**Lab Exercise: Basics of HTML and CSS - Creating a Personal Portfolio Page**

**Objective:**

To practice the basics of HTML and CSS by creating a personal portfolio webpage that includes various HTML elements such as headings, paragraphs, images, links, lists, and forms, styled with CSS for a professional look.

**Scenario:**

Imagine you are a web developer who needs to create a personal portfolio webpage to showcase your projects, skills, and contact information. This webpage will serve as a professional online presence that potential employers and clients can visit to learn more about you and your work.

**Materials Needed:**

* A text editor (e.g., Visual Studio Code, Sublime Text, or even Notepad)
* A web browser (e.g., Google Chrome, Firefox)

**Instructions:**

1. **Create a Basic HTML Structure:**
   * Create a new HTML file named index.html.
   * Add the basic HTML structure including <!DOCTYPE html>, <html>, <head>, and <body> tags.
   * Inside the <head> tag, add a <title> tag with the text "My Portfolio".
   * Link to an external CSS file named styles.css.

html

Copy code

<!DOCTYPE html>

<html>

<head>

<title>My Portfolio</title>

<link rel="stylesheet" type="text/css" href="styles.css">

</head>

<body>

</body>

</html>

1. **Add a Header:**
   * Inside the <body> tag, create a header using the <header> tag.
   * Inside the <header> tag, add a <h1> tag with your name.
   * Below your name, add a <h2> tag with a brief description, such as "Web Developer and Designer".

html

Copy code

<body>

<header>

<h1>Your Name</h1>

<h2>Web Developer and Designer</h2>

</header>

1. **Create a Navigation Menu:**
   * Below the header, create a navigation menu using the <nav> tag.
   * Inside the <nav> tag, create an unordered list (<ul>) with list items (<li>).
   * Each list item should contain a link (<a>) to different sections of your portfolio: Home, About, Projects, Contact.

html

Copy code

<nav>

<ul>

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

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

<li><a href="#projects">Projects</a></li>

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

</ul>

</nav>

1. **Add an About Section:**
   * Below the navigation menu, add a section with an ID of "about".
   * Inside this section, add a heading (<h3>) with the text "About Me".
   * Add a paragraph (<p>) with a brief description about yourself, your background, and your interests.

html

Copy code

<section id="about">

<h3>About Me</h3>

<p>I am a passionate web developer with experience in creating dynamic and responsive websites. I love coding, design, and learning new technologies.</p>

</section>

1. **Showcase Your Projects:**
   * Below the about section, add another section with an ID of "projects".
   * Inside this section, add a heading (<h3>) with the text "Projects".
   * Add an ordered list (<ol>) of your projects. Each list item should include the project name (as a link to the project if available), a short description, and an image representing the project (use placeholder images if you don't have actual project images).

html

Copy code

<section id="projects">

<h3>Projects</h3>

<ol>

<li>

<a href="#">Project 1</a>

<p>This is a description of my first project.</p>

<img src="https://via.placeholder.com/150" alt="Project 1">

</li>

<li>

<a href="#">Project 2</a>

<p>This is a description of my second project.</p>

<img src="https://via.placeholder.com/150" alt="Project 2">

</li>

</ol>

</section>

1. **Create a Contact Form:**
   * Below the projects section, add another section with an ID of "contact".
   * Inside this section, add a heading (<h3>) with the text "Contact Me".
   * Add a form with the action attribute set to a placeholder URL (e.g., #) and method post.
   * Inside the form, add input fields for name, email, and a textarea for the message. Add a submit button at the end.

html

Copy code

<section id="contact">

<h3>Contact Me</h3>

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

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

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

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

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

<label for="message">Message:</label><br>

<textarea id="message" name="message" rows="4" cols="50" required></textarea><br><br>

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

</form>

</section>

1. **Add a Footer:**
   * Below the contact section, add a footer using the <footer> tag.
   * Inside the footer, add a paragraph with your copyright information.

html

Copy code

<footer>

<p>&copy; 2024 Your Name. All rights reserved.</p>

</footer>

1. **Create the CSS File:**
   * Create a new file named styles.css.
   * Add styles to make your portfolio look attractive. Here's an example of basic styles you can apply:

css

Copy code

body {

font-family: Arial, sans-serif;

margin: 0;

padding: 0;

background-color: #f4f4f4;

}

header {

background-color: #333;

color: white;

padding: 10px 0;

text-align: center;

}

nav ul {

list-style: none;

padding: 0;

background-color: #444;

text-align: center;

}

nav ul li {

display: inline;

margin: 0 10px;

}

nav ul li a {

color: white;

text-decoration: none;

padding: 5px 10px;

}

nav ul li a:hover {

background-color: #555;

}

section {

padding: 20px;

margin: 20px;

background-color: white;

border-radius: 5px;

}

footer {

text-align: center;

padding: 10px 0;

background-color: #333;

color: white;

position: fixed;

bottom: 0;

width: 100%;

}

form input, form textarea {

width: 100%;

padding: 10px;

margin: 5px 0;

border: 1px solid #ccc;

border-radius: 5px;

}

form input[type="submit"] {

background-color: #333;

color: white;

border: none;

cursor: pointer;

}

form input[type="submit"]:hover {

background-color: #555;

}

1. **Test Your Webpage:**
   * Save your index.html and styles.css files.
   * Open the index.html file in a web browser to see your personal portfolio webpage with CSS styles applied.
   * Verify that all elements are styled correctly and the webpage is visually appealing.

**Submission:**

Submit your completed index.html and styles.css files for review. Ensure all elements are correctly implemented and the webpage is well-structured and styled.

This lab exercise will help you practice both HTML and CSS skills, allowing you to create a functional and visually appealing personal portfolio webpage.