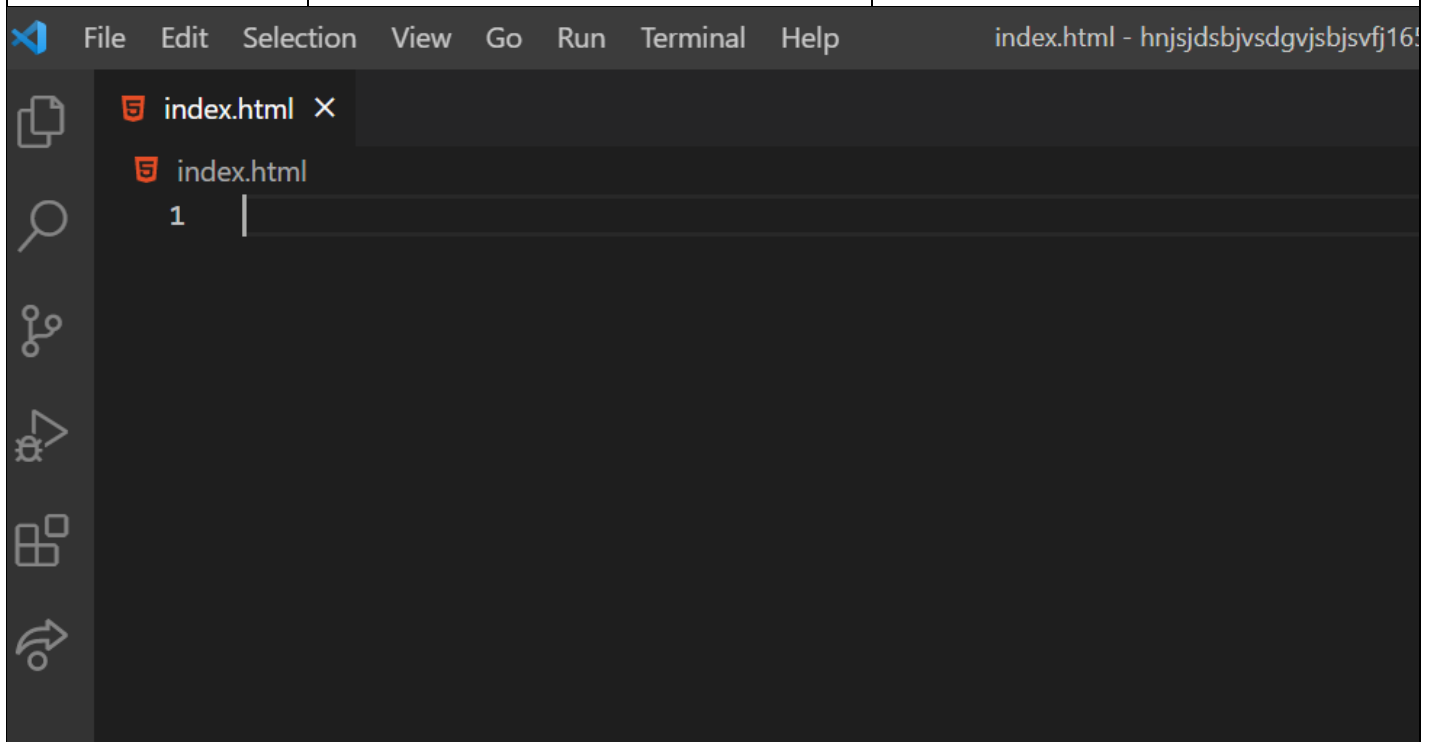


Topic	HTML and CSS	
Class Description	Students learn how to create a basic html layout of a portfolio page using different html tags.	
Class	L1	
Class time	50 mins	
Goal	<ul style="list-style-type: none"> <li>• Create a basic portfolio page layout using the html tags.</li> <li>• Add some style to the tags using CSS selectors.</li> </ul>	
Resources Required	<ul style="list-style-type: none"> <li>• Teacher Resources <ul style="list-style-type: none"> <li>○ Laptop with internet connectivity</li> <li>○ Earphones with mic</li> <li>○ Notebook and pen</li> </ul> </li> <li>• Student Resources <ul style="list-style-type: none"> <li>○ Laptop with internet connectivity</li> <li>○ Earphones with mic</li> <li>○ Notebook and pen</li> </ul> </li> </ul>	
Class structure	<p><b>Warm Up</b></p> <p><b>Teacher-led Activity</b></p> <p><b>Student-led Activity</b></p> <p><b>Wrap Up</b></p>	<p><b>5 mins</b></p> <p><b>15mins</b></p> <p><b>20 mins</b></p> <p><b>5 mins</b></p>
WARM-UP SESSION - 5 mins		
<p style="text-align: center;"><b>CONTEXT</b></p> <ul style="list-style-type: none"> <li>• Introduce 'React Native framework' for building native mobile apps and how it builds on HTML, CSS, and JavaScript.</li> </ul>		
Teacher starts slideshow		
Activity details		
<i>Hey &lt;student's name&gt;. How are you? It's great to see you!</i> <i>Are you excited to learn something new today?</i>		<b>ESR:</b> Hi, thanks, Yes I am excited about it!
<p><b>Following are the WARM-UP session deliverables:</b></p> <ul style="list-style-type: none"> <li>• Greet the student.</li> <li>• Revision of previous class activities.</li> <li>• Quizzes</li> </ul>		Click on the slide show tab and present the slides

