**WhiteHat Jr**
Live Online Coding for Kids

**Capstone class : Advanced CSS**

**What we did:**
- Set the correct margin and padding effects on the portfolio header.
- Changed the color of visited and unvisited links in the header using the ':list' selector.
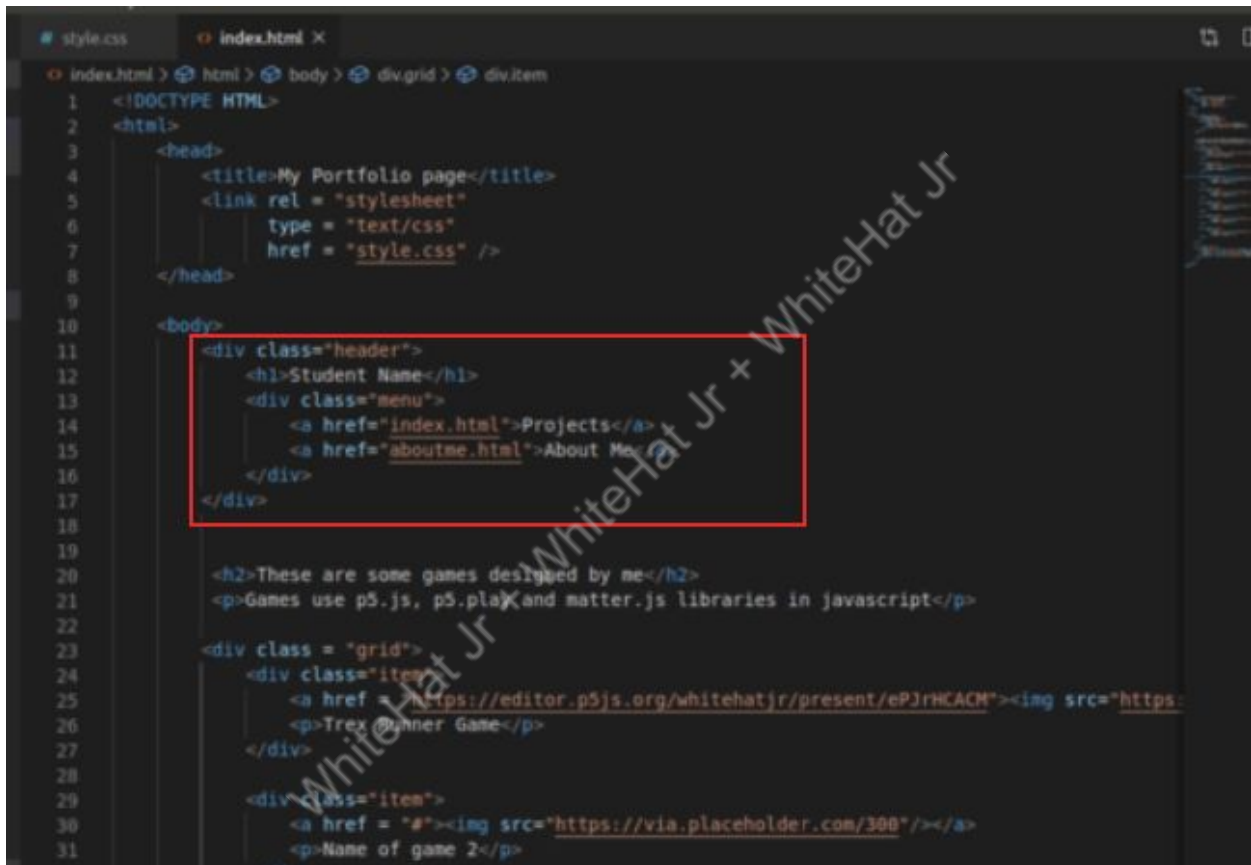- Created a hover effect to display the name of the game, when the mouse hovers over the image.

