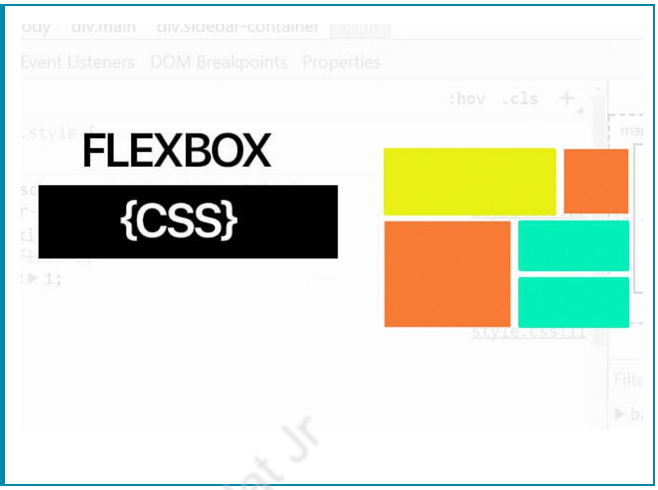
CSS and Flexbox



What we did:

- Created a separate CSS style sheet for the portfolio website.
- Used blocks and flexbox to give a layout to the website.
- Used CSS selectors to add style elements to the website.

How we did it: Today we gave a layout to our website.

Typically, designers/developers try to create content and styling in two different documents so that content and design are independent of each other.

This creates a consistent design for different pages of a website easily. It also allows for a change in the design template of a website easily without affecting the content page. Developers need to create two different and separate styling pages to create these two different designs. We call such styling page “CSS (cascading style sheet).”

Creating a CSS is quite simple.

- Create an empty file in the same folder and call it style.css (or any other name. The extension .css is important)
- Copy the style content (inside style tags) to this style sheet.
- This stylesheet needs to be linked to the HTML file.
  We do it using the <link/> tag.

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index.html

```
<!DOCTYPE HTML>
<html>
    <head>
        <title>My Portfolio page</title>
        <style>
            h1 {
                color: brown;
            }

            * {
                border: solid;
            }
        </style>
    </head>

    <body>
        <h1>Student Name</h1>
        <a href="index.html">Projects</a>
        <a href="aboutme.html">About Me</a>

        <h2>These are some games designed by me</h2>
        <p>Games use p5.js, p5.play and matter.js libraries in javascript</p>

        <a href = "https://editor.p5js.org/whitehatjr/present/ePJrHCACM"><img src="https://via.pl
        <p>Trex Runner Game</p>

        <a href = "#"><img src="https://via.placeholder.com/300"/></a>
        <p>Name of game 2</p>

        <a href = "#"><img src="https://via.placeholder.com/300"/></a>
        <p>Name of game 3</p>
```

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Follow link (ctrl + click)

style.css

```
h1 {
    color: brown;
}

* {
    border: solid;
}
```

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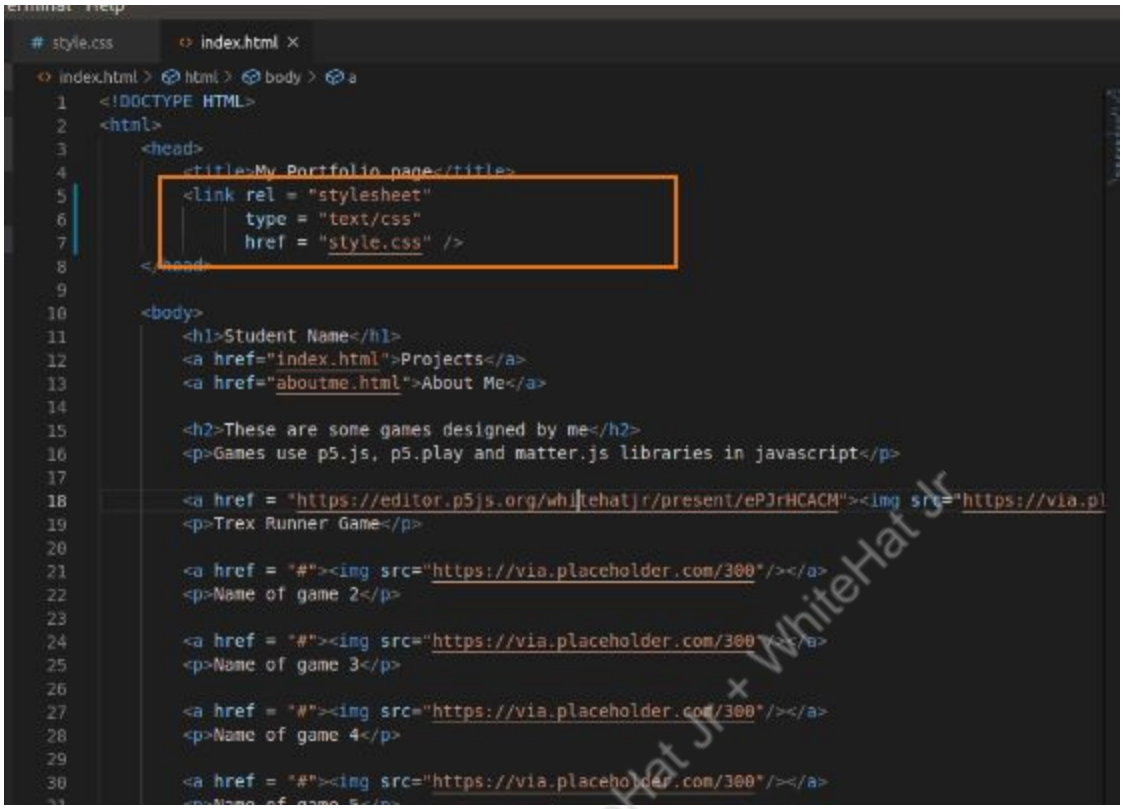

