

Hands-on Exercise Style and Layout a Website with CSS

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0.1 PART I: Individual Work

Exercise 1: Basic Styling

1. Create a new HTML file and link a CSS file:

- Create a file named `styles.css`.
- Link it in your HTML file (`index.html`):

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

2. Add a heading, paragraph, and an image:

- Add the following HTML to your `index.html`:

```
<section>
  <h1>Welcome to My E-commerce
Store</h1>
  <p>Discover our range of products
and shop online.</p>
  
</section>
```

3. Style the text and image using CSS properties:

- Add the following CSS to `styles.css`:

```
h1 {
  color: #333;
  font-family: Arial, sans-serif;
  text-align: center;
}

p {
  color: #666;
  font-size: 16px;
  line-height: 1.5;
  text-align: center;
}

img {
  display: block;
  margin: 0 auto;
```

```
max-width: 100%;
}
```

Exercise 2: Box Model

1. Create a box with content, padding, border, and margin:

- Add the following HTML to your index.html:

```
<div class="box">
  <p>This is a box with padding,
  border, and margin.</p>
</div>
```

2. Experiment with different values for padding, border, and margin:

- Add the following CSS to styles.css:

```
.box {
  padding: 20px;
  border: 2px solid #333;
  margin: 20px;
  background-color: #f9f9f9;
}
```

Exercise 3: Flexbox Layout

1. Create a flex container with multiple items:

- Add the following HTML to your index.html:

```
<div class="flex-container">
  <div class="flex-item">Item 1</div>
  <div class="flex-item">Item 2</div>
  <div class="flex-item">Item 3</div>
</div>
```

2. Use flex properties to arrange the items in different ways:

- Add the following CSS to styles.css:

```
.flex-container {
  display: flex;
  justify-content: space-around;
  align-items: center;
  padding: 20px;
  background-color: #e9e9e9;
}

.flex-item {
  padding: 20px;
  background-color: #ccc;
  border: 1px solid #333;
}
```

Exercise 4: Responsive Design

1. Create a responsive layout using media queries:

- Add the following CSS to styles.css:

```
@media (max-width: 600px) {
  .flex-container {
    flex-direction: column;
  }
}
```

2. Test the layout on different screen sizes:

- Resize your browser window to see the layout change.

0.2 Additional Tips:

- **Validate Your CSS:**
 - ▶ Use a CSS validator to ensure your code is correct and standards-compliant.
 - ▶ W3C CSS Validation Service
- **Test Your Pages:**
 - ▶ Test your web pages in different browsers to ensure compatibility.
- **Keep Practicing:**
 - ▶ Experiment with different styles and layouts to improve your CSS skills.

1 Part II: Using a Framework: Bootstrap

1.1 Exercise 5: Bootstrap Table

- **Objective:** Create a table with Bootstrap classes.
- **Instructions:**
 - Create a new HTML file and include Bootstrap via CDN.
 - Create a table and apply Bootstrap classes like `table`, `table-striped`, etc.

1.1.a Step 1: Setting Up Bootstrap

- **Include Bootstrap via CDN:**
 - Add the following `<link>` and `<script>` tags to the `<head>` section of your HTML file.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport"
content="width=device-width,
initial-scale=1.0">
  <title>Bootstrap Table
Exercise</title>
  <!-- Bootstrap CSS -->
  <link href="https://
cdn.jsdelivr.net/npm/bootstrap@
5.2.3/dist/css/bootstrap.
min.css" rel="stylesheet"
integrity="sha384-rbsA2VBKQhggwzxH7pPCaAq...9CUG65"
crossorigin="anonymous">
</head>
<body>
  <!-- Your content here -->

  <!-- Bootstrap JS and
dependencies -->
  <script src="https://cdn.
jsdelivr.net/npm/bootstrap@5.2.
3/dist/js/bootstrap.bundle.min.
```

```
js" integrity="sha384-kenU1KFdBIE4zVF0s0G1M5b4hcpxyL
crossorigin="anonymous"></
script>
</body>
</html>
```

1.1.b Step 2: Creating a Basic Table

- **Create a basic table:**
 - Add the following HTML inside the `<body>` tag.

```
<div class="container mt-5">
  <h2>Basic Bootstrap Table</h2>
  <table class="table">
    <thead>
      <tr>
        <th>Header 1</th>
        <th>Header 2</th>
      </tr>
    </thead>
    <tbody>
      <tr>
        <td>Data 1</td>
        <td>Data 2</td>
      </tr>
      <tr>
        <td>Data 3</td>
        <td>Data 4</td>
      </tr>
    </tbody>
  </table>
</div>
```

1.1.c Step 3: Adding Table Styles

- **Enhance the table with Bootstrap classes:**
 - Modify the table to include `table-striped` and `table-bordered` classes.

```
<div class="container mt-5">
  <h2>Styled Bootstrap Table</h2>
  <table class="table table-
```

```

striped table-bordered">
  <thead>
    <tr>
      <th>Header 1</th>
      <th>Header 2</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>Data 1</td>
      <td>Data 2</td>
    </tr>
    <tr>
      <td>Data 3</td>
      <td>Data 4</td>
    </tr>
  </tbody>
</table>
</div>

```

1.1.d Step 4: Adding More Features

- **Add hover effect and responsive table:**
 - Modify the table to include `table-hover` and `table-responsive` classes.

```

<div class="container mt-5">
  <h2>Enhanced Bootstrap Table</h2>
  <div class="table-responsive">
    <table class="table table-striped table-bordered table-hover">
      <thead>
        <tr>
          <th>Header 1</th>
          <th>Header 2</th>
        </tr>
      </thead>
      <tbody>
        <tr>
          <td>Data 1</td>
          <td>Data 2</td>
        </tr>
      </tbody>
    </table>
  </div>

```

```

    <tr>
      <td>Data 3</td>
      <td>Data 4</td>
    </tr>
  </tbody>
</table>
</div>

```

1.1.e Step 5: Adding Contextual Classes

- **Add contextual classes to rows:**
 - Modify the table to include `table-primary`, `table-secondary`, etc., for different row styles.

```

<div class="container mt-5">
  <h2>Contextual Bootstrap Table</h2>
  <div class="table-responsive">
    <table class="table table-striped table-bordered table-hover">
      <thead>
        <tr>
          <th>Header 1</th>
          <th>Header 2</th>
        </tr>
      </thead>
      <tbody>
        <tr class="table-primary">
          <td>Primary Data 1</td>
          <td>Primary Data 2</td>
        </tr>
        <tr class="table-secondary">
          <td>Secondary Data 1</td>
          <td>Secondary Data 2</td>
        </tr>
        <tr class="table-success">
          <td>Success Data 1</td>
          <td>Success Data 2</td>
        </tr>
        <tr class="table-danger">

```

```
        <td>Danger Data 1</td>
        <td>Danger Data 2</td>
    </tr>
</tbody>
</table>
</div>
</div>
```

Look at the code snippet in the official Bootstrap web site and experiment them : <https://getbootstrap.com/docs/5.3/examples/>

2 PART II: Group Work

- Once you have completed Part I, reform groups and add style to your project with CSS and bootstrap Final Project and Review, mainly Part I.
- Each group member should contribute to different sections style or components of the website.