QnA Session		
Question		Answer
What does a web wrapper do ?  A. adds game to github B. updates game on github C. compacts pc screen to mobile screen D. uploads game on thinkable		<b>C</b>
Which of the following tools can be used to generate an apk/ipk file?  A. Thunkable B. Github C. Expo snack D. Visual studio code		<b>A</b>
Continue the WARM-UP session		
Activity details		Solution/Guidelines
Following are the WARM-UP session deliverables: <ul style="list-style-type: none"> <li>• Appreciate the student.</li> <li>• Learn to create basic HTML layout</li> </ul>		Explain the concept by using hand gestures and voice modulation methods to bring in more interest in students
Teacher ends slideshow		
TEACHER-LED ACTIVITY - 15 mins		
	Let's get started	
Teacher Initiates Screen Share		
<b>CHALLENGE</b> • Create a basic portfolio layout using the HTML tags.		
Step 2: Teacher-led Activity (10 mins)	HTML - Hyper Text Markup Language is very similar to Markdown in some ways.  Do you remember Markdown and what we used it for?  Do you remember how we created bold, italics, underline etc. in markdown?	Student remembers markdown and how he/she created reflection journals using markdown.  ESR: We used *, **, __ before and after the word.

	<p>Great. In HTML we use tags instead of symbols. You can see the similarities between HTML and markdown as we learn more about HTML</p> <p>HTML is used to create content which is displayed on web pages.</p> <p>We will create the content of our Portfolio page using HTML.</p> <p>Let's create a folder called 'Portfolio' where we will be creating our portfolio page. Inside the folder create an empty file and name it as 'index.html' The name could be anything. We need to add '.html' at the end of the name to tell the computer that it is an html file.</p> <p>Let's open the '<b>index.html</b>' file in Visual code studio where we can write HTML</p> <p>Teacher opens <b>Visual code studio</b></p>	Student watches
--	--	-----------------