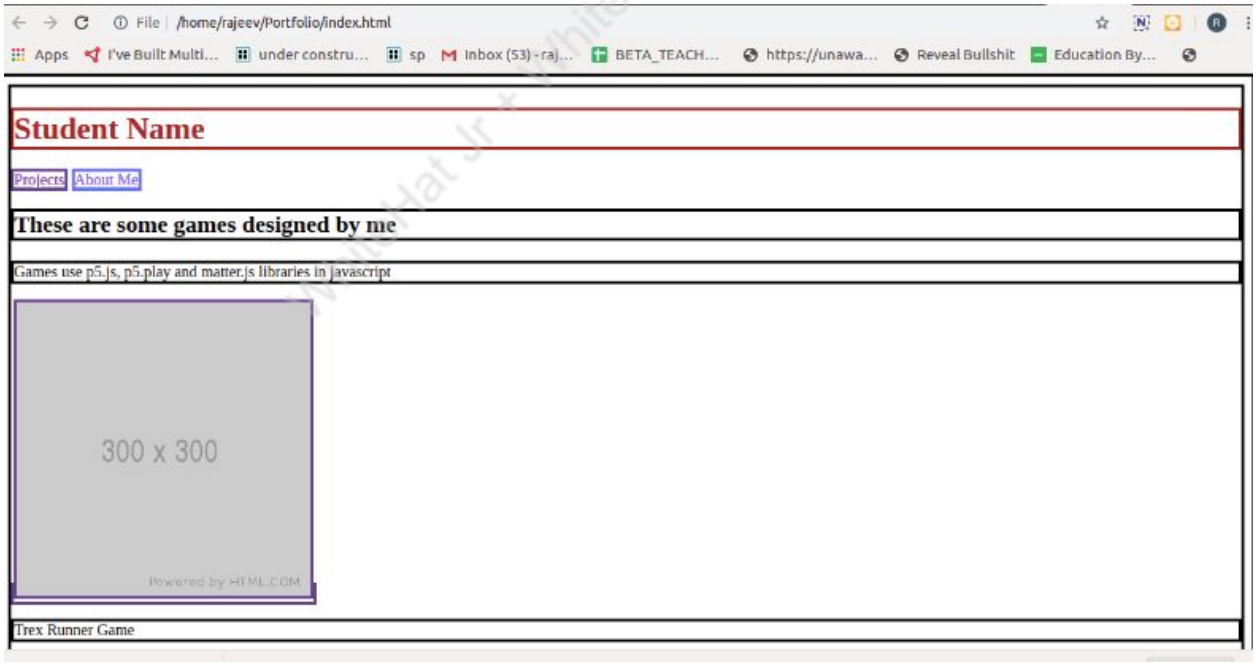

In the last class we had used * symbol to create a box around all the HTML content. All these boxes are separate and independent of each other.

We will be arranging these boxes to create a layout for our website.

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But before we go ahead and arrange these boxes, let's learn how to create a bigger box which can hold two smaller boxes. This will be useful for us when we arrange the boxes.

We create a big box using tags. All the HTML content we want inside the big box can be put in these div blocks.

