

APPLYING BOOTSTRAP



What is our GOAL for this MODULE?

We learned to enhance the e-portfolio website by adding a responsive blog to it while applying bootstrap classes to all the elements of the website thus developing advanced UX design skills.

What did we ACHIEVE in the class TODAY?

- Developed a blog with bootstrap design classes

Which CONCEPTS/ CODING BLOCKS did we cover today?

- Container class.
- Concepts of col-lg, col-md, col-sm and col-xs.
- 12 column concept of bootstrap.
- Bootstrap collapse concept.

How did we DO the activities?

We have already created the menu bar in the last class. So today we will create the travel section and movie review section.

Let's begin with making a responsive BLOG page.

1. First, make a new folder with the name of a responsive blog.
2. Open brackets and make index.html and style.css and save it inside the folder which we just created.
 - So first in index.html, we will write the default code which is HTML tag, head tag, title tag, and body tag.
 - Give the title inside the index.html.
 - Then inside the head section:
 - include the Bootstrap links, font awesome links and the style.css

Menu Bar

1. Update the menu name and their id as given below in the code which was given to you in the class 68

```
<div class="collapse navbar-collapse" id="myNavbar">
  <ul class="nav navbar-nav">
    <li><a href="#travel">Travel</a></li>
    <li><a href="#movies">Movies</a></li>
    <li><a href="#environment">Environment</a></li>
    <li><a href="#books">Books</a></li>
    <li><a href="#aboutMe">About Me</a></li>
  </ul>
</div>
```

2. Now make a div with a class container, this class container is a bootstrap class which will help us to put margin-left, margin-right, padding-left and padding-right.

Travel Section

```
<div class="page-header" id="travel">
  <h2 class="text-capitalize">places must visit</h2>
</div>
```

1. Put the header inside a div.
 - **class="page-header"**, this is a Bootstrap class which adds-
 - **padding-bottom: 9px;**
 - **margin: 40px 0 20px;**
 - **border-bottom: 1px solid #eee;**
 - This class gives div padding and margin for better alignment and **border-bottom: 1px solid #eee;** for a good look and feel at the bottom of the div.
 - **id="travel"**, we have given this div an identification using id, which is called inside the menu item->anchor tag.
 - Inside this div, we have an **h2 tag** that contains the heading of the travel section.
 - h2 tag has a **class="text-capitalize"** which is a Bootstrap class. This class **capitalizes** the first letter of every word.

First Travel Place

1. Html code:

```

<center>
  <div class="travel_mainDiv">
    

    <h4 class="text-capitalize"><kbd>prithvi cafe</kbd></h4>

    <hr >

    <h5 class="text-success text-left text-capitalize" >i had visited in dec
    2018</h5>

    <p class="text-muted text-left" >Quaint little restaurant tucked inside a by-
    lane of Juhu. Blink and you will miss the entrance to the cafe. So be alert
    enough to spot the black signboard that says "Prithvi cafe" while you are on the
    main road. The restaurant has a reasonably good menu at reasonable prices. The
    food is delicious, the servings are quite large and some dishes can be shared by
    2 people. Attracts quite a trendy crowd of aspiring celebrities on show days.
    Be sure to book in advance to avoid disappointments. On other days, the crowd
    there is pretty hep & happening. Hosts the famous "Prithvi theater fest", which
    you must attend if possible. </p>
  </div>
</center>

```

```

<center>
  <div class="travel_mainDiv">

```

- We will wrap everything inside the center **tag**, so that every content comes at the center of the page.
- We will create a div inside the center tag with class **trave_mainDiv**.

2. CSS of travel_mainDiv:

```

.travel_mainDiv
{
  border: 1px solid #c7c7c7;
  padding-left: 0px;
  padding-right: 0px;
  float: none
}

```

- We are giving:
 - A border of **1px** with light grey color.
 - **padding-left and padding-right** of 0px because we want that the image inside the travel touches the borders of the div.
 - **float: none** because we want the content not to float anywhere but remain in the center.

```

```


- Now we have our image tag, which has bootstrap **class="img-responsive"**. This class will automatically resize the image as per the screen so no matter what the screen size is, it will fit inside that screen without spilling out.
- CSS of the image:

```
.travel_mainDiv img
{
  width: 100%;
}
```

- We are setting the width to 100% for the img tag which is inside the div of travel_mainDiv.

```
<h4 class="text-capitalize"><kbd>prithvi cafe</kbd></h4>
```

- Now we have our name of the place, which is inside 2 tags **h4** and **kbd**.
 - h4 tag has **class="text-capitalize"**. This bootstrap class **capitalizes** the first letter of every word.
 - Inside h4 tag we have **kbd** tag. This is an HTML tag but bootstrap adds some styling to make it look like the following:



- Adds **padding** to the text.
- Increases the **font size**.
- Adds **border-radius** to it.
- Changes the **color** and **background-color** of it.

- Now we will add an **hr tag** which is shown below the name of the place.

```
<h4 class="text-capitalize"><kbd>prithvi cafe</kbd></h4>
<hr >
```

7. CSS of hr tag:

```
.travel_mainDiv hr  
{  
    width: 230px;  
}
```

- We give the width of 230px so that it does not cover big space on the screen.
- After hr tag, we have an **h5 tag** with some bootstrap classes. This tag is used to hold the date of the visit.

8. Then we have a h5 tag which will hold the date we visited.

```
<h5 class="text-success text-left text-capitalize" >i had visited in dec  
2018</h5>
```

- **text-success** will add green color to the text.
- **text-left** aligns text to the left.
- **text-capitalize** makes capitalizes the first letter of every word.

9. The last tag we have is a **p tag** which holds the description of the tag with it's bootstrap classes.

```
<p class="text-muted text-left" >Quaint little restaurant tucked inside a by-
```

- **text-muted** adds light grey color to the text.
- **text-left** aligns the text to the left.

10. CSS of the p tag:

```
.travel_mainDiv h5 , .travel_mainDiv p  
{  
    margin-left: 20px;  
}
```

- We are adding a 20px margin-left to the p tag to make it look aligned and good on screen.

Movie Review Section

1. Code:

```
<div class="page-header" id="movies">
  <h2 class="text-capitalize">review on the movies</h2>
</div>
```

2. We are putting the header inside a div.

- **class="page-header"**, this is a Bootstrap class which adds
 - **padding-bottom: 9px;**
 - **margin: 40px 0 20px;**
 - **border-bottom: 1px solid #eee;**
- This class gives div padding and margin for better alignment and **border-bottom: 1px solid #eee;** for a good look and feel at the bottom of the div.
- **id="movies"**, we have given this div an identification using id, which is called inside the menu item->anchor tag.
- Inside this div, we have an **h2 tag** that contains the heading of the travel section.
 - h2 tag has a **class="text-capitalize"** which is a Bootstrap class. This class **capitalizes** the first letter of every word.

First movie review section

1. Code for heading:

```
<div class="page-header" id="movies">
  <h2 class="text-capitalize">review on the movies</h2>
</div>
```

2. We are putting the header inside a div.

- **class="page-header"** - This is a Bootstrap class which adds:
 - **padding-bottom: 9px;**
 - **margin: 40px 0 20px;**
 - **border-bottom: 1px solid #eee;**
- This class gives div padding and margin for better alignment and bottom border of 1 pixel for a good look and feel at the bottom of the div.
- **id="movies"** - We have given this div an identification using id, which is called inside the menu item -> anchor tag.
- Inside this div, we have a h2 **tag** that contains the heading of the travel section.
 - h2 tag has a **class="text-capitalize"** which is a Bootstrap class. This class **capitalizes** the first letter of every word.

