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

Activity 2.1 – Rothko Painting

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

Every HTML element is its own box – with its own spacing and a border. This is called the Box Model. In this activity, you'll use CSS and the Box Model to create your own Rothko-style rectangular art pieces.

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

a. What does the overflow property set?

b. What are the different values that the overflow property can be set to? What does each do?

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

a. What does the box-shadow property set?

b. What does each value represent when setting the box-shadow property?

c. What are the different ways the box-shadow property can be set?

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

a. What does the border-radius property set?

b. What does each value represent when setting the border-radius property?

c. What are the different ways the border-radius property can be set?

4. And finally, read this [article](https://www.joshwcomeau.com/css/rules-of-margin-collapse/#nesting-doesnt-prevent-collapsing-4) about margin collapsing (if you are confused, come chat with Mr. Pawelski). As you read, answer the following questions…

a. What is margin collapsing?

b. What margin can collapse?

c. Which margin is utilized (i.e., bigger or smaller)?

d. What prevents margin collapsing?

5. 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.

6. 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.

7. Login to [freeCodeCamp](https://www.freecodecamp.org/). Using the steps provided under the [*Learn the CSS Box Model by Building a Rothko Painting*](https://www.freecodecamp.org/learn/2022/responsive-web-design/#learn-the-css-box-model-by-building-a-rothko-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 steps have different instructions for VS Code...

a. Step 2 – Instead of using "https://cdn.freecodecamp.org/curriculum/css-box-model/diagram-1.png" for the image’s src, use "images/diagram-1.png".

b. Step 3 – Instead of using "https://cdn.freecodecamp.org/curriculum/css-box-model/diagram-2.png" for the image’s src, use "images/diagram-2.png".

c. Step 4 – Instead of using "https://cdn.freecodecamp.org/curriculum/css-box-model/diagram-3.png" for the image’s src, use "images/diagram-3.png".

d. Step 7 – Instead of using href="styles.css" for the <link> element, use href="styles/styles.css".

8. 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.

c. Take a screenshot of the finished webpage (open it in a browser and use the *Snip and Sketch* tool). Print a copy of the screenshot and add it to your engineering notebook. Annotate the picture by labeling each component with the element required to insert it.

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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. | /3 |
| Website contains a <div> element to act as the frame with the appropriate CSS properties set to reproduce the desired image. | /5 |
| Website contains a <div> element to act as the canvas with the appropriate CSS properties set to reproduce the desired image. | /5 |
| Website contains a <div> element to act as the first box with the appropriate CSS properties set to reproduce the desired image. | /5 |
| Website contains a <div> element to act as the second box with the appropriate CSS properties set to reproduce the desired image. | /5 |
| Website contains a <div> element to act as the third box with the appropriate CSS properties set to reproduce the desired image. | /5 |
| 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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