**How we did it:**
Our header elements are towards the left side of the page:

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| 300 x 300 | 300 x 300 | 300 x 300 | 300 x 300 |

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Trex Runner Game          Name of game 2            Name of game 3            Name of game 4

There are two ways in which we can customize the spacing between the elements - using margins and padding properties. They are important properties, often used in CSS and it is also important to differentiate between the two. To understand the difference, let's add a border around each element inside the header.

Earlier, when we wanted a box around every element in the page, we used * as a CSS selector. Now when we need all the elements inside the header class, we can use ".header *" as the CSS selector.

```css
h1 {
    color: white;
}

.header * {
    border: solid;
}

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

.site-description{
    display: flex;
    flex-direction: column;
    justify-content: first baseline;
}

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

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

p,h2{
```



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Trex Runner Game        Name of game 2        Name of game 3        Name of game 4

Use the two properties - margin and padding - separately on h1 to create the proper spacing. You need to tell me the difference between the two.

Note: px stands for pixels. the screen is made up of pixels.

```
# style.css  ×      <> index.html

# style.css > 🔧 h1
 1   h1 {
 2       color:  white;
 3       margin: 30px;
 4   }
 5
 6   .header * {
 7       border: solid;
 8   }
 9
10   .header{
11       background-color: ■cadetblue;
12       display: flex;
13       justify-content: space-between;
14   }
15
16   .site-description{
17       display: flex;
18       flex-direction: column;
19       justify-content: first baseline;
20   }
21
22   .grid{
23       display: flex;
24       flex-wrap: wrap;
25       justify-content: space-evenly;
26   }
27
28   .footer{
29       display: flex;
30       justify-content: flex-end;
31   }
32
```

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| 300 x 300 | 300 x 300 | 300 x 300 | 300 x 300 |
|---|---|---|---|
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| Trex Runner Game | Name of game 2 | Name of game 3 | Name of game 4 |

Add margin to only the left side of the box using the margin-left property.

```
# style.css   ×      <> index.html

# style.css > ⌂ h1
  1    h1 {
  2        color: ■white;
  3        margin-left: 30px;
  4    }
  5
  6    .header * {
  7        border: solid;
  8    }
  9
 10    .header{
 11        background-color: ■cadetblue;
 12        display: flex;
 13        justify-content: space-between;
 14    }
 15
 16    .site-description{
 17        display: flex;
 18        flex-direction: column;
 19        justify-content: first baseline;
 20    }
 21
 22    .grid{
 23        display: flex;
 24        flex-wrap: wrap;
 25        justify-content: space-evenly;
 26    }
 27
 28    .footer{
 29        display: flex;
 30        justify-content: flex-end;
 31    }
 32
```

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Trex Runner Game          Name of game 2          Name of game 3          Name of game 4

```css
# style.css   ×    <> index.html

# style.css > ⚡ h1
  1   h1 {
  2       color: █white;
  3       padding-left: 30px;
  4   }
  5
  6   .header * {
  7       border: solid;
  8   }
  9
 10   .header{
 11       background-color: ■cadetblue;
 12       display: flex;
 13       justify-content: space-between;
 14   }
 15
 16   .site-description{
 17       display: flex;
 18       flex-direction: column;
 19       justify-content: first baseline;
 20   }
 21
 22   .grid{
 23       display: flex;
 24       flex-wrap: wrap;
 25       justify-content: space-evenly;
 26   }
 27
 28   .footer{
 29       display: flex;
 30       justify-content: flex-end;
 31   }
```

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| 300 x 300 | 300 x 300 | 300 x 300 | 300 x 300 |
| --- | --- | --- | --- |
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| Trex Runner Game | Name of game 2 | Name of game 3 | Name of game 4 |

The padding of 30 pixels has been added to the content inside h1. Sometimes we need margin, padding or both while creating design layouts.

