Web Programming Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Activity 3.3 – Build a Piano

Points: \_\_\_\_\_\_\_\_\_\_ / 43

Responsive Design tells your webpage how it should look on different-sized screens. In this activity, you'll use CSS and Responsive Design to code a piano. You'll also learn more about media queries and pseudo selectors.

1. First, read this [article](https://developer.mozilla.org/en-US/docs/Web/CSS/Pseudo-elements) about the CSS pseudo-elements. As you read, answer the following questions in your engineering notebook...

a. What is the purpose of pseudo-elements?

b. What do the ::after and ::before pseudo-elements do?

2. Next, read this [article](https://developer.mozilla.org/en-US/docs/Web/CSS/float) about the CSS float property. As you read, answer the following questions in your engineering notebook...

a. What does the float property set?

b. What do the left and right values do?

3. Next, read this [article](https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_media_queries/Using_media_queries) about media queries. As you read, answer the following questions in your engineering notebook...

a. What is a media query?

b. When should you use a media query?

c. What does min-width and min-width check?

4. Download and extract the project folder from GitHub using the link provided in Google Classroom. Once extracted, rename the project folder using proper naming practices.

5. Next, open the file named *index.html*. Add a comment at the top of the document with the project name, your name, today’s date, and the title of the course on separate lines. Then open the file named *styles.css* (located in the styles folder) and add a comment at the top of the document with the same information. All content you add to the documents should be under these comments.

6. Login to [freeCodeCamp](https://www.freecodecamp.org/). Using the steps provided under *Learn Intermediate CSS by Building a Cat Painting*, complete the website. You should complete the work in Visual Studio Code and copy and paste the solution to each step into freeCodeCamp to check your answer. The following step(s) have different instructions for VS Code or hints to help you complete the step...

a. Step 9 – Like previous activities, when linking your stylesheet, use href="./styles.css" on the website, but href="styles/styles.css" in Visual Studio Code.

b. Step 21 – When linking your image, use src="./fcc\_primary.svg" on the website, but src="images/fcc\_primary.svg " in Visual Studio Code.

c. Step 27 – When adding your media queries, add them to the bottom of the CSS document. Otherwise, they will not be applied.

7. When your website is complete, please do the following…

a. Compress the project folder and submit it to Google Classroom.

b. Print a copy of *index.html* and *styles.css*. Add these to your engineering notebook. Highlight and annotate your code.

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| --- | --- |
| **Project Criteria** | |
| Criteria | Point(s) |
| <head> element contains all the necessary non-visible and visible elements to provide the necessary meta data for the website. | /4 |
| <body> element contains all the necessary visible elements to construct the quiz. | /24 |
| Website has the correct overall style and structure. | /5 |
| **Development Mechanics** | |
| Criteria | Point(s) |
| All elements are structured using best practices. | /2 |
| Project folder/director structure follows industry best practices. | /2 |
| All folders/directories and files use proper naming style (i.e., file-name). | /2 |
| All documents use whitespace and comments to help organize the code. | /2 |
| Project root folder/directory has an appropriate name. | /1 |
| All documents have a comment at the top that includes the program’s title, the student’s name, the date, and the course’s title. | /1 |

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