T. PRIYA VARSHA

Id: 16332852

Task-1

Objective:

The main objective of this ICP is to learn about the Media queries, responsive web design, Bootstrap, Grid layout and basics of JavaScript

Rock, Paper or Scissors Game

The task is to design a Rock, Paper or Scissors Game using HTML, JavaScript and CSS. Basic rules of the game is when Player picks one of the 3 given options based on a random selection by the computer it picks the winner.

```html
<body style="background-color: rgb(50, 290, 170)" >
<div class="container-fluid"> <!-- This div has basic display contents and receiving score value from script.js-->
    <h1>Pick one of the below</h1>
    <h2 style="text-align: center;">Rock Paper Scissors</h2>
    <div class="container-fluid" class="row" id="response" style="text-align: center"></div>
    <div style="text-align: center">
        <h2><span class="player">Player</span>
            <span id="score"></span>
            <span class="computer">Computer</span></h2>
    </div>
    <div class="row">
        <center>
            <div class="btn-group btn-group-lg" role="group"> <!-- Calling functions defined inn script.js with user's selection as a pa
                <button type="button" onclick="game('Rock')" class="btn btn-info"><img src="Images/Rock.png" height="300"
                                                                                        width="300"/></button>
                <button type="button" onclick="game('Paper')" class="btn btn-info"><img src="Images/Paper.png" height="300"
                                                                                         width="300"/></button>
                <button type="button" onclick="game('Scissors')" class="btn btn-info"><img src="Images/Scissors.png" height="300"
                                                                                            width="300"/></button>
            </div>
        </center>
    </div>
</div>
<script src="script.js"></script><!--Linking Java script-->
</body>
</html>
```

Output after compiling the ICP is:

CSS file used for this HTML

```css
.container{
    background-color: white;
    border-radius: 3px   ;
    margin: 50px auto;
    width: 600px;
    height: 520px;
    box-shadow: 3px 3px 30px rgba(0,0,0,0.1);
    font-family: Helvetica;
}
.container1{
    background-color: white;
    border-radius: 3px   ;
    margin: 50px auto;
    width: 200px;
    height: 50px;
    padding: 10px;
    box-shadow: 3px 3px 30px rgba(0,0,0,0.1);
}
h1 {
    text-align: center;
    color: rgba(5,5,5,1);
    padding: 40px 0px 10px;
}
```