	<p>Remember, in markdown, we used symbols to tell how we wanted to format text content.</p> <p>In HTML, we use tags to tell the computer how we want to display the content.</p> <p>First, we write the tag <code>&lt;!DOCTYPEHTML&gt;</code> to tell the computer that this is going to be an HTML page. This informs the browser that it is going to read an HTML page. This is a must do for all HTML pages.</p> <p>All our HTML content comes inside the opening <code>&lt;HTML&gt;</code> tag and closing <code>&lt;/HTML&gt;</code> tag</p>	<p>Student observes and asks questions</p>
--	---	--

```

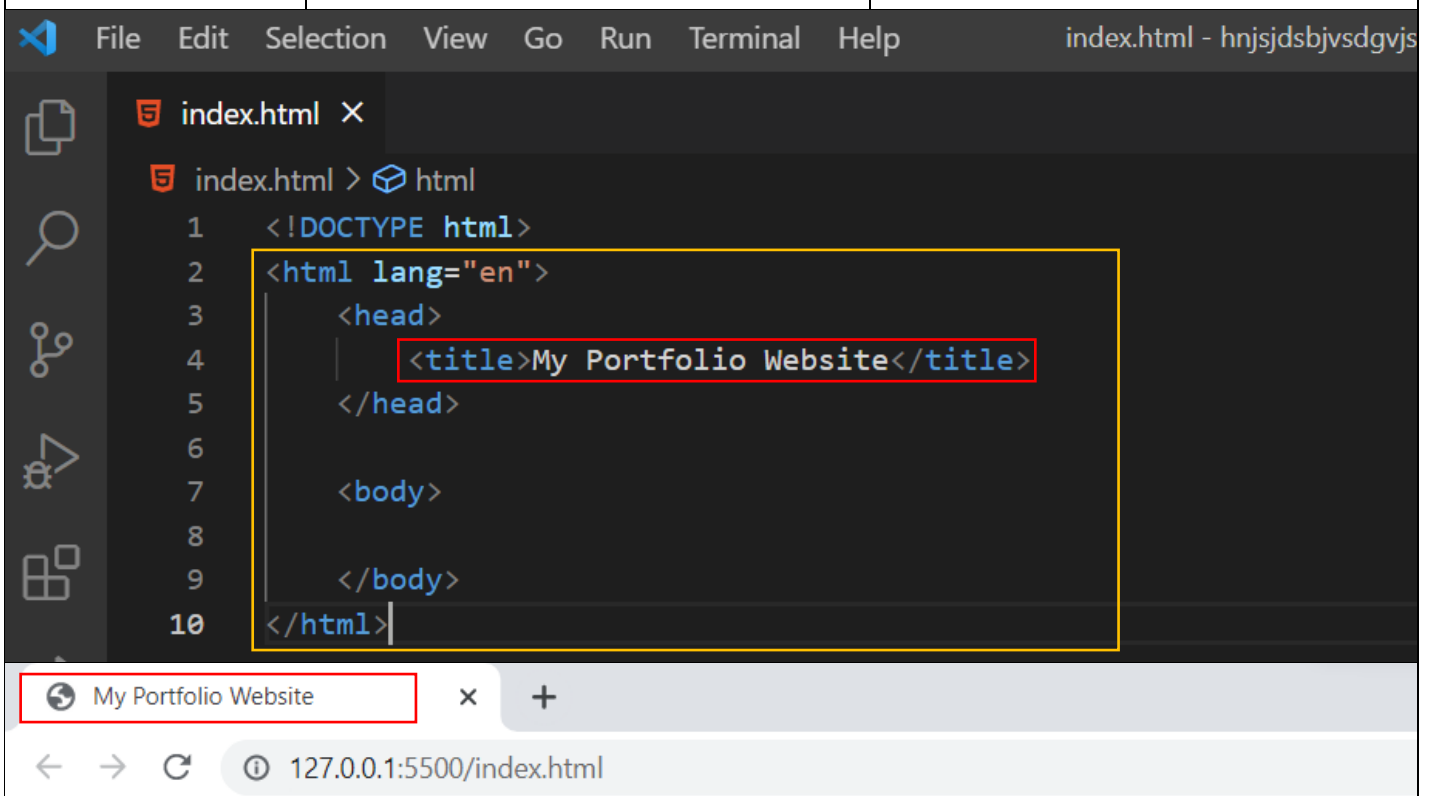
File Edit Selection View Go Run Terminal Help index.html - hnjsjdsbjvsgvjs
index.html X
index.html > html
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <title>My Portfolio Website</title>
5   </head>
6
7   <body>
8
9   </body>
10 </html>

```

	<p>Inside <code>&lt;HTML&gt;</code> tags, we can have <code>&lt;HEADS&gt;</code> tags and <code>&lt;BODY&gt;</code> tags.</p> <p>Inside <code>&lt;HEADS&gt;</code> tags, we store information about the page. Inside <code>&lt;BODY&gt;</code> tags we write content which is displayed on the web page.</p> <p>Indentations are also followed while writing html to keep everything organized.</p>	<p>Student observes and asks questions</p>
--	---	--

For example, we can write the title of our page inside tags. It is displayed at the top of the browser when you open the web page. To tell the computer that it is a title, we enclose it under <TITLE> tags .

Teacher writes the title and shows the output by opening the index.html in a browser.



The screenshot displays a development environment with VS Code and a web browser. In VS Code, the file 'index.html' is open, showing the following HTML code:

```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <title>My Portfolio Website</title>
5   </head>
6
7   <body>
8
9   </body>
10 </html>
```

The code is highlighted with a yellow box, and the title tag on line 4 is specifically highlighted with a red box. Below the code editor, a web browser window is open with the title 'My Portfolio Website' and the address bar showing '127.0.0.1:5500/index.html'.

