

# Full Stack Application Development with Cloud Computing

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

### Lab - 3

#### Unit 4 – Front-End Frameworks - Bootstrap

##### Topic: Bootstrap Properties

**Ex. 1: Build a web page using Bootstrap's container and card components to showcase product information. Apply custom CSS properties to style the cards with a unique background color, adjust the text color, and add padding to the content area. Additionally, ensure that the cards have a slight shadow to create a subtle visual effect.**

```
<!DOCTYPE html>
<html>
<head>
  <title>Styled Cards with Bootstrap</title>
  <!-- Include Bootstrap CSS -->
  <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
  <!-- Include custom CSS styles -->
  <style>
    body {
      background-color: #f8f9fa;
      font-family: Arial, sans-serif;
    }

    .custom-card {
      background-color: #3498db;
      color: #fff;
```

```
padding: 20px;
border-radius: 10px;
box-shadow: 0px 2px 5px rgba(0, 0, 0, 0.2);
}

h4 {
margin-top: 0;
}
</style>
</head>
<body>
<div class="container">
<div class="row">
<div class="col-md-4">
<div class="card custom-card">
<div class="card-body">
<h4 class="card-title">Item 1</h4>
<p class="card-text">High-quality and innovative.</p>
</div>
</div>
</div>
<div class="col-md-4">
<div class="card custom-card">
<div class="card-body">
<h4 class="card-title">Item 2</h4>
<p class="card-text">Elegance and functionality combined.</p>
</div>
</div>
</div>
<div class="col-md-4">
<div class="card custom-card">
<div class="card-body">
<h4 class="card-title">Item 3</h4>
```

```

        <p class="card-text">The ultimate solution for your needs.</p>
      </div>
    </div>
  </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"></scr
ipt>
</body>
</html>

```

### Output:



**Ex. 2: Design a webpage that utilizes Bootstrap's navigation bar and button components. Customize the navigation bar's background color, text color, and adjust the spacing between the navigation links. Apply CSS properties to style the button with a gradient background and rounded corners.**

```
<!DOCTYPE html>
<html>
<head>
  <title>Styled Navigation Bar and Button</title>
  <!-- Include Bootstrap CSS -->
  <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
  <!-- Include custom CSS styles -->
  <style>
    body {
      background-color: #f8f9fa;
      font-family: Arial, sans-serif;
    }

    .custom-navbar {
      background-color: #333;
      padding: 10px 0;
    }

    .navbar-dark .navbar-nav .nav-link {
      color: #fff;
      margin-right: 20px;
    }

    .custom-button {
      background: linear-gradient(to right, #3498db, #e74c3c);
      color: #fff;
      border-radius: 20px;
      padding: 10px 20px;
      border: none;
    }
  </style>
</head>
<body>
  <nav class="navbar navbar-expand-lg navbar-dark custom-navbar">
```

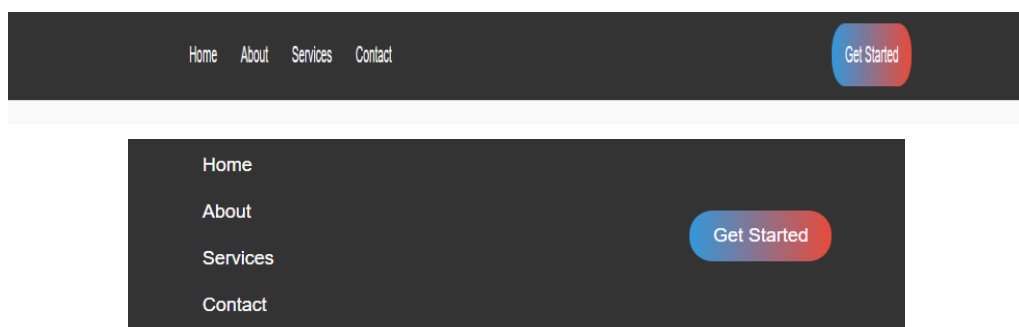
```

<div class="container">
  <ul class="navbar-nav">
    <li class="nav-item">
      <a class="nav-link" href="#">Home</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" href="#">About</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" href="#">Services</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" href="#">Contact</a>
    </li>
  </ul>
  <button class="btn custom-button">Get Started</button>
</div>
</nav>

<!-- 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"></script>
</body>
</html>

```

### Output:



## Practice Question

**Ex. 3: Create a product showcase page for an e-commerce website. Use Bootstrap's Card component to display product information. Customize the card's background color, text color, and add a border. Ensure that the product images maintain their aspect ratio within the card.**