For example, let's say we want the website header name (inside h1 tag) and the menu items inside one big box.
Let's create a div block which holds them.

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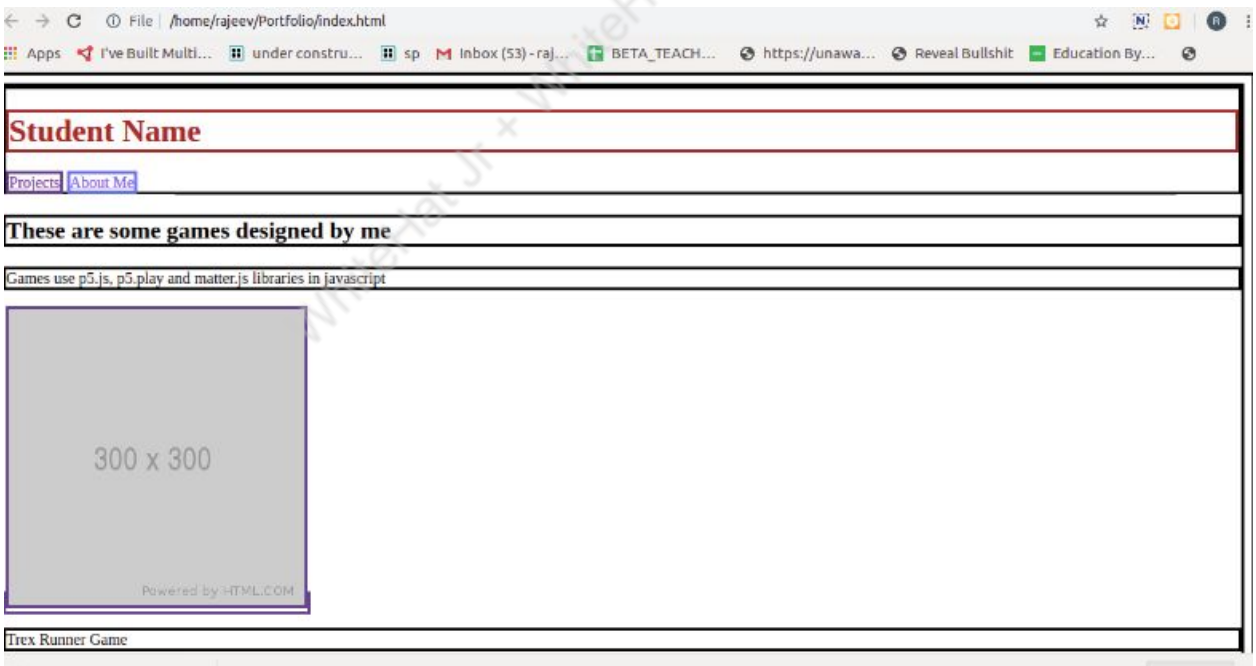
```
<link rel = "stylesheet"
      type = "text/css"
      href = "style.css" />
</head>

<body>
    <div>
        <h1>Student Name</h1>
        <a href="index.html">Projects</a>
        <a href="aboutme.html">About Me</a>
    </div>

    <h2>These are some games designed by me</h2>
    <p>Games use p5.js, p5.play and matter.js libraries in javascript</p>

    <a href = "https://editor.p5js.org/whitehatjr/present/ePJrHCACM"><img src="https://via.pl
    <p>Trex Runner Game</p>

    <a href = "#"><img src="https://via.placeholder.com/300"/></a>
    <p>Name of game 2</p>

    <a href = "#"><img src="https://via.placeholder.com/300"/></a>
    <p>Name of game 3</p>

    <a href = "#"><img src="https://via.placeholder.com/300"/></a>
    <p>Name of game 4</p>

    <a href = "#"><img src="https://via.placeholder.com/300"/></a>
    <p>Name of game 5</p>
```



You can see a bigger box holding the header name and the menu items. We normally give a class name to each div block. It helps when we are styling it. Let's call our div block "header"

