Explain how can I implement the buttons in js for this game I wrote in js

```
function playGame() {

 let userin= prompt("Choose Rock, Paper, or Scissors:").toLowerCase();



 while (userin!== "rock" && userin!== "paper" && userin!== "scissors") {

   userin = prompt("Invalid input.").toLowerCase();

 }

 const choices = ["rock", "paper", "scissors"];

 const computerOp = choices[Math.floor(Math.random() * 3)];



 let result;



 if (userin=== computerOp) {

   result= "TIE";

 } else if(

   (userin=== "rock" && computerOp === "scissors")||

   (userin === "paper" && computerOp=== "rock") ||

   (userin==="scissors" && computerOp=== "paper")

 ) {

   result = "YOU WON";

 } else {

   result  = "COMPUTER WON";

 }
```

```
  console.log(result);



  alert(`You chose: ${userin}\nComputer chose: ${computerOp}\nResult: ${result}`);



  if (confirm(`${result}`)) {

    playGame();

  }

}

playGame();

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```

Creating the Rock Paper Scissors Buttons in JavaScript

Let me explain how the buttons are implemented in the JavaScript code:

1. Button Selection

First, we select all the buttons from the HTML using:

javascript
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```
const buttons = document.querySelectorAll('button');
```

This creates a NodeList (similar to an array) containing all three buttons from our HTML.

2. Adding Click Event Listeners

We then add click event listeners to each button using `forEach`:

javascript
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```
            .forEach(            => {
```

```
        .addEventListener('click', () => {
    // Game logic goes here
  });
});
```

This loops through each button and attaches a click handler function.

3. Getting Player's Choice

When a button is clicked, we get the player's choice from the button's ID:

javascript
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```
const playerChoice = button.id;
```

Since our buttons have IDs matching the game choices (`rock`, `paper`, `scissors`), this gives us the player's selection.

4. Complete Button Implementation

Here's the full button-related code with context:

javascript
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```
// Get all buttons from the page
const buttons = document.querySelectorAll('button');

// Add click handler to each button
buttons.forEach(button => {
  button.addEventListener('click', () => {
    // 1. Get player's choice from button ID
    const playerChoice = button.id;

    // 2. Generate computer's random choice
    const computerChoice = choices[Math.floor(Math.random() * 3)];

    // 3. Determine winner
    const result = determineWinner(playerChoice, computerChoice);

    // 4. Display results
    resultsDiv.innerHTML = `
      You chose <strong>${playerChoice}</strong><br>
      Computer chose <strong>${computerChoice}</strong><br>
      <strong>${result}</strong>
```

```
    `;
  });
});
```

Key Points About the Button Implementation:

1. **No Need to Create Buttons in JS** - We defined them in HTML because:
    - They're static elements (always the same three choices)
    - It's simpler to style them in HTML/CSS
    - The page loads faster with HTML elements
2. **Using Button IDs** - We leverage the button IDs to identify the player's choice, which is cleaner than checking text content.
3. **Event Delegation Alternative** - For many buttons, we could use event delegation (one listener on a parent), but with just three buttons, this approach is fine.
4. **Separation of Concerns** - The button handling is separate from:
    - The game logic (in `determineWinner()`)
    - The computer's random choice generation
    - The display updating

This makes the code more maintainable and easier to modify later.