	<p>We can write any kind of content inside the &lt;BODY&gt; tags in the html page.</p> <p>For example, to write a paragraph, we use the &lt;p&gt; tags.</p> <p>Teacher uses &lt;p&gt; tags in the html page and shows it to the student.</p>	Student observes and asks questions
--	--	-------------------------------------

```

1  <!DOCTYPE html>
2  <html lang="en">
3      <head>
4          <title>My Portfolio Website</title>
5      </head>
6
7      <body>
8          <p> Hey! I am a paragraph. </p>
9      </body>
10 </html>

```

	<p>Ok, now that you know the basic structure of how an HTML is created, I want you to create the portfolio page for yourself.</p> <p>I will keep telling you about the tags which you need to add in the page!</p> <p>Ready for the challenge?</p>	YES!!
--	--	-------

Teacher Stops Screen Share		
----------------------------	--	--

	Now it's your turn. Please share your screen with me.	
--	---	--

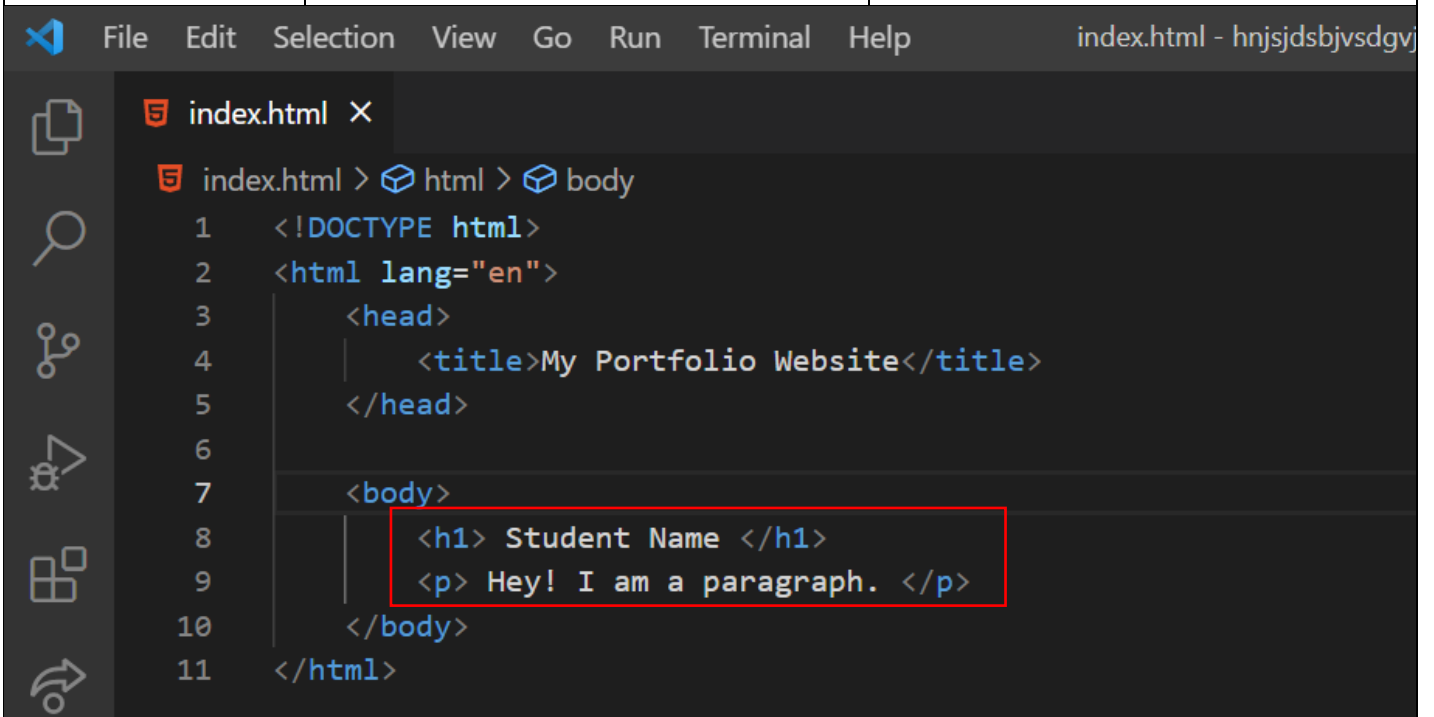
STUDENT-LED ACTIVITY – 20 mins		
--------------------------------	--	--

- Ask Student to press ESC key to come back to panel
- Guide Student to start Screen Share
- Teacher gets into Fullscreen

### ACTIVITY

- Use HTML tags to create a portfolio of games the student has built during the course.
- Add some style using css.