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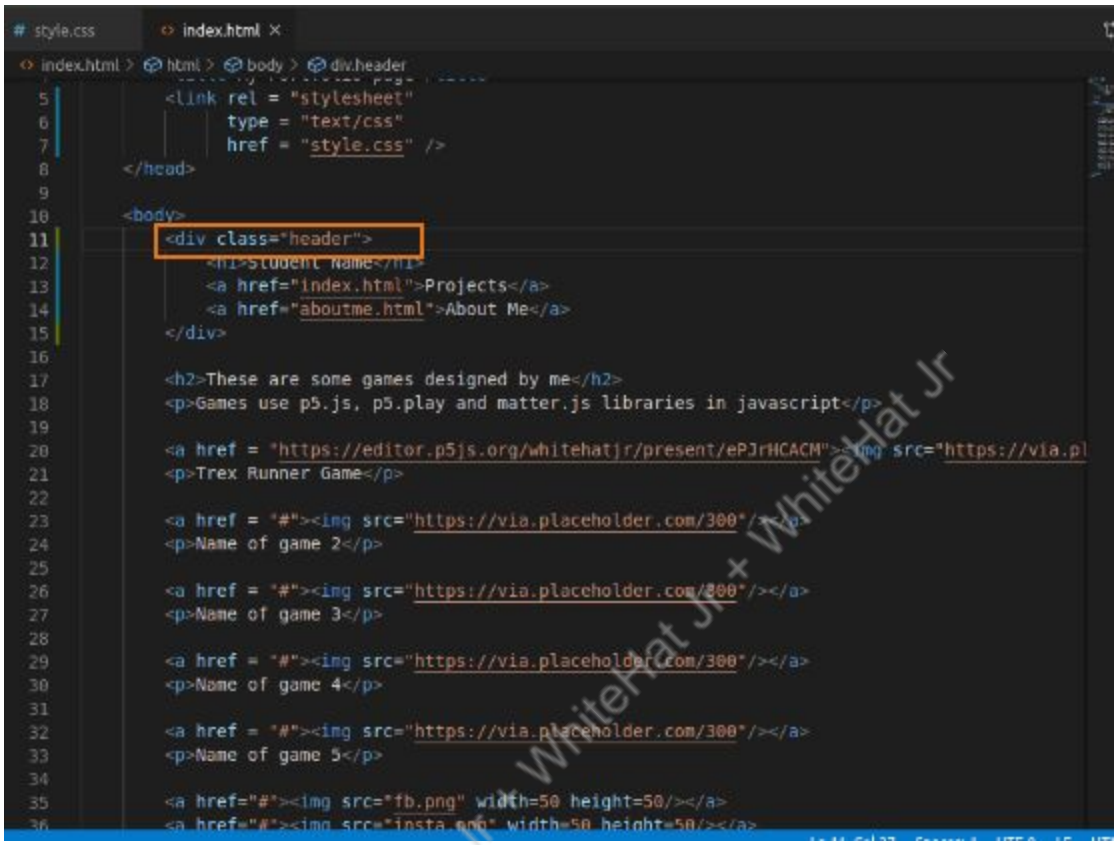
Since it will be at the top of our website. The class can be styled in stylesheet using .classname selector. Here, header div class can be styled using .header selector.



Arrange these boxes to create a layout which we want. We will be using flexbox to create the layout.

The bigger box is called the parent. The boxes inside the bigger box are called the children.

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Let's style the box (div block) named ‘header’. We will be using ".header" as a CSS selector to add styling to this box.

We can add a simple background to our ‘header class div’ to check if our styling works.

‘.header’ class is the parent class containing h1 tag and another div class called ‘menu’. We will use flexbox to arrange the boxes inside the header class. Let's use "display: flex" to tell the browser that we are going to be using the flexbox.

Now, we can use "justify-content" property inside the parent div to align the inside boxes horizontally.

