# 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:

- · Customize the CSS classes through your own additions in a separate CSS file
- · Centering the content both vertically and horizontally within a row

#### 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

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

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

```
<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.

```
5
       color:floralwhite;
6 }
8 - address{
9 font-size:80%;
10
       margin:0px;
       color:#0f0f0f;
11
12 }
13
```

### Vertically Centering the Content

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

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

• Update the copyright paragraph as follows:

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

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

1 - <div class="text-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.