Algorithm used in JavaScript

```javascript
function game(pick){
    compare(pick);
}//Value of pick is received from HTML which in turn calls the function with game logic

function compare(choice1) {
    var computerChoice = Math.random();
    if (computerChoice < 0.34) {
        choice2 = "Paper";
    } else if (computerChoice <= 0.67) {
        choice2 = "Scissors";
    } else {
        choice2 = "Rock";
    }

    if (choice1 === choice2) {
        Draw();
    }

    else if (choice1 === "Rock") {

        if (choice2 === "Scissors") {
            Winner();
        }
        else {
            Loser();
        }
    }
```
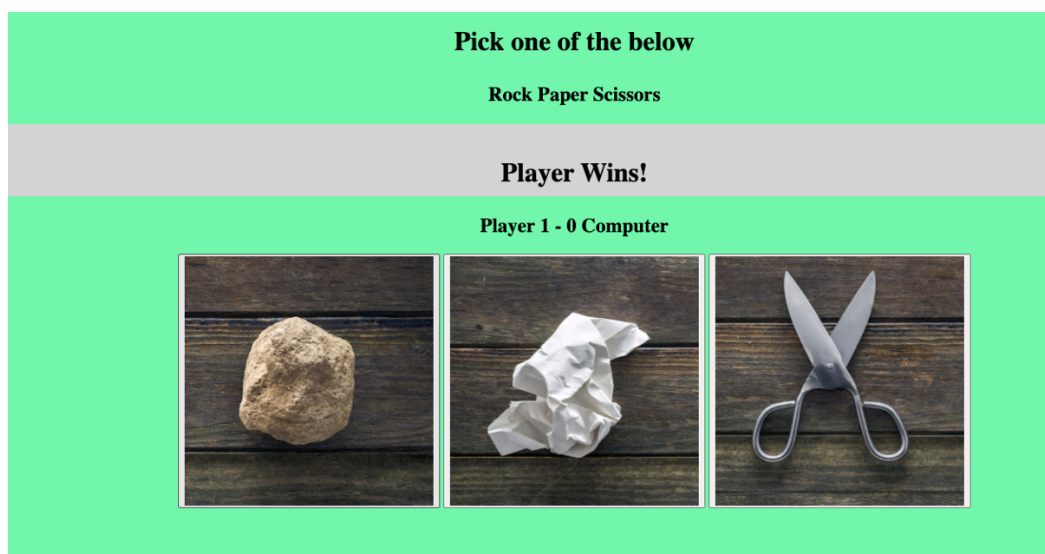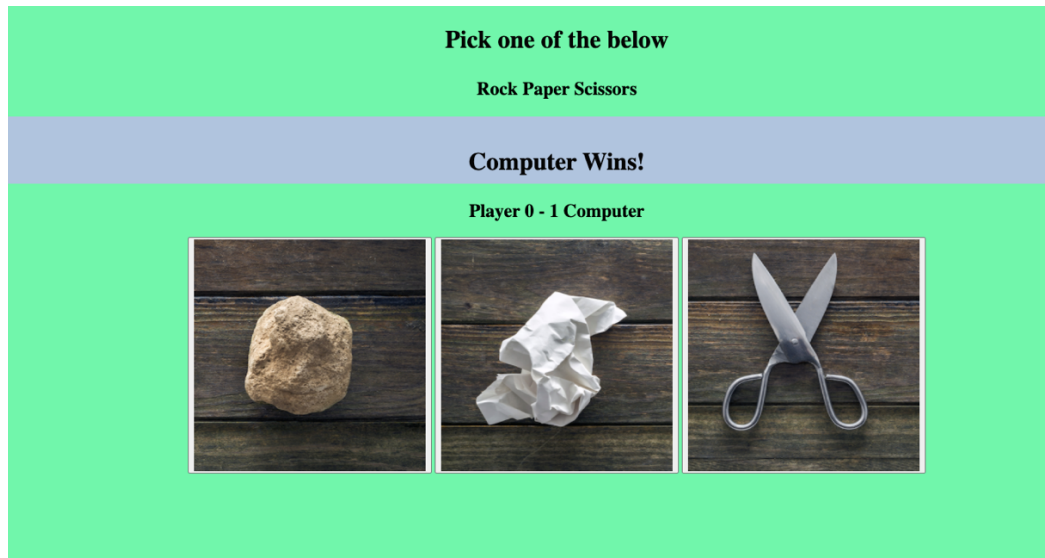
When the Player selects one option, then the computer generates a random number within the range of 0 to 1 and the user option has certain probability and so by calculating probability score the winner is declared. Also, we have a score counter for each play whoever wins their score will be calculated. The output is as follows:
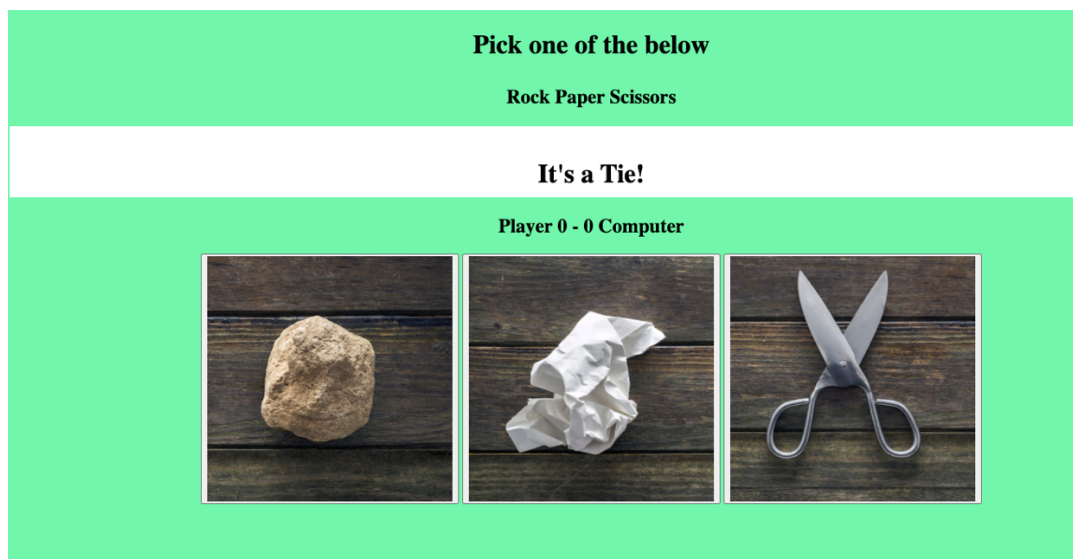
When player wins:

When computer wins:

When it's a tie:

Task -2

Responsive Web Design (RWD)

The task is to design a mockup page. The link to the sample mockup page: [Sample mockup](#)

To do this task, we are using a Responsive Web design. The images have been resized and placed in the respective folders.

Step 1: Added the respective links for Responsive Web design

```html
<html>
<head>
    <meta name="viewport" content="width=device-width, initial-scale=1.0"><!-- Using Viewport to make the page responsive to th
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-beta1/dist/css/bootstrap.min.css" rel="stylesheet"
        integrity="sha384-giJF6kkoqNQ00vy+HMDP7azOuL0xtbfIcaT9wjKHr8RbDVddVHyTfAAsrekwKmP1" crossorigin="anonymous">
    <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
    <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Orbitron">
    <style>
        body {
            font-family: "Orbitron";
        }
    </style> <!-- Importing font style from google fonts-->

</head>
```

Step 2: Changed the Name and designation

```html
</head>
<body style="background-color: #6c857d">
<div class="container" style="background-color: #FFFFBF">
    <div class="row">
        <div class="col-lg-3">
            <img src="SampleImages/bean.jpg" height="133" width="100"/>
        </div>
        <div class="col-lg-6"></div>
        <div class="col-lg-3">
            <h1>Priya Varsha</h1>
            <h3>Student</h3>
        </div>
    </div>
```

Step 3: Added the necessary images required to demonstrate RWD.

```html
    </div>
    <hr style="height:3px;border-width:9px;color:black;background-color:darkblue">
    <div class="row">
        <img src="SampleImages/Image.png" height="350" width="1140"/>
    </div>
    <div class="row" style="text-align: center">
        <h2>Featured Work </h2>
    </div>
```

Step 4: Made required changed in Featured Work

```
</div>
<div class="row" style="text-align: center">
    <h2>Featured Work </h2>
</div>
<div class="row">
    <div class="col-lg-4">
        <img src="SampleImages/app1.png" height="250" width="350"/>
        <h3 style="text-align: center">Project1</h3>
        <p style="text-align: center;font-size: x-small"><a href="#">https://github.com/Privar11/Web_Mobile_Programming_ICP/</a></p>
    </div>
    <div class="col-lg-4">
        <img src="SampleImages/app2.png" height="250" width="350"/>
        <h3 style="text-align: center">Project2</h3>
        <p style="text-align: center;font-size: x-small"><a href="#">https://github.com/Privar11/Web_Mobile_Programming_ICP</a></p>
    </div>
    <div class="col-lg-4">
        <img src="SampleImages/app3.png" height="250" width="350"/>
        <h3 style="text-align: center">Project3</h3>
        <p style="text-align: center;font-size: x-small"><a href="#">https://github.com/Privar11/Web_Mobile_Programming_ICP</a></p>
    </div>
</div>
</div>
</body>
</html>
```

Output: