

Exercise: Responsive Design and Bootstrap Grid System Part 2

Objectives and Outcomes

This exercise continues the examination of responsive design and Bootstrap support for mobile first responsive design through the use of the grid system. We also learn how to customize some of the Bootstrap classes through defining our own modifications in a separate CSS file. At the end of this exercise, you will be able to:

- Reordering Content using flex order
- Customize the CSS classes through your own additions in a separate CSS file
- Centering the content both vertically and horizontally within a row

Using Flex Order

- Using Flex ordering, we can achieve the same effect that we achieved with the push and pull classes above. To do this, you can update the two div classes above as follows:

```
1      <div class="col-sm-4 col-md-3 flex-last"> ... </div>
2
3      <div class="col-sm col-md flex-first"> ... </div>
4
```

List styles

- You can use several list styles to display lists in different formats. In this exercise, we will use the unordered list style *list-unstyled* to display the links at the bottom of the page without the bullets. To do this, go to the links in the footer and update the ul as follows

```
1      <ul class="list-unstyled"> ... </ul>
```

Using Custom CSS classes

We can define our own custom CSS classes in a separate CSS file, and also customize some of the built-in CSS classes. We will now attempt to do this in this part of the exercise.

- Create a folder named **css**. Then create a file named *styles.css* in the **css** folder. Open this file to edit the contents. Add the following CSS code to the file:

```
1  .row-header{
2      margin:0px auto;
3      padding:0px;
4  }
5
6  .row-content {
7      margin:0px auto;
8      padding: 50px 0px 50px 0px;
9      border-bottom: 1px ridge;
10     min-height:400px;
11 }
12
13 .footer{
14     background-color: #D1C4E9;
15     margin:0px auto;
16     padding: 20px 0px 20px 0px;
17 }
18
```

- Include the *styles.css* file into the head of the *index.html* file as follows:

```
1      <link href="css/styles.css" rel="stylesheet">
```

- Then add these classes to the corresponding rows in the *index.html* file as follows. See the difference in the *index.html* file in the browser. The first one is for the row in the <header>, the next three for the rows in the content, and the last one directly to the <footer> tag.

```
1      <div class="row row-header"> ... </div>
2
3      <div class="row row-content"> ... </div>
4
5      <div class="row row-content"> ... </div>
6
7      <div class="row row-content"> ... </div>
8
9      <footer class="footer"> ... </footer>
10
```

- Our next set of customization is to the jumbotron and the address. Add the following to *styles.css* file:

```
1  .jumbotron {
2      padding:70px 30px 70px 30px;
3      margin:0px auto;
4      background: #9575CD ;
5      color:floralwhite;
6  }
7
8  address{
9      font-size:80%;
10     margin:0px;
11     color:#0f0f0f;
12 }
13
```

Vertically Centering the Content

- In the content section, update all the rows as follows:

```
1      <div class="row row-content align-items-center">
```

- In the footer, update the third column div that contains the social media links as follows:

```
1      <div class="col col-sm-4 align-self-center">
```

Horizontally Centering the Content

- Update the copyright paragraph as follows:

```
1      <div class="row justify-content-center">
2      <div class="col-auto">
```

Applying Inline CSS

- Update the inner div containing the social media links as follows:

```
1      <div style="text-align:center">
```

- After saving all the changes, you can do a Git commit with the message "Bootstrap Grid Part 2" and push your changes to the online repository.

Conclusion

In this exercise, we continued our review of responsive design and the Bootstrap grid system. We also learnt how to customize using our own CSS classes.

Mark as completed