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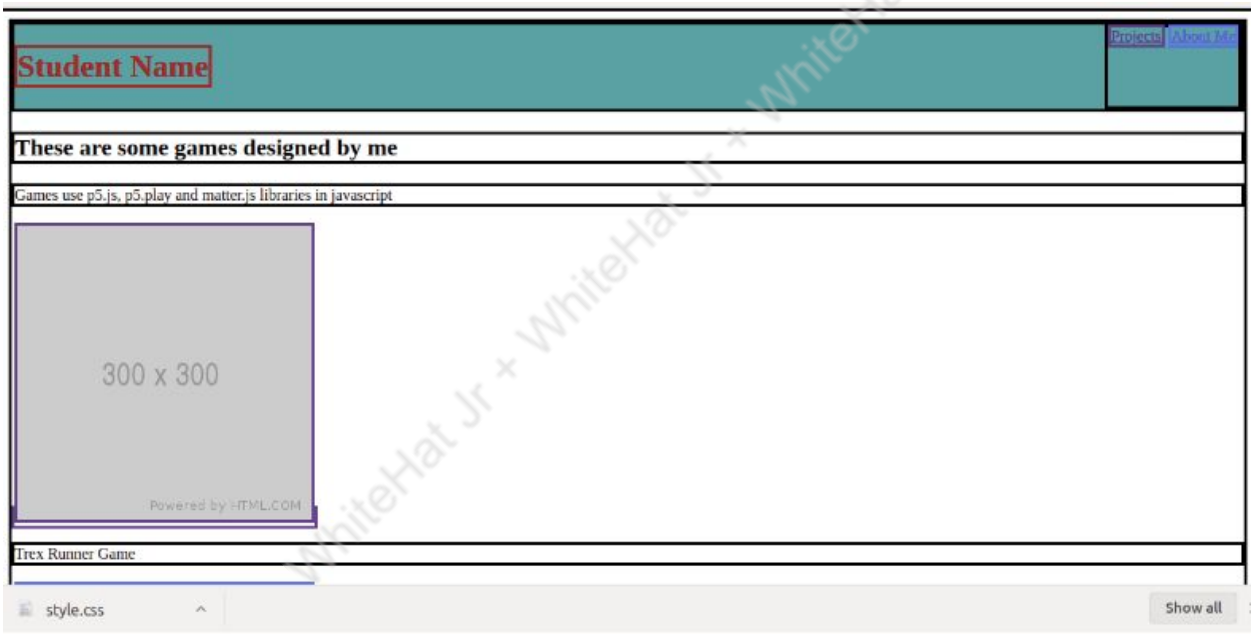
If you want the header name towards left and menu to the right of the web page, you could use "space-between"

```
# style.css ×  index.html
# style.css > .header
h1 {
    color: brown;
}

* {
    border: solid;
}

.header{
    background-color: cadetblue;
    display: flex;
    justify-content: space-between;
}
```



Let's arrange the other boxes on the page to create a great layout for the portfolio website.

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```html
<div class = "grid">
    <div class="item">
        <a href = "https://editor.p5js.org/whitehatjr/present/ePJrHCACM"><img src="https:
        <p>Trex Runner Game</p>
    </div>

    <div class="item">
        <a href = "#"><img src="https://via.placeholder.com/300"/></a>
        <p>Name of game 2</p>
    </div>

    <div class="item">
            <a href = "#"><img src="https://via.placeholder.com/300"/></a>
            <p>Name of game 3</p>
    </div>

    <div class="item">
            <a href = "#"><img src="https://via.placeholder.com/300"/></a>
            <p>Name of game 4</p>
    </div>

    <div class="item">
            <a href = "#"><img src="https://via.placeholder.com/300"/></a>
            <p>Name of game 5</p>
    </div>

    <div class="item">
            <a href = "#"><img src="https://via.placeholder.com/300"/></a>
            <p>Name of game 6</p>
```

```css
h1 {
    color: white;
}

/* * {
    border: solid;
} */

.header{
    background-color: cadetblue;
    display: flex;
    justify-content: space-between;
}

.grid{
    display: flex;
    flex-wrap: wrap;
    justify-content: space-evenly;
}

