

## ICP3 – Group 12

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GitHub link: <https://github.com/Srinikhitha98/Web-Mobile-Dev-Spring-2022/tree/main/Web/ICP3>

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GitHub link: <https://github.com/sukumarbodapati/Web-Mobile-Spring-2022/tree/main/Web/ICP3>

### ICP3: Bootstrap and JavaScript

**Bootstrap:** It is a framework for Responsive web designing.

**JavaScript:** It is a programming language used for controlling the web pages.

#### Objectives of ICP3:

1. Design Rock paper Scissor game using JavaScript with basic User Interface.
2. Design the Responsive web design.

#### Tasks – Objective 1:

1. Created a game.html file and game.js file and linked html with java script using the script tag.
2. For basic UI structure, used game.html file. Given the title as Rock paper scissor using title tag in the head tag of html.
3. Used container to make the page responsive and professional and configured it to center.
4. Designed one block to display the score after each round and result text after each round.
5. For the user to select, have designed three buttons using buttons tag, given values to each of them and tagged them to respective images (Rock, paper, scissor) and styled them using width and height.
6. Used onclick event, to pass the user selected option into the function.
7. Designed another block for the results and to display the play again button.

#### Java script:

1. For the logic, taken user input "Rock as "1"" , Paper as "2"" , Scissor as "3"".
2. Considered two players, Player A as manual input which is given by user and Player B as random generator.
3. Set the initial scores of the Players to zero using the let (since let allows you to declare the variables with block scope).
4. Rgen():Written this function for the player B's input using math.random().
5. Written main function which takes input given by the User. Declared random variable inside main function which is assigned to random generator function and passed both the values i.e. user input and random generator input into compare function(comp(a,b)).
6. comp(a,b):Written this function to get the result for the given input.

7. In the comp function: As per below table, used conditional statement(if-statement) for the logic and also increment the score of player who wins the round until the any of the player reaches the score of 10 .

- When two player chooses same option then no points are awarded to each player and displays result text as “Draw”.
- As per table, when player A wins, incremented the score of Player A and also displayed the text as “Player A won”.
- As per table, when player B wins, incremented the score of Player B and also displayed the text as “Player lost”.
- Once any of the player score reaches 10, will close the game.

User Input-Player A	Random Generated-Player B	Output
Rock (1)	Rock (1)	Draw
Rock (1)	Paper (2)	Player B wins
Rock (1)	Scissors (3)	Player A wins
Paper (2)	Rock (1)	Player A wins
Paper (2)	Paper (2)	Draw
Paper (2)	Scissors (3)	Player B wins
Scissors (3)	Rock (1)	Player B wins
Scissors (3)	Paper (2)	Player A wins
Scissors (3)	Scissors (3)	Draw

8. Scorecard (): Used this function to display the result text and score of each player.

9. Closegame (): Used this function to close the current game and reset all the values to zero and give an option to the user to play again.

Code:

```

Game.html X  README.md ...Game  README.md ...ICP3  Release Notes: 1.64.0
eb > ICP3 > Game > Game.html > html > body > div.GameName.text-center.text-info. > div.conta
21 </head>
22
23 <!--to link Java script with HTML-->
24 <script src="Game.js"></script>
25
26 <body>
27 <!--To display the game name-->
28 <div class="GameName text-center text-info ">
29 <h1 class=" text-centre font-weight-italic">Rock paper scissor</h1>
30
31
32 <!--Start the Game-->
33 <div class="container text-centre text-info mt-5">
34 <div class=" row justify-content-md-center ">
35 <div class=" game col-md-5 p-3 text-center pt-4" id="Startgame">
36 <!--to display the result text after each game-->
37 <h1 class="result text-info font-weight-italic display-5" id="result
38
39 <!--To display result of each player after each round-->
40 <p>
41 <span class="text-dark font-weight-bold">Player A : <b id="PlayA
42 <br>
43 <span class="text-dark font-weight-bold">Player B : <b id="PlayB

```

```

Web > ICP3 > Game > JS Gamejs > ...
4 let result= start
5
6 // main function
7 function game(clickvalue) {
8
9     var Random = Rgen();
10    comp(clickvalue, Random);
11    scorecard();
12 }
13
14 // Random genertor
15 function Rgen() {
16     var hv = 4, lv = 1;
17     return Math.floor(Math.random() * (hv - lv) + lv)
18 }
19
20 // display the scores
21 function scorecard() {
22     document.getElementById("PlayA").innerText=PlayerA ;
23     document.getElementById("PlayB").innerText=PlayerB;
24     document.getElementById("resulttext").innerText = result;
25 }

```

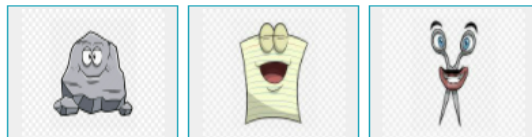
Output of the UI:

# Rock paper scissor

## Let's Begin the Game

**Player A :**

**Player B :**



### Task -Objective 2:

1. For the given source code, added bootstrap references and font style reference link in the head of the HTML file.
2. In the body of the file, declared the class as container for the first div tag for responsive web design and added a row class for the picture and text as per mockup.
3. Inside the row class ,placed images and styled the text as per given screen

4. For the images to be responsive, added the .img-fluid class wherever required.
5. Used font family as "Lato" for all the text in the screen.
6. Created another class row for the bottom images and text.
7. In the row class, set the image using .img-fluid, styled the text using font side as Lato and also added respective hyperlinks for the sports channels using a tag.

#### Code:

```
Web > ICP3 > RWD > <> input.html > ...
22
23 <body>
24
25 <!-- Created a block using container class -->
26 <div class="container">
27
28 <!-- created a class row and added border at the bottom of the row -->
29 <div class="row border-5 border-bottom">
30 <div class="col-sm-4">
31 
34 <h1 class="text-uppercase display-5" style="font-family:'Lato',
35 <h3 class="text-uppercase fs-5" style="font-family:'Lato', sans-
36 </div>
37 </div>
38
39 <!-- Set the image in class img-fluid -->
40 <div>
41 <img alt="PlaceholderImage2" class="img-fluid" src="PlaceholderImage
42 </div>
43
44 <!-- Add styling to the text -->
```

#### Output:

