

# Creating a Responsive Web Page with Advanced CSS Techniques

## Scenario:

You are tasked with creating a **Responsive Personal Portfolio Webpage** that adjusts its layout using CSS Flexbox, Grid, and media queries.

### Step 1: Create a New HTML File

- Select New File;
- Name file index.html;
- Press enter;
- Select OK.

### Step 2: Build the HTML Structure

Create a structured HTML document with the following elements:

1. Header: Add a `<header>` section with your name and tagline.
2. Navigation Bar: Create a `<nav>` element with three links.
3. Main Content: Include a `<main>` section containing:
  - A section with a heading and paragraph introducing yourself.
  - An aside with your top skills.

Footer: Add a `<footer>` containing copyright text.

### Step 3: Apply CSS for Layout and Responsiveness

Create a styles.css file and link it to your HTML document. Use the following CSS concepts:

1. Basic Styling: Reset margins and padding using the `*` selector and define a consistent font for the entire webpage.
2. Layout Styling:
  - Use Flexbox to align and space elements in the header, navigation, and main sections.
  - Use Grid for more complex layouts if needed.

### 3. Media Queries:

- Ensure the layout adapts for smaller screens (less than 768px).
- Stack elements vertically (like the sidebar) when the screen size is small.

### Step 4: Testing your page

1. Open your HTML document in the browser.
2. Resize the browser window to test the responsiveness.
3. Ensure the content stacks vertically and remains readable on small screens.

### HTML:

```
!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-
scale=1.0" />
  <title>Dima's Portfolio</title>
  <link rel="stylesheet" href="styles.css" />
</head>

<body>

  <header>
    <div class="header-container">
      <h1>Dima</h1>
      <p>Aspiring Web Developer & Tech Enthusiast</p>
    </div>
  </header>

  <nav>
    <a href="#about">About</a>
    <a href="#projects">Projects</a>
    <a href="#contact">Contact</a>
  </nav>

  <main>
    <section>
      <h2 id="about">About Me</h2>
      <p>
        Hello! I'm Dima, a passionate learner with a growing
        interest in full-stack development.
        I enjoy exploring modern web technologies and
        continuously improving my skills by building fun and
        useful projects.
      </p>
    </section>

    <aside>
      <h3>Top Skills</h3>
```

```

        <ul>
            <li>HTML & CSS</li>
            <li>JavaScript</li>
            <li>C# / ASP.NET Core</li>
            <li>Git & GitHub</li>
            <li>Problem Solving</li>
        </ul>
    </aside>
</main>

<footer>
    <p>&copy; 2025 Dima. All rights reserved.</p>
</footer>

</body>

</html>

```

## CSS:

```

* {
    margin: 0;
    padding: 0;
    box-sizing: border-box;
}

body {
    font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
    background-color: #f5f7fa;
    color: #333;
    line-height: 1.6;
}

header {
    background-color: #2c3e50;
    color: #ffffff;
    padding: 40px 20px;
    box-shadow: 0 2px 8px rgba(0, 0, 0, 0.05);
}

.header-container {
    display: flex;
    flex-direction: column;
    align-items: center;
    gap: 10px;
}

nav {
    background-color: #1f1f1f;
    display: flex;
    justify-content: center;
    padding: 12px 0;
    gap: 30px;
    box-shadow: 0 1px 4px rgba(0, 0, 0, 0.05);
}

nav a {
    color: white;
}

```

```

        text-decoration: none;
        font-weight: bold;
        transition: color 0.3s ease;
        padding: 6px 10px;
    }

    nav a:hover {
        color: #4a90e2;
    }

    main {
        display: flex;
        gap: 24px;
        padding: 40px 20px;
        max-width: 1200px;
        margin: auto;
    }

    section {
        flex: 3;
        background-color: #ffffff;
        padding: 24px;
        border-radius: 12px;
        box-shadow: 0 2px 10px rgba(0, 0, 0, 0.03);
    }

    aside {
        flex: 1;
        background-color: #f0f4ff;
        padding: 24px;
        border-radius: 12px;
        border: 1px solid #d3e0f0;
    }

    footer {
        background-color: #1f1f1f;
        color: white;
        text-align: center;
        padding: 20px 10px;
        font-size: 0.9rem;
        margin-top: 60px;
    }

    ul {
        padding-left: 15px;
    }

    @media (max-width: 768px) {
        .header-container {
            text-align: center;
        }

        nav {
            flex-direction: column;
            gap: 12px;
            padding: 10px 16px;
        }

        nav a {

```

```
        padding: 10px 0;
    }

    main {
        flex-direction: column;
        padding: 30px 16px;
    }

    section,
    aside {
        width: 100%;
    }
}
```