<b>Step 3: Student-Led Activity (20 mins)</b>	Guide the student to create the 'Portfolio folder' and 'index.html' file inside it. Guide the student to write the start-up code inside index.html file	Student creates the folder and opens the file in visual code studio. Student creates the start-up code (written by the teacher earlier)
	<p>Ok, We need a header on our web page to display the name of our web page.</p> <p>It could be your name!</p> <p>We use &lt;H1&gt; tags to create a BIG header. &lt;H2&gt;, &lt;H3&gt;, &lt;H4&gt; tags could be used to create SMALLER headers.</p> <p>Guide the student to create header using &lt;H1&gt; tag inside html body</p>	<p>The student creates a header using &lt;H1&gt; tags.</p> <p>He/She also experiments with different header tags &lt;H2&gt;, H3&gt; etc.</p>



```

File Edit Selection View Go Run Terminal Help index.html - hnjsjdsbjvsdgvj
index.html X
index.html > html > body
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <title>My Portfolio Website</title>
5   </head>
6
7   <body>
8     <h1> Student Name </h1>
9     <p> Hey! I am a paragraph. </p>
10  </body>
11 </html>

```

<div><div>My Portfolio Website</div><div>127.0.0.1:5500/index.html</div></div> <div><div>Student Name</div><div>Hey! I am a paragraph.</div></div>		
	<p>Have you ever seen portfolio websites of others online? What does it contain?</p> <p>Amazing! Our webpage needs to have some navigation menu as well which can lead to other webpages. These are called hyperlinks.</p> <p>We use <code>&lt;a&gt;</code> tag to create hyperlinks. Let's create two hyperlinks - Projects and About Me.</p>	<p>ESR: It contains links to projects they have done, about me pages etc.</p> <p>The student creates two <code>&lt;a&gt;</code> tags with 'Projects' and 'About Me' labels.</p>



```
File Edit Selection View Go Run Terminal Help index.html - portfolio-master - Visu
index.html X
index.html > html
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <title>My Portfolio Website</title>
5   </head>
6
7   <body>
8     <h1> Student Name </h1>
9     <a>Projects</a>
10    <a>About Me</a>
11  </body>
12 </html>
```

	<p>Great! We need to point these tags to the respective pages. This is done using 'attributes'. Each tag has some attributes.</p> <p>&lt;a&gt; tag has an attribute called 'href' (hypertext reference) which is used to point the tag to other pages. Guide the student to use 'href' attribute to point it to hyperlinks</p>	<p>The student uses the href attribute inside &lt;a&gt; tag to create a hyperlink.</p> <p>The student also creates an empty aboutme.html page for the hyperlink.</p> <p>Student runs the code and checks the output</p>
--	--	---

```
index.html > html > body > a
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <title>My Portfolio Website</title>
5   </head>
6
7   <body>
8     <h1> Student Name </h1>
9     <a href="index.html">Projects</a>
10    <a href="aboutme.html">About Me</a>
11  </body>
12 </html>
```

# Student Name

[Projects](#) [About Me](#)

	<p>You can create a sub-heading using &lt;H2&gt; tags (remember smaller than h1 tags).</p> <p>You can create a description using &lt;p&gt; tag which is used to write text in a paragraph</p>	<p>The student uses h2 and p tags to create sub-heading and description.</p>
--	---	--

index.html > html > body

```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <title>My Portfolio Website</title>
5   </head>
6
7   <body>
8     <h1> Student Name </h1>
9     <a href="index.html">Projects</a>
10    <a href="aboutme.html">About Me</a>
11
12    <h2>These are some games designed by me</h2>
13    <p>Games use p5.js, p5.play and matter.js libraries in javascript</p>
14
15  </body>
16 </html>
```

# Student Name

[Projects](#) [About Me](#)

## These are some games designed by me

Games use p5.js, p5.play and matter.js libraries in javascript

Now let's add images of the games you have created.

We use `<img/>` tag to add images. `<img/>` is a self-closing tag - we do not need opening and closing tags for `<img/>`.

The 'src' (source) attribute is used to give link to the image. You can add your images of your games in the same folder and use it in the src attribute.

For now, we will use placeholder images for these games.

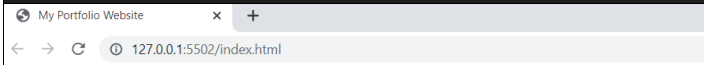
But we also want our images to be hyperlinks - that means clicking them should take them to our games hosted on github or p5!

Not surprisingly, tags can be enclosed inside each other. This means the `<img/>` tag can be enclosed inside tag.

Guide the student to use `<img/>` tag inside tag.