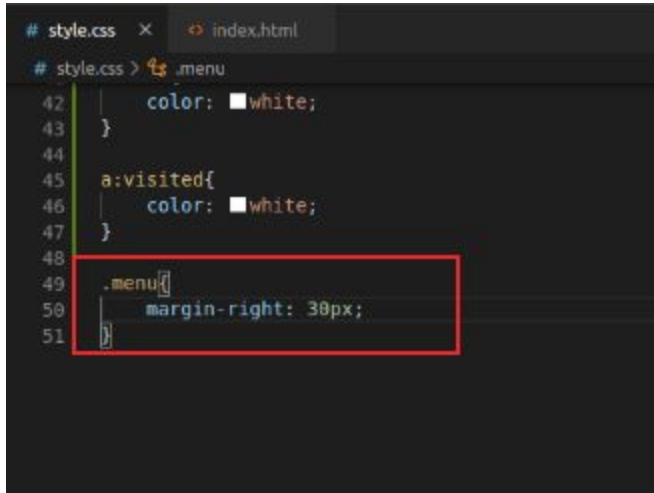We have two selectors which allow us to customize the style of links.
'a:link' allows us to customize the style of links.
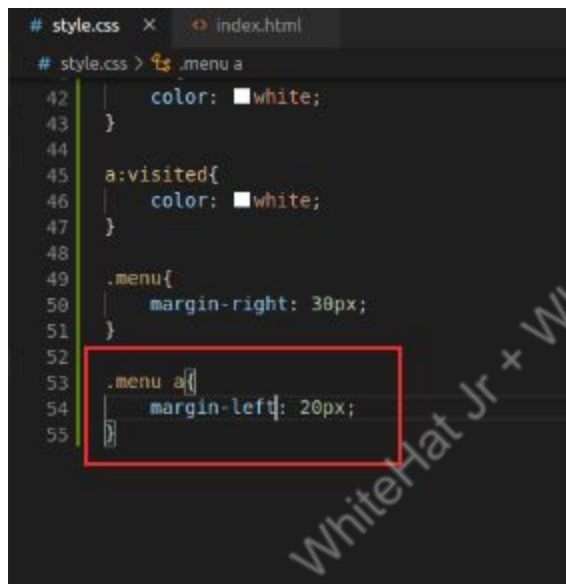'a:visited' allows us to customize the style of visited links.

Add some margin to the right of the "menu" class.

```
# style.css  ×       <> index.html
# style.css > ⁙ .menu
42  |     color: ■white;
43  }
44
45  a:visited{
46  |     color: ■white;
47  }
48
49  .menu{
50  |     margin-right: 30px;
51  }
```

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| 300 x 300 | 300 x 300 | 300 x 300 | 300 x 300 |
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| Trex Runner Game | Name of game 2 | Name of game 3 | Name of game 4 |

Add margin-left to the li elements inside the menu.

We want the text to be centred in the div containing the image.

The <p> and the <img> tags are contained inside item div class.

We want to position elements inside item div class in relative position to it. For example: We want the text to be centred relative to this div and not the entire page.

We will add the property "position: relative" in the item class.
We will also add the property "position:absolute" in the <p> tag inside item.

We want to align the text inside <p> 50% from the top and 50 % from the left. We can use these properties to style the text.

```css
 35    }
 36
 37    body{
 38        background-color: ■#808080;
 39    }
 40
 41    a:link{
 42        color: ■white;
 43    }
 44
 45    a:visited{
 46        color: ■white;
 47    }
 48
 49    .menu{
 50        margin-right: 30px;
 51    }
 52
 53    .menu a{
 54        margin-left: 20px;
 55    }
 56
 57    .item{
 58        position: relative;
 59    }
 60
 61    .item p{
 62        position: absolute;
 63        top: 50%;
 64        left: 50%;
 65    }
 66
```

