CMPS 350 – Spring 2023
Web Development Fundamentals

Lab 03
CSS Fundamentals

Objective

1. Stylesheets, cascading order, and syntax

2. Selectors, properties, values, and units

3. The box model and flexbox layout

4. Media queries for responsive layouts

Resources

1. Styling the web by MDN: https://developer.mozilla.org/en-US/docs/Learn/CSS

2. CSS tutorial by W3Schools: https://www.w3schools.com/css/css_border.asp

3. Learn series by web.dev: https://web.dev/learn

4. CSS cheatsheet: https://htmlcheatsheet.com/css

1. Selectors, Properties, Values, and Units

1. Search for and install Visual Studio Code extensions to enhance your CSS experience.

2. Experiment with multiple ways of including CSS in your HTML pages: inline, internal, and external.

3. Use the corresponding tutorial from https://www.w3schools.com/css/default.asp to complete the following exercises from https://www.w3schools.com/css/exercise.asp:

   3.1. Selectors,

   3.2. Background,

   3.3. Border,

   3.4. Margin,

   3.5. Padding,

   3.6. Height/Width,

   3.7. Box Model,

   3.8. Outline,

   3.9. Text,

   3.10. Font,

   3.11. Links,

   3.12. Lists,

   3.13. Combinators,

   3.14. Pseudo-classes,

   3.15. Pseudo-elements,

   3.16. Attribute Selectors,

   3.17. Rounded corners, and

   3.18. Color.

4. Complete the Diner game at https://flukeout.github.io to test your CSS selector skills.

5. Use an internal stylesheet to style the provided `quantum.html` and `qubit.html` pages as shown in `screenshot-1a.png` and `screenshot-1b.png`; do not modify the document structure of the pages.

5.1. The icons can be downloaded from https://feathericons.com.

5.2. The color palette is available at https://colorbrewer2.org.

2. Flexbox Layout

1. You can learn more about flexbox using the guide at https://css-tricks.com/snippets/css/a-guide-to-flexbox.

2. Use an external stylesheet to style the provided `quantum.html` and `qubit.html` pages as shown in `screenshot-2a.png` and `screenshot-2b.png`; you must modify the structure of your pages to be able to use a flexbox layout.

   2.1. Notice how the three-column layout is not adequate for smaller screen sizes.

3. Complete the Flexbox Froggy game at https://flexboxfroggy.com to test your flexbox layout skills.

3. Responsive Layouts

1. You can learn more about media queries using the guide at https://css-tricks.com/a-complete-guide-to-css-media-queries.

2. Modify your external stylesheet to implement a responsive layout with three breakpoints as shown in `screenshot-3a.png`, `screenshot-3b.png`, `screenshot-3c.png`, and `screenshot-3d.png`.

4. Additional Exercises

1. Complete the CSS Sundae game at https://www.codeanalogies.com/csssundae to learn more about positioning

2. Go through all the tutorials at https://www.w3schools.com/css/default.asp and complete all the exercises from https://www.w3schools.com/css/exercise.asp for a full overview of CSS

3. Further expand your understanding of media queries by completing these three mini projects: https://www.freecodecamp.org/news/learn-css-media-queries-by-building-projects