Assignment 01

Rapid Application Development | SCS 2208

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[1] With all due respect, in an emergency please contact.

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1 Game Link

JS Dice Game (kulasinghet.github.io)

2 Code File

```
// import {rollDice} from "./diceGame";
let maxScore = 100; // max score for the game
let marks = [0, 0]; // array to store the marks

document.getElementById("btn1").addEventListener("click", () => { // event listener for
player 1 button

    let dice = rollDice(); // roll the dice

    document.getElementById("dice1").src = dice[3]; // set the image src for dice 1
    document.getElementById("dice2").src = dice[4]; // set the image src for dice 2



        if (gameRule(dice)) { // if the player 1 can play again
            document.getElementById("btn2").setAttribute("disabled", "disabled"); //
disable the button for player 2
            document.getElementById("btn1").removeAttribute("disabled"); // enable the
button for player 1
        } else { // if the player 1 cannot play again transfer the button to player 2
            document.getElementById("btn2").removeAttribute("disabled"); // enable the
button for player 2
            document.getElementById("btn1").setAttribute("disabled", "disabled"); //
disable the button for player 1
        }

        marks[0] = scoreRule(dice, marks[0]); // calculate the score for player 1
        let marksString = "Score: " + marks[0]; // convert the score to string
        document.getElementById("score1").innerHTML = marksString; // set the score for
player 1

    if (marks[0] >= maxScore) { // if the score is greater than or equal to the max
score initiate winning scenario for player 1
        winScenario(1);
    }
});

document.getElementById("btn2").addEventListener("click", () => { // event listener for
player 2 button

    let dice = rollDice(); // roll the dice

    document.getElementById("dice1").src = dice[3]; // set the image src for dice 1
    document.getElementById("dice2").src = dice[4]; // set the image src for dice 2

        if (gameRule(dice)) { // if the player 2 can play again
            document.getElementById("btn1").setAttribute("disabled", "disabled"); //
disable the button for player 1
            document.getElementById("btn2").removeAttribute("disabled"); // enable the
button for player 2
        } else { // if the player 2 cannot play again transfer the button to player 1
            document.getElementById("btn1").removeAttribute("disabled"); // enable the
button for player
            document.getElementById("btn2").setAttribute("disabled", "disabled"); //
disable the button for player 2
        }

        marks[1] = scoreRule(dice, marks[1]);  // calculate the score for player 2

        let marksString = "Score: " + marks[1]; // convert the score to string
        document.getElementById("score2").innerHTML = marksString; // set the score for
player 2

        if (marks[1] >= maxScore) { // if the score is greater than or equal to the max
score initiate winning scenario for player 2
            winScenario(2); // initiate winning scenario for player 2
        }
});
```

```
const rollDice = () => { // function to roll the dice

    let dice = []; // array to store the dice values
    dice[0] = Math.floor(Math.random() * 6) + 1; // first dice roll
    dice[1] = Math.floor(Math.random() * 6) + 1; // second dice roll

    dice[3] = "images/dice_" + dice[0] + ".png"; // set the image src for dice 1
    dice[4] = "images/dice_" + dice[1] + ".png"; // set the image src for dice 2

    return dice; // return the image src according to the dice values
}

let gameRule = (dice) => { // function to check if the player can play again

    return dice[0] === dice[1] && dice[0] !== 1; // if the dice values are equal and not
1 return true
}

let scoreRule = (dice, marks) => { // function to calculate the score

    if (dice[0] === 1 && dice[1] === 1) { // if both dice are 1
        return 0; // return marks as 0
    } else { // if both dice are not 1
        return dice[0] + dice[1] + marks; // return the sum of the dice values plus the
marks
    }
}

const winScenario = (player) => { // function to initiate winning scenario
    document.getElementById("btn1").setAttribute("disabled", "disabled"); // disable the
button for player 1
    document.getElementById("btn2").setAttribute("disabled", "disabled"); // disable the
button for player 2

    if (player === 1) { // if the player is player 1
        document.getElementById("score1").innerHTML = "Winner!"; // set the score for
player 1 as winner
        document.getElementById("score2").innerHTML = "Loser!"; // set the score for
player 2 as loser
    } else if (player === 2) { // if the player is player 2
        document.getElementById("score2").innerHTML = "Winner!"; // set the score for
player 2 as winner
        document.getElementById("score1").innerHTML = "Loser!"; // set the score for
player 1 as loser
    }
}
```