3. Code:

```

<div class="bg-primary movie_head" data-toggle="collapse" data-target="#avengers_endgame" >
  <span class="glyphicon glyphicon-film" ></span> Avengers Endgame<i class="fa fa-sort-
desc" ></i>
</div>

<div id="avengers_endgame" class="collapse">

  <div class="col-lg-3 col-md-3 col-sm-3 col-xs-12">
    
  </div>

  <div class="col-lg-9 col-md-9 col-sm-9 col-xs-12 movie_text" >
    <h5 class="text-success text-left text-capitalize">Excellent film to culminate MCU
ride
    <span class="glyphicon glyphicon-star" ></span>
    <span class="glyphicon glyphicon-star" ></span>
    <span class="glyphicon glyphicon-star" ></span>
    <span class="glyphicon glyphicon-star" ></span>
    <span class="glyphicon glyphicon-star" ></span>
  </h5>
    <p>Saw it today with my kids and they loved it.You should have a minimal previous
understanding of the movies or you'll miss 40% of the fun.At minimum:Infinity
WarCivil WarBlack PantherAge ofAnt Man and the WaspProblem is that the whole movie
is homage to all movies. Yet you will enjoy it a lot.There is at the beginning of
the movie a (spoiler alert) head dismemberment that is quite impressive. But most
is comic book style figand battles.Must go to bathroom just before the movie
because ut does last 3 hours all worthwhile.</p>
  </div>
</div>

<div class="bg-primary movie_head" data-toggle="collapse" data-target="#avengers_endgame" >
  <span class="glyphicon glyphicon-film" ></span> Avengers Endgame<i class="fa fa-sort-
desc" ></i>
</div>

```

- This div has a bootstrap class to apply bootstrap design and an extra class to apply css design as per our need. Remember you can enhance bootstrap design by apply your own css as well
 - **bg-primary** is a bootstrap class which adds color white and background-color blue to the div.
 - **movie_head** - Here is the CSS added for this.

4. CSS:

```

.movie_head
{
    font-size: 20px;
    padding: 6px 22px;
    border-radius: 10px;
    margin-bottom: 15px;
}

```

- We are increasing font-size, adding some padding, having some border-radius, and giving some margin-bottom.
- Then inside div we have:
 - **data-toggle="collapse"** - It tells the div that there is something that will open when the div is clicked .
 - **data-target="#avengers_endgame"** - It tells the div, that when div is clicked the div with the **id = avengers_endgame** should open.

```
<span class="glyphicon glyphicon-film" ></span> Avengers Endgame<i class="fa fa-sort-desc" ></i>
```

5. We have added span inside this div, which holds a movie icon. This span has a bootstrap class **glyphicon glyphicon-film** to get the film icon.
6. Then we have a movie name followed by an **i tag**. This tag uses font called 'awesome', to show the icon on the right of the div.
7. CSS of this i tag: We want this icon to be on the right that is why we have used **float: right**.

```
.movie_head i
{
float: right;
}
```

This completes the movie name.

8. Now we will add HTML code for the content of movie review.

```
<div id="avengers_endgame" class="collapse">
```

- First we have a div that will hold the whole content of movie review.
 - This div has a bootstrap **id="avengers_endgame"**. This is for identification of this div.
 - This div has a class **collapse**. This will hide the content of the div unless someone clicks on the div **data-target="#avengers_endgame"**.


```
<div id="avengers_endgame" class="collapse">

  <div class="col-lg-3 col-md-3 col-sm-3 col-xs-12">
    
```

9. Now we have another div and this **div** has bootstrap class **col-lg-3 col-md-3 col-sm-3 col-xs-12**.

This is how we add responsive effect to this element based on different screen size:

- If the user is using a computer or any screen with width 1200px or greater.
 - **col-lg-3 (24.99% of the screen):** because we want that on screen more than 1200px, the image should be small and text can also fit in the same line.
- **col-lg-3** - This means that on the screen size 1200px or more, the width of this div will be **24.99%** of the screen.
 - $(100 / 12 = 8.33)$ 100 is the size of the screen and 12 is the total column used by bootstrap.
 - $(8.33 * 3 = 24.99\%)$ 8.33 is the value of 1 column, 3 is the number of the column we have assigned to this div [col-lg-3]
- Any screen which is 1200px to 992 px or kind of a tablet screen then
 - **col-md-3 (24.99% of the screen):** because we want that on screen between 1200px to 992px, the image should be small and text can also fit in the same line.
- **col-md-3** - This means that on the screen size between 1200px to 992px the width of this div will be **24.99%** of the screen.
 - $(100 / 12 = 8.33)$ 100 is the size of the screen and 12 is the total column used by bootstrap.
 - $(8.33 * 3 = 24.99\%)$ 8.33 is the value of 1 column, 3 is the number of the column we have assigned to this div [col-md-3]
- If a user is using a even smaller screen like a big screen phone then
 - **col-sm-3 (24.99% of the screen):** because we want that on screen between 992px to 768px, the image should be small and text can also fit in the same line.
- **col-sm-3** - This means that on the screen size between 992px to 768px the width of this div will be **24.99%** of the screen.
 - $(100 / 12 = 8.33)$ 100 is the size of the screen and 12 is the total column used by bootstrap.
 - $(8.33 * 3 = 24.99\%)$ 8.33 is the value of 1 column, 3 is the number of the column we have assigned to this div [col-sm-3]

- If the user is using very small screen phone then
 - **col-xs-12 (almost 100% of the screen)**: because we want that on screen between 768px and 0px, the image to be big enough to sit alone on the single line.
- **col-xs-12** - This means that on the screen size between 768px to 0px the width of this div will be almost **100%** of the screen.
 - $(100 / 12 = 8.33)$ 100 is the size of the screen and 12 is the total column used by bootstrap.
 - $(8.33 * 12 = 99.96\%)$ 8.33 is the value of 1 column, 12 is the number of the column we have assigned to this div [col-xs-12]

```
<div id="avengers_endgame" class="collapse">

  <div class="col-lg-3 col-md-3 col-sm-3 col-xs-12">
    
  </div>
```

10. Inside this div we have an **img tag** which holds the image of the movie. It has the following bootstrap class.

- **img-responsive** - We have already discussed.
- **img-thumbnail** - This class will help the image look like a small icon or size of the thumbnail by adding padding and border color.

```
<div id="avengers_endgame" class="collapse">

  <div class="col-lg-3 col-md-3 col-sm-3 col-xs-12">
    
  </div>

  <div class="col-lg-9 col-md-9 col-sm-9 col-xs-12 movie_text" >
```

11. Then we have another div. This div will hold the text content of the movie review. It has bootstrap class **col-lg-9 col-md-9 col-sm-9 col-xs-12 movie_text**

We have given:

- **col-lg-9(74.97% of the screen)** because we want the content of movie review should be small so that it fits with the image on the same line, on screen more than 1200px
- **col-lg-9** - this means that in the screen size 1200px and more the width of this div will be **74.97%** of the screen
 - $(100 / 12 = 8.33)$ 100 is the size of the screen and 12 is the total column used by bootstrap.
 - $(8.33 * 9 = 74.97\%)$ 8.33 is the value of 1 column, 9 is the number of the column we have assigned to this div [col-lg-9]

- **col-md-9(74.97% of the screen)** because we want the content of movie review should be small so that it fits with the image on the same line, on screen between 1200px to 992px
- **col-md-9** - this means that in the screen size between 1200px to 992px the width of this div will be **74.97%** of the screen
 - $(100 / 12 = 8.33)$ 100 is the size of the screen and 12 is the total column used by bootstrap.
 - $(8.33 * 9 = 74.97\%)$ 8.33 is the value of 1 column, 9 is the number of the column we have assigned to this div [col-md-9]
- **col-sm-9(74.97% of the screen)** because we want the content of movie review should be small so that it fits with the image on the same line, on screen between 992px to 768px
- **col-sm-9** - this means that in the screen size between 992px to 768px the width of this div will be **74.97%** of the screen
 - $(100 / 12 = 8.33)$ 100 is the size of the screen and 12 is the total column used by bootstrap.
 - $(8.33 * 9 = 74.97\%)$ 8.33 is the value of 1 column, 9 is the number of the column we have assigned to this div [col-sm-9]
- **col-xs-12** (almost **100%** of the screen) because now the content of movie review should be big enough to sit alone on the single line, on screen between 768px and 0px
- **col-xs-12** - this means that in the screen size between 768px to 0px the width of this div will be almost **100%** of the screen
 - $(100 / 12 = 8.33)$ 100 is the size of the screen and 12 is the total column used by bootstrap.
 - $(8.33 * 12 = 99.96\%)$ 8.33 is the value of 1 column, 12 is the number of the column we have assigned to this div [col-xs-12]

```
<div class="col-lg-9 col-md-9 col-sm-9 col-xs-12 movie_text" >
  <h5 class="text-success text-left text-capitalize">Excellent film to culminate MCU
  ride
```

12. Now inside the div with class **movie_text**, first we have a **h5 tag** that will contain the head text of the description.

- Classes of h5 tag:
 - **text-success** will add green color to text.
 - **text-left** aligns the text to the left.
 - **text-capitalize** capitalizes the first letter of every word.

```
<div class="col-lg-9 col-md-9 col-sm-9 col-xs-12 movie_text" >
  <h5 class="text-success text-left text-capitalize">Excellent film to culminate MCU
  ride
  <span class="glyphicon glyphicon-star" ></span>
  <span class="glyphicon glyphicon-star" ></span>
  <span class="glyphicon glyphicon-star" ></span>
  <span class="glyphicon glyphicon-star" ></span>
  <span class="glyphicon glyphicon-star" ></span>
</h5>
```

13. After the head of the description we have the stars for the movie as a way of displaying how nice the movie is, so 5 stars for good movie and 1 star for not so nice movie etc, so for that we use **span tag** with bootstrap **icon** class.

- This span tag is placed inside the h5 tag.
- **Span tag** has class **glyphicon glyphicon-star**, which imports a star icon automatically and we add orange color to the star by adding CSS as follows:
 - Bootstrap has inbuilt icons emojis and animations. We can just name them and they get applied to the html element. We need not to import them as we do in case of images. That's why Web Developers prefer to use bootstrap more as it saves a lot of coding time.

```
.movie_text span
{
color: #ff7700;
}
```

14. Now we add a **p tag** which holds the text of the movie review.

```
<h5 class="text-success text-left text-capitalize">Excellent film to culminate MCU
ride
<span class="glyphicon glyphicon-star" ></span>
<span class="glyphicon glyphicon-star" ></span>
<span class="glyphicon glyphicon-star" ></span>
<span class="glyphicon glyphicon-star" ></span>
<span class="glyphicon glyphicon-star" ></span>
</h5>
<p>Saw it today with my kids and they loved it.You should have a minimal previous
```

What's NEXT?

We will further enhance the e-portfolio website by adding a responsive blog to it while applying bootstrap classes to all the elements of the website.

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. Grid System in Bootstrap: <https://www.youtube.com/watch?v=NYeixTazk1c>
2. Bootstrap Accordion: <https://www.youtube.com/watch?v=LxUACFT8QEY>
3. Responsive Images in Bootstrap: https://www.youtube.com/watch?v=OEJHPxyc_ps

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

1. : https://www.w3schools.com/bootstrap/bootstrap_grid_system.asp
2. : https://www.w3schools.com/bootstrap4/bootstrap_collapse.asp
3. : https://www.w3schools.com/Bootstrap/bootstrap_ref_css_images.asp