.footer{
    display: flex;
    justify-content: flex-end;
}

p,h2{
    text-align: center;
}
```

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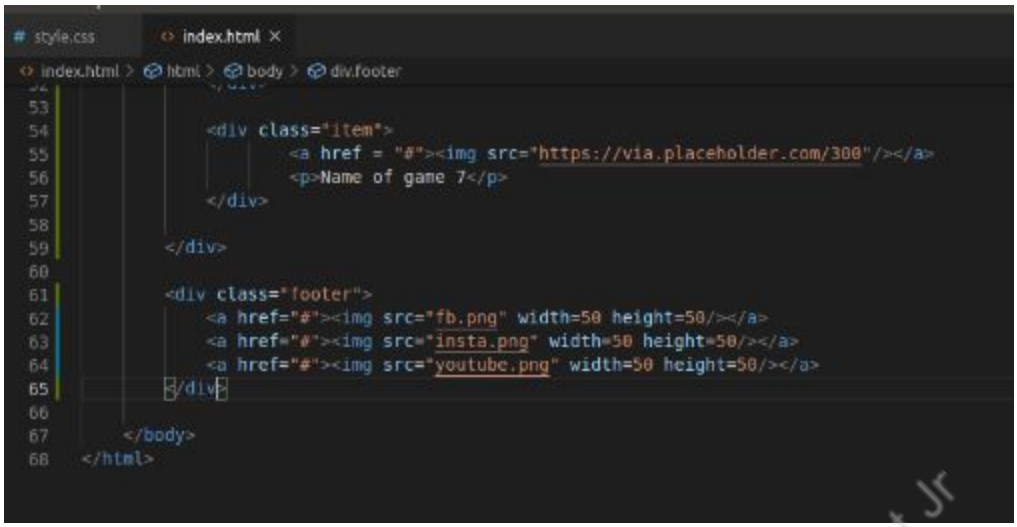

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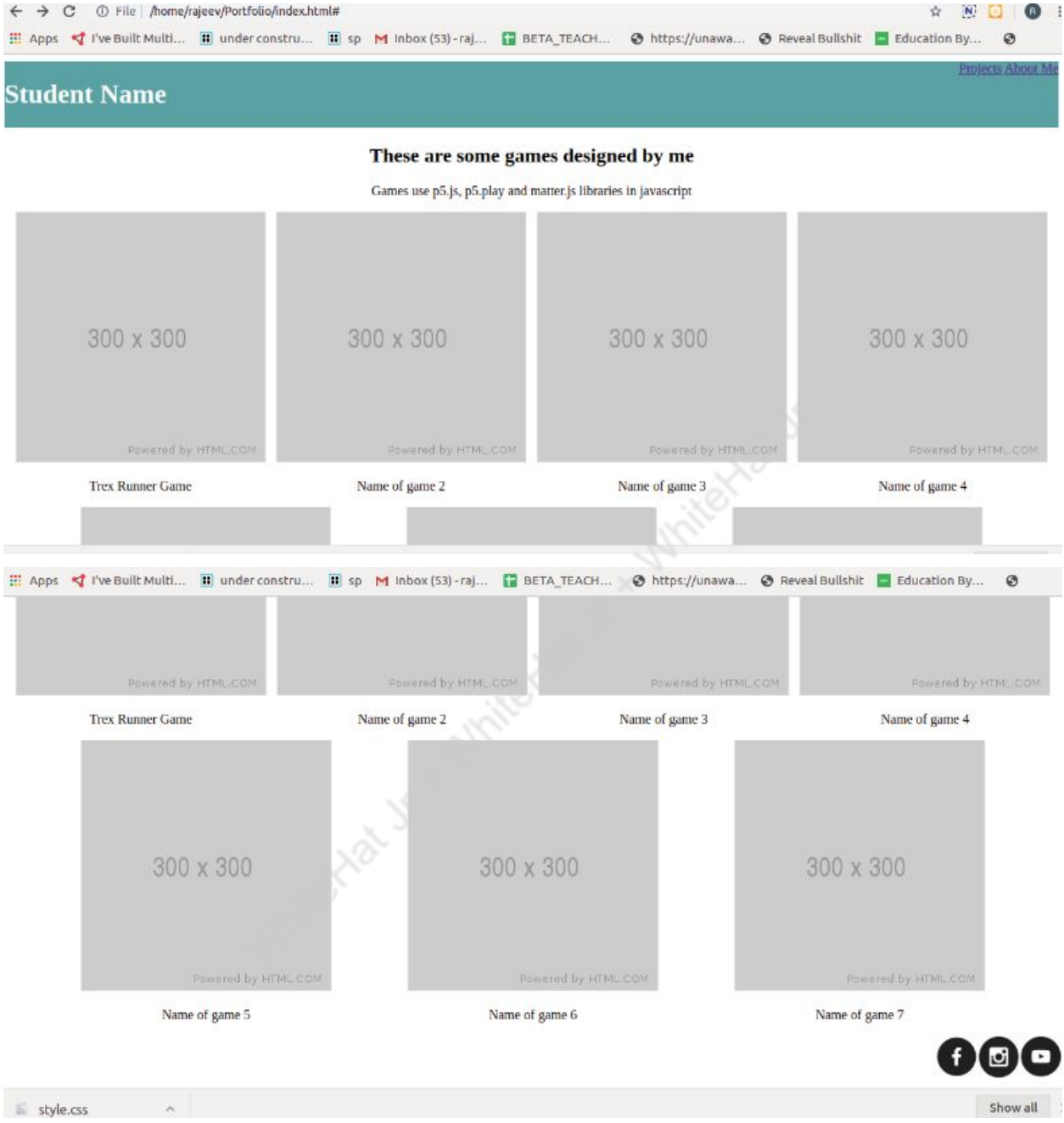

What's next?:
In the next class, you will add more styling to the web page to make it look super professional.

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