Psychic Game Homework Pseudocode

1. To start the game, clicks on a link to go to the URL for the game. The text “Guess what letter I’m thinking of” will display on the screen.
2. The following text also displays for each counter:
   1. Wins
   2. Losses
   3. Guesses Left
   4. Your Guesses so far:
3. Create a counter and set the counter values:
   1. Wins (var wins++1)
   2. Losses (var losses++1)
   3. Guesses Left (guessesLeft-1)
   4. Your Guesses so far (blank until the user selects a letter, then display letters user selects until the user wins or loses)
4. Create an array for computer generated keys.
5. The app then randomly generates a letter that is stored so it can be compared to the letter the user selects, but the letter does not display to the user. The letter is stored to an array so it can be compared to what the user enters.
6. The user selects a letter on the keyboard (user input) and it is displayed in “Your Guesses so far”. Determine which key was pressed: var userGuess = event.key;
7. Determine if the user wins or not: - use a for-loop for this.
   1. Compare user input to letter that is random generated by the computer.
   2. Determine if user wins or loses.
      1. Allow the user to continue entering keys and with each keystroke, reduce the Guesses Left by 1 and store the result until either:
         1. The user keystroke matches the computer generated key, or:
         2. The Guesses Left counter reaches 1.
            1. If the letters selected when the counter reaches 0 does not match the computer generated key, increment Losses by 1 and store the result; reset Guesses Left to 9;
         3. As soon as any of the keystrokes match the computer generated key, Wins are incremented by 1 the result is stored; Guesses Left is reset to 9.
      2. If the user wins, increment Wins by 1; else increment Losses by 1.

!DOCTYPE html>

<html lang="en-us">

<head>

<meta charset="UTF-8">

<title>Rock Paper Scissors Part 6</title>

</head>

<body>

<div>

<p id="directions-text">Press r, p or s to start playing!</p>

<p id="userchoice-text"></p>

<p id="computerchoice-text"></p>

<p id="wins-text"></p>

<p id="losses-text"></p>

<p id="ties-text"></p>

</div>

<script type="text/javascript">

// Creates an array that lists out all of the options (Rock, Paper, or Scissors).

var computerChoices = ["r", "p", "s"];

// Creating variables to hold the number of wins, losses, and ties. They start at 0.

var wins = 0;

var losses = 0;

var ties = 0;

// Create variables that hold references to the places in the HTML where we want to display things.

var directionsText = document.getElementById("directions-text");

var userChoiceText = document.getElementById("userchoice-text");

var computerChoiceText = document.getElementById("computerchoice-text");

var winsText = document.getElementById("wins-text");

var lossesText = document.getElementById("losses-text");

var tiesText = document.getElementById("ties-text");

// This function is run whenever the user presses a key.

document.onkeyup = function(event) {

// Determines which key was pressed.

var userGuess = event.key;

// Randomly chooses a choice from the options array. This is the Computer's guess.

var computerGuess = computerChoices[Math.floor(Math.random() \* computerChoices.length)];

// Only run the following code block if the user presses "r" or "p" or "s".

if ((userGuess === "r") || (userGuess === "p") || (userGuess === "s")) {

// If we choose rock and the computer guesses scissors, increment our wins variable.

if ((userGuess === "r") && (computerGuess === "s")) {

wins++;

}

// If we choose rock and the computer guesses paper, increment our losses variable.

if ((userGuess === "r") && (computerGuess === "p")) {

losses++;

}

// If we choose scissors and the computer guesses rock, increment our losses variable.

if ((userGuess === "s") && (computerGuess === "r")) {

losses++;

}

// If we choose scissors and the computer guesses paper, increment our wins variable.

if ((userGuess === "s") && (computerGuess === "p")) {

wins++;

}

// If we choose paper and the computer guesses rock, increment our wins variable.

if ((userGuess === "p") && (computerGuess === "r")) {

wins++;

}

// If we choose paper and the computer guesses scissors, increment our losses variable.

if ((userGuess === "p") && (computerGuess === "s")) {

losses++;

}

// If we choose the same thing as the computer, increment our ties variable.

if (userGuess === computerGuess) {

ties++;

}

// Hide the directions

directionsText.textContent = "";

// Display the user and computer guesses, and wins/losses/ties.

userChoiceText.textContent = "You chose: " + userGuess;

computerChoiceText.textContent = "The computer chose: " + computerGuess;

winsText.textContent = "wins: " + wins;

lossesText.textContent = "losses: " + losses;

tiesText.textContent = "ties: " + ties;

}

};

</script>

</body>

</html>

<!

DOCTYPE html>

<html lang="en-us">

<head>

<meta charset="UTF-8">

<title>Rock Paper Scissors Part 7</title>

</head>

<body>

<div>

<p id="directions-text">Press r, p or s to start playing!</p>

<p id="userchoice-text"></p>

<p id="computerchoice-text"></p>

<p id="wins-text"></p>

<p id="losses-text"></p>

<p id="ties-text"></p>

</div>

<script type="text/javascript">

// Creates an array that lists out all of the options (Rock, Paper, or Scissors).

var computerChoices = ["r", "p", "s"];

// Creating variables to hold the number of wins, losses, and ties. They start at 0.

var wins = 0;

var losses = 0;

var ties = 0;

// Create variables that hold references to the places in the HTML where we want to display things.

var directionsText = document.getElementById("directions-text");

var userChoiceText = document.getElementById("userchoice-text");

var computerChoiceText = document.getElementById("computerchoice-text");

var winsText = document.getElementById("wins-text");

var lossesText = document.getElementById("losses-text");

var tiesText = document.getElementById("ties-text");

// This function is run whenever the user presses a key.

document.onkeyup = function(event) {

// Determines which key was pressed.

var userGuess = event.key;

// Randomly chooses a choice from the options array. This is the Computer's guess.

var computerGuess = computerChoices[Math.floor(Math.random() \* computerChoices.length)];

// Reworked our code from last step to use "else if" instead of lots of if statements.

// This logic determines the outcome of the game (win/loss/tie), and increments the appropriate number

if ((userGuess === "r") || (userGuess === "p") || (userGuess === "s")) {

if ((userGuess === "r" && computerGuess === "s") ||

(userGuess === "s" && computerGuess === "p") ||

(userGuess === "p" && computerGuess === "r")) {

wins++;

} else if (userGuess === computerGuess) {

ties++;

} else {

losses++;

}

// Hide the directions

directionsText.textContent = "";

// Display the user and computer guesses, and wins/losses/ties.

userChoiceText.textContent = "You chose: " + userGuess;

computerChoiceText.textContent = "The computer chose: " + computerGuess;

winsText.textContent = "wins: " + wins;

lossesText.textContent = "losses: " + losses;

tiesText.textContent = "ties: " + ties;

}

};

</script>

</body>

</html>