

HTML, CSS and JAVASCRIPT

Assignment 1: Implement a navigation bar using an unordered list with links to different sections of your HTML page. Use CSS to style the list as a horizontal menu and highlight the current page or section.

HTML:

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Navigation Bar Example</title>

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

</head>

<body>

<nav>

<ul class="navbar">

<li><a href="#home">Home</a></li>

<li><a href="#about">About</a></li>

<li><a href="#services">Services</a></li>

<li><a href="#contact">Contact</a></li>

</ul>

</nav>

<div id="home">Home Section</div>

<div id="about">About Section</div>

<div id="services">Services Section</div>

<div id="contact">Contact Section</div>

</body>

</html>
```

CSS:

```
body {  
  font-family: Arial, sans-serif;  
  margin: 0;  
  padding: 0;  
}  
nav {  
  background-color: #ff0000;  
}  
.navbar {  
  list-style-type: none;  
  margin: 0;  
  padding: 0;  
  overflow: hidden;  
  .navbar li {  
    float: left;  
  }  
  .navbar li a {  
    display: block;  
    color: white;  
    text-align: center;  
    padding: 14px 16px;  
    text-decoration: none;  
  }  
  .navbar li a:hover, .navbar li a.active {  
    background-color: #111;  
  }  
}
```

Assignment 2: Create a simple HTML page that includes the use of headings, paragraphs, and at least two semantic tags like `h1` or `h2`. Add a table with data of your choice and a form with fields for a user's name, email, and a submit button.

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Simple Professional HTML Page</title>

  <style>

    body {

      font-family: Arial, sans-serif;

      margin: 20px;

      line-height: 1.6;

    }

    section, article {

      margin-bottom: 20px;

      padding: 10px;

      border: 1px solid #ccc;

    }

    table {

      width: 100%;

      border-collapse: collapse;

      margin-bottom: 20px;

    }

    th, td {

      border: 1px solid #ccc;

      padding: 8px;

      text-align: left;

    }

    form {
```

```
    max-width: 400px;

    margin-top: 20px;

    padding: 10px;

    border: 1px solid #ccc;
}

label {

    display: block;

    margin-bottom: 8px;
}

input[type="text"], input[type="email"] {

    width: 100%;

    padding: 8px;

    margin-bottom: 10px;

    box-sizing: border-box;
}

input[type="submit"] {

    background-color: #4CAF50;

    color: white;

    padding: 10px 20px;

    border: none;

    cursor: pointer;

    text-align: center;

    text-decoration: none;

    display: inline-block;

    font-size: 16px;
}

input[type="submit"]:hover {

    background-color: #45a049;
}

</style>
</head>
```

```
<body>

  <header>

    <h1>Simple Professional HTML Page</h1>

  </header>
```

```
<section>

  <h2>About</h2>

  <p>HTML page </p>

</section>
```

```
<section>

  <h2>Article</h2>

  <article>

    <h3>Article Title</h3>

    <p>Data required</p>

  </article>

</section>
```

```
<section>

  <h2>Data Table</h2>

  <table>

    <thead>

      <tr>

        <th>Name</th>

        <th>Age</th>

        <th>Location</th>

      </tr>

    </thead>

    <tbody>

      <tr>

        <td>Vardhan</td>
```

```
        <td>23</td>

        <td>MP</td>

    </tr>

    <tr>

        <td>Varsha</td>

        <td>23</td>

        <td>AP</td>

    </tr>

</tbody>

</table>

</section>
```

```
<section>

    <h2>Contact Form</h2>

    <form action="#" method="post">

        <label for="name">Name:</label>

        <input type="text" id="name" name="name" required>


        <label for="email">Email:</label>

        <input type="email" id="email" name="email" required>


        <input type="submit" value="Submit">

    </form>

</section>
```

```
<footer>

    <p HTML Page </p>

</footer>

</body>

</html>
```

Assignment 3: Apply the CSS box model to ensure that your page content has appropriate margins and padding. Create a layout using div tags and style them to arrange content in a multi-column format using floats or flexbox.

```
<!DOCTYPE html>

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title> CSS Layout</title>

  <style>

    body {

      font-family: Arial, sans-serif;

      line-height: 1.6;

      margin: 20px;

      background-color: #f9f9f9;

    }

    .container {

      max-width: 800px;

      margin: auto;

      padding: 20px;

      border: 1px solid #ddd;

      border-radius: 5px;

      background-color: #fff;

    }

    .section {

      margin-bottom: 20px;

      padding: 10px;

      border: 1px solid #ccc;

      border-radius: 5px;

    }

    .section-header {

      background-color: #f0f0f0;
```

```
padding: 8px;

border-bottom: 1px solid #ccc;

border-radius: 5px 5px 0 0;
}
```

```
.columns {

display: flex;

flex-wrap: wrap;

gap: 20px;
}
```

```
.column {

flex: 1;

background-color: #e0e0e0;

padding: 10px;

border: 1px solid #ccc;

border-radius: 5px;
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<div class="container">
```

```
<h1>Simple CSS Layout</h1>
```

```
<section class="section">
```

```
<div class="section-header">
```

```
<h2>About</h2>
```

```
</div>
```

```
<p>This is a simple CSS layout demonstrating multi-column format.</p>
```

```
</section>
```

```
<section class="section">
```

```
<div class="section-header">
```



```
<h2>Services</h2>
</div>
<div class="columns">
  <div class="column">
    <h3>Service 1</h3>
    <p>Description of service 1.</p>
  </div>
  <div class="column">
    <h3>Service 2</h3>
    <p>Description of service 2.</p>
  </div>
  <div class="column">
    <h3>Service 3</h3>
    <p>Description of service 3.</p>
  </div>
</div>
</section>

<section class="section">
  <div class="section-header">
    <h2>Contact Form</h2>
  </div>
  <form action="#" method="post">
    <label for="name">Name:</label>
    <input type="text" id="name" name="name" required>

    <label for="email">Email:</label>
    <input type="email" id="email" name="email" required>

    <input type="submit" value="Submit">
  </form>
```

```
</section>
</div>
</body>
</html>
```

Assignment 4: Enhance the page by adding CSS3 animations to the menu and form elements. Also, use media queries to make the page responsive, ensuring it looks good on both desktop and mobile screen sizes.

```
.navbar li a {
display: block;
color: white;
text-align: center;
padding: 14px 16px;
text-decoration: none;
transition: background-color 0.3s ease;
}
.navbar li a:hover, .navbar li a.active {
background-color: #111;
}
form input[type="text"], form input[type="email"], form input[type="submit"] {
transition: all 0.3s ease;
}
form input[type="text"]:focus, form input[type="email"]:focus {
border-color: #333;
background-color: #f9f9f9;
}
@media (max-width: 600px) {
.navbar li {
float: none;
}
.navbar li a {
```

```
text-align: left;

}

form label {

display: block;

}

}
```

Assignment 5: Take the static HTML page from Day 1 and integrate Bootstrap. Refactor the navigation bar, table, and form to use Bootstrap components. Ensure the page is responsive using Bootstrap's grid system

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Assignment 5: Simple Bootstrap Integration</title>

  <!-- Bootstrap CSS -->

  <link href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css"
rel="stylesheet">

  <style>

    body {

      padding-top: 20px; /* Give some padding for the fixed navbar */

      font-family: Arial, sans-serif;

    }

  </style>

</head>

<body>

  <div class="container">

    <!-- Navbar -->
```

```
<nav class="navbar navbar-expand-lg navbar-dark bg-dark mb-4">

  <a class="navbar-brand" href="#">Navbar</a>

  <button class="navbar-toggler" type="button" data-toggle="collapse" data-
target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle
navigation">

    <span class="navbar-toggler-icon"></span>

  </button>

  <div class="collapse navbar-collapse" id="navbarNav">

    <ul class="navbar-nav">

      <li class="nav-item active">

        <a class="nav-link" href="#home">Home</a>

      </li>

      <li class="nav-item">

        <a class="nav-link" href="#about">About</a>

      </li>

      <li class="nav-item">

        <a class="nav-link" href="#services">Services</a>

      </li>

      <li class="nav-item">

        <a class="nav-link" href="#contact">Contact</a>

      </li>

    </ul>

  </div>

</nav>
```

```
<!-- Main content sections -->
```

```
<div id="home" class="mb-4">Home Section</div>
```

```
<div id="about" class="mb-4">About Section</div>
```

```
<div id="services" class="mb-4">Services Section</div>
```

```
<div id="contact" class="mb-4">Contact Section</div>
```

```
<!-- Bootstrap Table -->
```

```
<div class="table-responsive">
  <table class="table table-striped">
    <thead>
      <tr>
        <th>Name</th>
        <th>Age</th>
        <th>Location</th>
      </tr>
    </thead>
    <tbody>
      <tr>
        <td>John Doe</td>
        <td>30</td>
        <td>New York</td>
      </tr>
      <tr>
        <td>Jane Smith</td>
        <td>25</td>
        <td>Los Angeles</td>
      </tr>
    </tbody>
  </table>
</div>
```

```
<!-- Bootstrap Form -->
```

```
<form action="#" method="post">
  <div class="form-group">
    <label for="name">Name:</label>
    <input type="text" class="form-control" id="name" name="name" required>
  </div>
  <div class="form-group">
```

```
<label for="email">Email:</label>

<input type="email" class="form-control" id="email" name="email" required>

</div>

<button type="submit" class="btn btn-primary">Submit</button>

</form>

</div>
```

```
<!-- Bootstrap JS and jQuery (Optional for certain components like the Navbar toggler) -->

<script src="https://code.jquery.com/jquery-3.5.1.slim.min.js"></script>

<script
src="https://cdn.jsdelivr.net/npm/@popperjs/core@1.16.1/dist/umd/popper.min.js"></script>

<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>

</body>

</html>
```