

CS 110

Lab 2: Style a Web Page with CSS

Overview

CSS (Cascading Style Sheets) is used to style and layout web pages. In this lab, you will create a simple CSS file and link it to an HTML file to apply basic styling. You will preview your work in Chrome to ensure consistent user results.

Instructions

1. **Download the Starter Files**

Download `index.html` from Canvas and save it to `Documents/110/lab2/index.html`.

2. **Create a New CSS File**

Open VS Code and create a new file named `style.css` in the same folder as `index.html`.

3. **Link the CSS File**

Add the following `<link>` element in the `<head>` section of `index.html` to link the CSS file:

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

4. **Apply Basic Styling**

Open `style.css` and add the following styles:

- Set the background color of the page to light blue.
- Change the font family of all text to Arial, sans-serif.
- Center aligns the content of all `<h1>` elements.

```
body {  
    background-color: lightgrey;  
    font-family: Arial, sans-serif;  
}  
  
h1 {  
    text-align: center;  
    border: 2px solid darkblue;  
}
```

5. Preview Your Web Page

Use Chrome to preview your changes:

- Use VS Code's Live Server

6. Add a New Rule

Add a CSS rule to style all `<p>` elements with the following properties:

- Text color: Dark green.
- Font size: 16px.

```
p {  
  color: darkgreen;  
  font-size: 16px;  
}
```

7. Enhance the Page Structure

In `index.html`, update the content as follows:

- Add an `<h2>` heading after the `<h1>` with the text: "My CSS Journey".
- Add a `<p>` element under the new heading with the content: "This is my first attempt at using CSS to style a web page."

Preview your changes in Chrome and make edits if necessary.

8. Add an image element to the HTML

Please download `sample-image.png` from Canvas and put in the lab2 folder.

Note: `<!-- Add an image -->`: this is a comment

```
<!-- Add an image -->  

```

Use Chrome to preview your changes:

- Use VS Code's Live Server

Style it with CSS to:

- Set a maximum width
- Center it on the page
- Add a border

Note: `/* Image styling */`: this is a comment

```

/* Image styling */
img {
    max-width: 300px;
    display: block;
    margin: 20px auto;
    border: 3px solid navy;
}

```

9. Add and Style a List

Add an unordered list with learning points

Note: `<!-- Add a list -->`: this is a comment

```

<!-- Add a list -->
<h3>What I've Learned:</h3>
<ul>
    <li>HTML Structure</li>
    <li>CSS Basics</li>
    <li>Styling Elements</li>
</ul>

```

Use Chrome to preview your changes:

- Use VS Code's Live Server

Style it with CSS to:

- Give it a light background color
- Add proper padding
- Center it on the page
- Improve line spacing

Note: `/* List styling */`: this is a comment

```

/* List styling */
ul {
    background-color: #f0f0f0;
    padding: 20px 40px;
    width: 200px;
    margin: 20px auto;
}

```

10. Validate Your Work

- Use the [W3C Markup Validation Service](#) to validate `index.html` and fix any errors.
- Use the https://jigsaw.w3.org/css-validator/#validate_by_upload to validate `style.css` and fix any errors.

Practice Exercises

1. Add a Footer

At the end of `index.html`, add a `<footer>` element with the content: "Created by [Your Name], CS 110."

2. Style the Footer

In `style.css`, add a rule for the `<footer>` to:

- Set the background color to gray.
- Align the text to the center.
- Add 10px of padding.
- Add 20px of margin-top.

3. Experiment with More CSS

Try adding the following to `style.css`:

- A border around all `<h1>` elements.
- A hover effect on `<p>` elements that changes their text color to red.

```
/* Hover effect for paragraphs */
p: hover {
    color: darkblue;
}
```

CS 110 Web Development Workflow

Master these three steps:

1. **Edit:** Use VS Code to create and modify HTML and CSS files.
2. **Preview:** Use Chrome to view your work. Ensure it meets the specifications before proceeding.
3. **Validate:**
 - HTML file: [W3C Markup Validation Service](#)
 - CSS file: https://jigsaw.w3.org/css-validator/#validate_by_upload
4. **Upload:** Zip `index.html`, `style.css`, and `sample-image.png` files and submit the zipped file to Canvas.