carousel-inner p
{
    margin-bottom: 15px;
    margin-top: 15px;
    color: white;
    font-size: 20px;
}
```

# What's NEXT?

We will learn to simulate the effect of the astrophysical concept of solar distance and to express it in terms of light minutes and light-years.

#### **EXTEND YOUR KNOWLEDGE**

Here are Few Best Reference Links we complied to extend your knowledge about the concept we learnt today in the class. This will help you become pro at coding and creating industry-grade tech products

**Short Videos:** Watch these Short Videos to Understand the Class Concepts Applied in Real World Applications.

- 1. Full Stack Web Development: <a href="https://www.youtube.com/watch?v=d7Aww1g6PkE">https://www.youtube.com/watch?v=d7Aww1g6PkE</a>
- 2. Bootstrap CSS Container: <a href="https://www.youtube.com/watch?v=m570jpmS4]A">https://www.youtube.com/watch?v=m570jpmS4]A</a>
- 3. Bootstrap Carousel Tutorial: <a href="https://www.youtube.com/watch?v=cncBpfyRkUs">https://www.youtube.com/watch?v=cncBpfyRkUs</a>

Coding Playground: Try Out These code examples yourself to deepen your knowledge.

What is Bootstrap: <a href="https://www.w3schools.com/whatis/whatis\_bootstrap.asp">https://www.w3schools.com/whatis/whatis\_bootstrap.asp</a>
Bootstrap for Carousel: <a href="https://www.w3schools.com/bootstrap/bootstrap\_carousel.asp">https://www.w3schools.com/bootstrap/bootstrap\_carousel.asp</a>