The student runs the code and tests the output.

```
index.html > ...
1  <!DOCTYPE html>
2  <html lang="en">
3    <head>
4      <title>My Portfolio Website</title>
5    </head>
6
7    <body>
8      <h1> Student Name </h1>
9      <a href="index.html">Projects</a>
10     <a href="aboutme.html">About Me</a>
11
12     <h2>These are some games designed by me</h2>
13     <p>Games use p5.js, p5.play and matter.js libraries in javascript</p>
14
15     <a href = "https://editor.p5js.org/richa176/full/MBtALZyCx"></a>
16
17   </body>
18 </html>
```

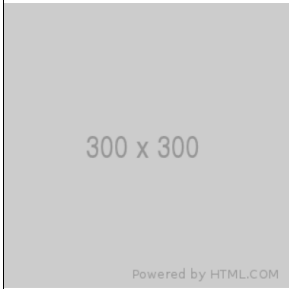


# Student Name

[Projects](#) [About Me](#)

## These are some games designed by me

Games use p5.js, p5.play and matter.js libraries in javascript



	Let's add a <code>&lt;p&gt;</code> tag below to add a name for the game	The student adds the <code>&lt;p&gt;</code> tag for the name of the game
--	---	--

```
1  <!DOCTYPE html>
2  <html lang="en">
3    <head>
4      <title>My Portfolio Website</title>
5    </head>
6
7    <body>
8      <h1> Student Name </h1>
9      <a href="index.html">Projects</a>
10     <
11       The p element represents a paragraph.
12       MDN Reference
13     > by me</h2>
14     <p>Games use p5.js, p5.play and matter.js libraries in javascript</p>
15
16     <a href = "https://editor.p5js.org/richa176/full/MBtALZyCx"></a>
17
18     <p>Trex Runner Game</p>
19
20   </body>
21 </html>
```

--	--	--

	<p>You can add many images for the games you have made.</p> <p>Note: src will contain the image name if the student has added the images in the same folder as the index.html file. Else, it will contain the path of the image.</p>	<p>The student adds multiple image hyperlinks and game names</p>
--	--	--

```
<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/richa176/full/MBtALZYCx"></a>
  |
  <p>Trex Runner Game</p>

  <a href = "#"></a>
  <p>Name of game 2</p>

  <a href = "#"></a>
  <p>Name of game 3</p>

  <a href = "#"></a>
  <p>Name of game 4</p>

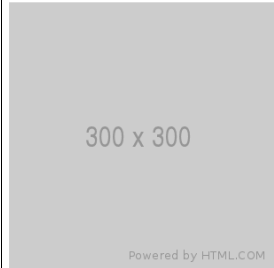
  <a href = "#"></a>
  <p>Name of game 5</p>
</body>
```

Student Name

[Projects](#) [About Me](#)

These are some games designed by me

Games use p5.js, p5.play and matter.js libraries in javascript



Trex Runner Game



	<p>Awesome!</p> <p>Let's say we want people visiting our page to find us through our social media pages including - Facebook, Youtube, Instagram.</p>	<p>The student downloads Facebook, Instagram and Youtube icons from the internet (Google Images) and uses them in the img src for the image hyperlinks.</p>
--	---	---

Let's add these icons at the end of the web page and link them to our social media pages

```
7 <body>
8 <h1> Student Name </h1>
9 <a href="index.html">Projects</a>
10 <a href="aboutme.html">About Me</a>
11
12 <h2>These are some games designed by me</h2>
13 <p>Games use p5.js, p5.play and matter.js libraries in javascript</p>
14
15 <a href = "https://editor.p5js.org/richa176/full/MBtALZYCx"></a>
16
17 <p>Trex Runner Game</p>
18
19 <a href = "#"></a>
20 <p>Name of game 2</p>
21
22 <a href = "#"></a>
23 <p>Name of game 3</p>
24
25 <a href = "#"></a>
26 <p>Name of game 4</p>
27
28 <a href = "#"></a>
29 <p>Name of game 5</p>
30
31 <a href="#"></a>
32 <a href="#"></a>
33 <a href="#"></a>
34
35 </body>
```

300 x 300

Powered by HTML.COM

Name of game 5



These icons might be larger than we expect.

<img/>. tag also has width and height attributes which can be used to set the width and height of the images.

The student uses the width and height attribute of <img/>. tag to adjust the image size.

```

7 <body>
8   <h1> Student Name </h1>
9   <a href="index.html">Projects</a>
10  <a href="aboutme.html">About Me</a>
11
12  <h2>These are some games designed by me</h2>
13  <p>Games use p5.js, p5.play and matter.js libraries in javascript</p>
14
15  <a href = "https://editor.p5js.org/richa176/full/MBtALZYCx"></a>
16
17  <p>Trex Runner Game</p>
18
19  <a href = "#"></a>
20  <p>Name of game 2</p>
21
22  <a href = "#"></a>
23  <p>Name of game 3</p>
24
25  <a href = "#"></a>
26  <p>Name of game 4</p>
27
28  <a href = "#"></a>
29  <p>Name of game 5</p>
30
31  <a href="#"></a>
32  <a href="#"></a>
33  <a href="#"></a>
34

```

300 x 300

Powered by HTML.COM

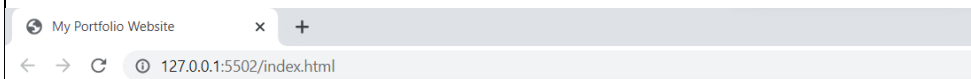
Name of game 5



	<p>Great! We have almost all the content / design elements on our portfolio page almost ready using HTML language.</p> <p>What do you think are we missing?</p>	<p>There is no styling. All the content is left-aligned and not in their proper places.</p>
	<p>Yes! We need styling for our web page. There are many ways to do styling. One way is to use &lt;STYLE&gt; tag</p>	<p>The student changes the color of h1 inside &lt;STYLE&gt; tag</p>

Inside style tags, we can add styling for any content on our page. Guide the student to use style tag and give a different color to the h1 tag.

```
index.html > html > head > style
1  <!DOCTYPE html>
2  <html lang="en">
3      <head>
4          <title>My Portfolio Website</title>
5
6          <style>
7              h1 {
8                  color: rgb(180, 64, 43);
9              }
10
11         </style>
12     </head>
13
```

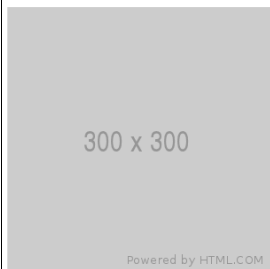


## Student Name

[Projects](#) [About Me](#)

**These are some games designed by me**

Games use p5.js, p5.play and matter.js libraries in javascript



Trex Runner Game

We can also apply a style to all the content. We use '\*' if we want a style to be applied to all the content.

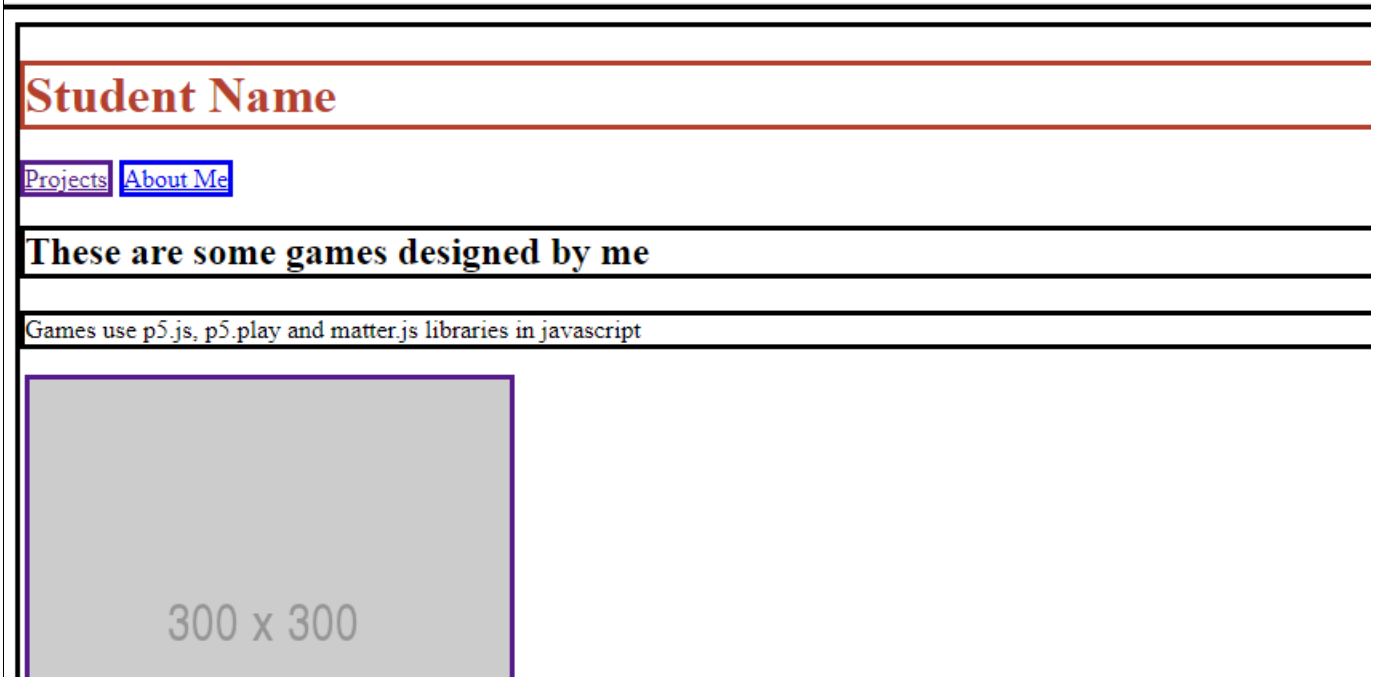
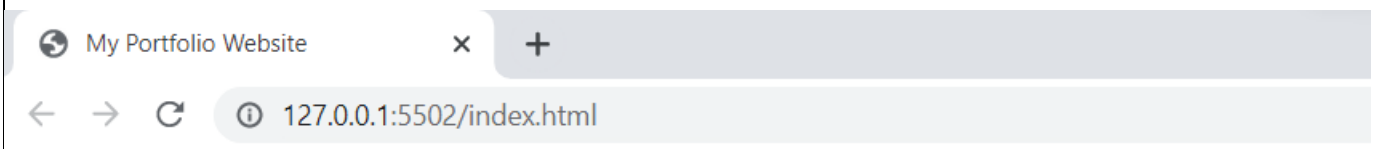
Let's add a border around each content on the page.

Guide the student to add a solid border around each content on the webpage.

The student adds a solid border around each content on the webpage



```
index.html > html > head > style
1  <!DOCTYPE html>
2  <html lang="en">
3    <head>
4      <title>My Portfolio Website</title>
5
6      <style>
7        h1 {
8          color: rgb(180, 64, 43);
9        }
10
11        * {
12          border: solid;
13        }
14      </style>
15    </head>
16  </html>
```



As you can see, all the content is made up of boxes. These boxes cover the entire width of the screen. We need to find some way to rearrange these boxes on the webpage. We do this using a style concept called "flexboxes".

	We will learn about using flexboxes and other advanced concepts of styling in the next class	
Teacher Guides Student to Stop Screen Share		
WRAP-UP SESSION - 5 Mins		
Activity details		Activity details
<p>Following are the wrap-up session deliverables:</p> <ul style="list-style-type: none"> <li>• Explain the facts and trivias</li> <li>• Next class challenge</li> <li>• Project for the day</li> <li>• Additional Activity</li> </ul>		Guide the student to develop the project and share with us.
Quiz time		
Question		Answer
<p>Which of the following is not a tag?</p> <p>A. bgcolor B. HTML C. HEAD D. BODY</p>		<b>A</b>
<p>In which of the following tags we write any kind of content which is to be displayed on the web page?</p> <p>A. &lt;HEAD&gt; B. &lt;BODY&gt; C. &lt;TITLE&gt; D. &lt;SCRIPT&gt;</p>		<b>B</b>
<p>Which of the following is the attribute of the tag which is used to take the user to the other pages?</p> <p>A. style B. src C. width D. href</p>		<b>D</b>
End the quiz panel		

## FEEDBACK

- Complement the student for her/his effort in the class.
- Encourage the student to create an About Me page using HTML

As an assignment, do you think you can create your own aboutme.html - About Me page using html tags?

Alright. I will look forward to seeing how you create your content.

We will be doing the styling for the html page in the next class.

### Project Overview

#### Tutorial Hub-1

**Goal of the Project :** you have learnt to add different HTML tags.

In this project, you will have to use multiple tags like lists, images, links and various styling properties to add some color and definition for our website.

**Story:** Shourya is learning to code for creating websites. He always wanted to show his creativity online. So he has decided to make a Tutorial Hub website for himself. Here, he wishes to add different technical languages to his website.

I am very excited to see your project solution and I know you both will do really well.

Bye Bye!

Students engage with the teacher over the project

## Teacher Clicks End Class

Activity	Activity Name	Links
Teacher Activity 1	Reference	<a href="https://github.com/Laaisha176/L1-My-portfolio">https://github.com/Laaisha176/L1-My-portfolio</a>
Student Activity 1	Icons	<a href="https://github.com/Laaisha176/L1Icons/archive/refs/heads/master.zip">https://github.com/Laaisha176/L1Icons/archive/refs/heads/master.zip</a>
Student Activity 2	Commonly used HTML tags	<a href="https://www.w3schools.com/tags/ref_byfunc.asp">https://www.w3schools.com/tags/ref_byfunc.asp</a>
Project Solution Link	Tutorial Hub -1	<a href="https://github.com/Laaisha176/L1-HWproj">https://github.com/Laaisha176/L1-HWproj</a>