

Full Stack Application Development with Cloud Computing

Module 2 – Front-End Development Tools, Technologies and Frameworks

Lab - 2

Unit 4 – Front-End Frameworks - Bootstrap

Topic: Bootstrap Containers & Grid

Ex. 1: Creating a responsive layout using Bootstrap's containers and the grid system. Follow the instructions below to achieve the desired outcome:

Create an HTML page. Integrate Bootstrap into your HTML page by including the necessary CSS and JavaScript files from the provided Bootstrap.

```
<!DOCTYPE html>
<html>
<head>
  <title>Custom Styled Containers & Grid</title>
  <!-- Include Bootstrap CSS -->
  <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
  <!-- Custom CSS styles -->
  <style>
    body {
      background-color: #f0f0f0;
      font-family: Arial, sans-serif;
    }

    .container {
      margin-top: 50px;
    }

    .custom-header {
      text-align: center;
```

```

        background-color: #3498db;
        color: #fff;
        padding: 20px;
        border-radius: 10px;
        margin-bottom: 30px;
    }

    .custom-column {
        padding: 20px;
        border-radius: 10px;
        box-shadow: 0px 2px 5px rgba(0, 0, 0, 0.1);
        margin-bottom: 20px;
    }

    .custom-primary {
        background-color: #27ae60;
        color: #fff;
    }

    .custom-secondary {
        background-color: #e74fff;
        color: #fff;
    }

    h3 {
        margin-top: 0;
    }
</style>
</head>
<body>
    <!-- Custom Container for the main content -->
    <div class="container">
        <div class="custom-header">
            <h1>Custom Styled Layout with Containers & Grid</h1>
        </div>

```

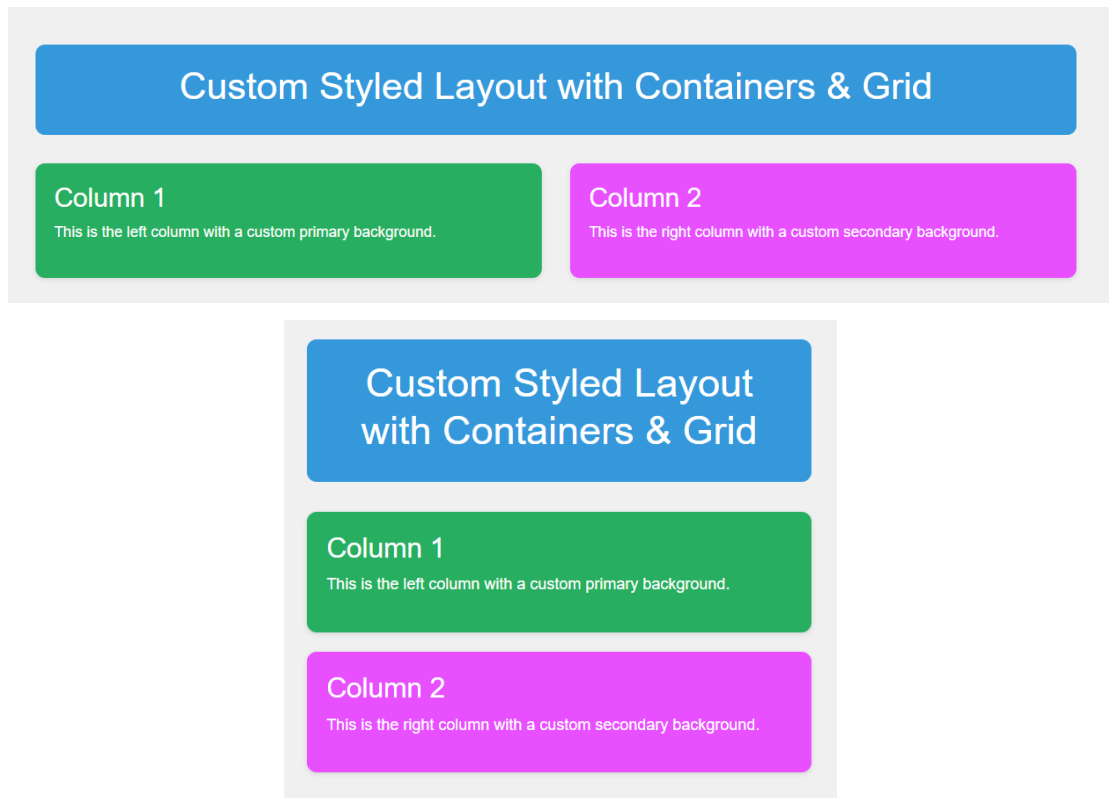
```

<!-- Custom Grid system for responsive layout -->
<div class="row">
  <div class="col-md-6">
    <div class="custom-column custom-primary">
      <h3>Column 1</h3>
      <p>This is the left column with a custom primary background.</p>
    </div>
  </div>
  <div class="col-md-6">
    <div class="custom-column custom-secondary">
      <h3>Column 2</h3>
      <p>This is the right column with a custom secondary
background.</p>
    </div>
  </div>
</div>

<!-- Include Bootstrap JS and Popper.js -->
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.16.0/umd/popper.min.js">
</script>
<script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></sc
ript>
</body>
</html>

```

Output:



Practice Question

Ex. 2: Creating a responsive layout for a portfolio webpage using Bootstrap's containers and the grid system.

- **Create an HTML page.**
- **Integrate Bootstrap into your HTML page by including the necessary CSS and JavaScript files from the provided Bootstrap**
- **Create a Bootstrap container to hold the main content.**
- **Divide the container into different columns using the Bootstrap grid system.**
- **Place an image inside each column.**
- **Apply custom CSS to style the images and text content. Use appropriate spacing, fonts, and colors to enhance the presentation.**