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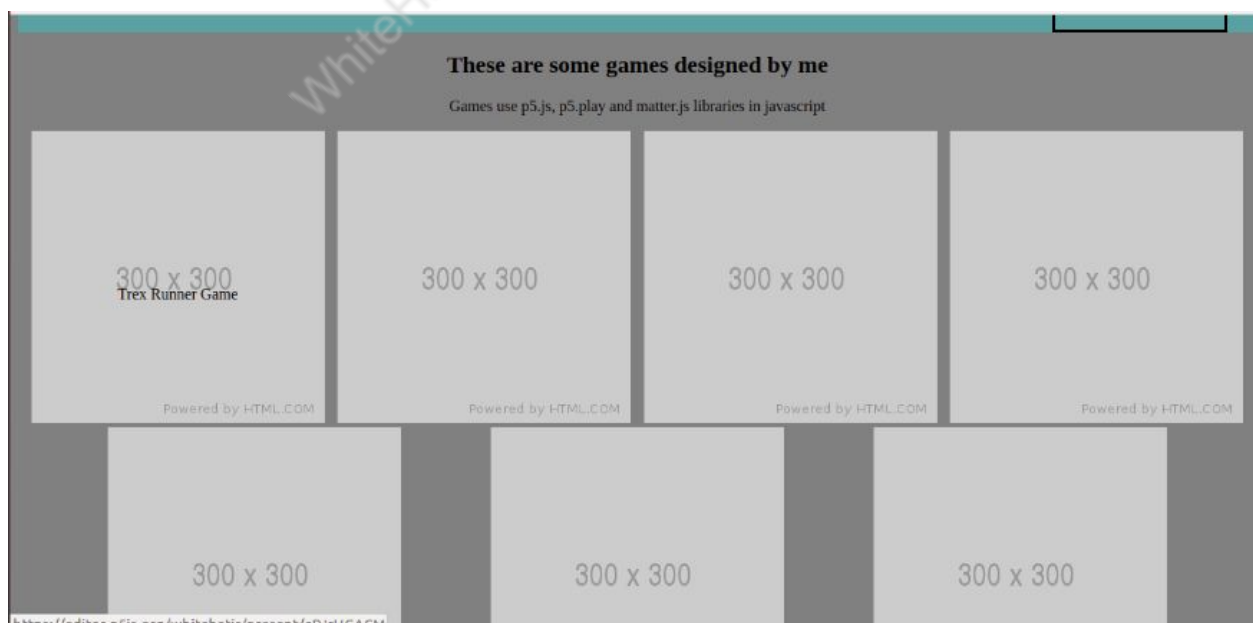| | | | |
|---|---|---|---|
| 300 x 300<br>Trex Runner Game<br>Powered by HTML.COM | 300 x 300<br>Name of game 2<br>Powered by HTML.COM | 300 x 300<br>Name of game 3<br>Powered by HTML.COM | 300 x 300<br>Name of game 4<br>Powered by HTML.COM |
| 300 x 300<br>Name of game 5 | 300 x 300<br>Name of game 6 | 300 x 300<br>Name of game 7 | |

Transform property to translate the text.

```
# style.css > .item p
35    }
36
37    body{
38        background-color: #808080;
39    }
40
41    a:link{
42        color: white;
43    }
44
45    a:visited{
46        color: white;
47    }
48
49    .menu{
50        margin-right: 30px;
51    }
52
53    .menu a{
54        margin-left: 20px;
55    }
56
57    .item{
58        position: relative;
59    }
60
61    .item p{
62        position: absolute;
63        top: 50%;
64        left: 50%;
65        transform: translate(-50%, -50%);
66    }
```

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| 300 x 300 Trex Runner Game | 300 x 300 Name of game 2 | 300 x 300 Name of game 3 | 300 x 300 Name of game 4 |
|---|---|---|---|
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| 300 x 300 Name of game 5 | 300 x 300 Name of game 6 | 300 x 300 Name of game 7 |
|---|---|---|

file:///home/rajeev/Portfolio/index.html#

Visibility is controlled by 'opacity' property. We can change the opacity of the text to 0. However, when we hover, we want the opacity to become 1.  We use ':hover' selector over the item to style the <p> element when the mouse hovers over the item div class.
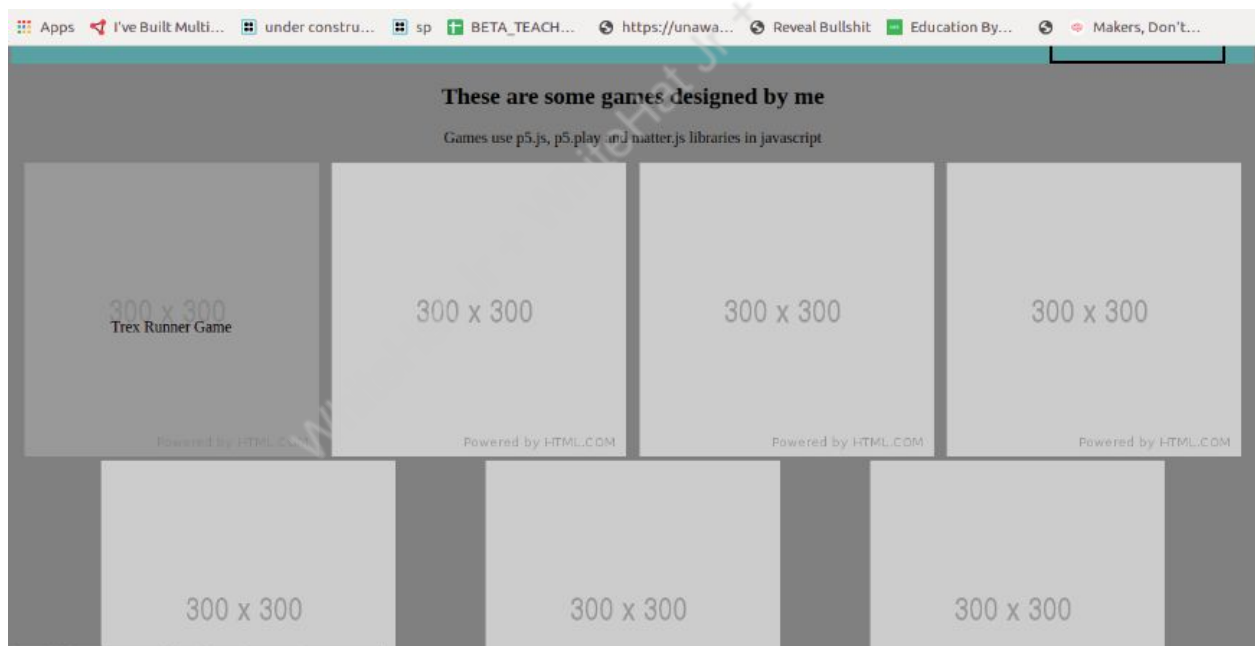
```css
# style.css  ×    ⟨⟩ aboutme.html     ⟨⟩ index.html

# style.css > ⌂ .item p
41    a:link{
42        color: ■white;
43    }
44
45    a:visited{
46        color: ■white;
47    }
48
49    .menu{
50        margin-right: 30px;
51    }
52
53    .menu a{
54        margin-left: 20px;
55    }
56
57    .item{
58        position: relative;
59    }
60
61    .item p{
62        position: absolute;
63        top: 50%;
64        left: 50%;
65        transform: translate(-50%, -50%);
66        opacity:0;
67    }
68
69    .item:hover p{
70        opacity: 1;
71    }
72
```

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| 300 x 300 Trex Runner Game | 300 x 300 | 300 x 300 | 300 x 300 |
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| 300 x 300 | 300 x 300 | 300 x 300 | |

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Reduce the opacity of the image to one-third when the mouse hovers over the item.

## What's next?:

In the next class, you will learn about React Native.