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1 // Script for hw3 extra credit
2 $(document).ready(function () {
3     $("#generateNums").on("click", function () {
4         generateNumbers(); // Call the generateNumbers() function
5     });
6
7     let num1;
8     let num2;
9     let answer;
10    let userAnswer;
11
12    // Resets outputs divs to empty.
13    function clear() {
14        $("#rightAnswer").html("");
15        $("#wrongAnswer").html("");
16    }
17
18    // Generates 2 random numbers using Math.random, displays a multiplication question,
19    // and shows the input field for the user's answer.
20    function generateNumbers() {
21        $("#questionBox").show();
22
23        clear();
24        num1 = Math.floor(Math.random() * 10);
25        num2 = Math.floor(Math.random() * 10);
26        answer = num1 * num2;
27
28        // Hide the generateNums button
29        $("#generateNums").hide();
30
31        // Create the question element
32        const questionBox = $("#questionBox");
33        questionBox.empty(); // Clear previous content
34        questionBox.append(`

How much is ${num1} times ${num2}?</p>`);
35
36        // Create the input field and "Check Answer" button
37        const inputContainer = $('<div>');
38        inputContainer.append(`
39            <label for="userAnswer"><br><br>Fill in your answer here:</label>
40            <input type="number" id="userAnswer" name="userAnswer" size="10" autofocus>
41            <input type="button" id="checkAnswerButton" value="Check Answer"><br>
42        `);
43
44        // Attach the event handler to the "Check Answer" button
45        inputContainer.find('#checkAnswerButton').on('click', checkAnswer);
46
47        // Append the input container to the question box
48        questionBox.append(inputContainer);
49
50        // Set focus to the input field
51        $("#userAnswer").focus();
52    }
53
54    // If the answer is correct, display a "Very Good" message and prompt the user to
55    // continue or end.
56    // If incorrect, provide an error message.
57    function checkAnswer() {
58        clear();
59        userAnswer = $("#userAnswer").val();
60        if (parseInt(userAnswer) === answer) {
61            $("#questionBox").hide();
62            $("#rightAnswer").html('Very Good!<br>Keep practicing
63            multiplication?<br><br>');
64            // Create "Yes" button
65            const yesButton = $('<input type="button" value="Yes">');
66            yesButton.on('click', generateNumbers); // Attach the click event handler
67            // Create "No" button
68            const noButton = $('<input type="button" value="No">');
69            noButton.on('click', endScript); // Attach the click event handler


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68
69         // Append the buttons to the rightAnswer div
70         $("#rightAnswer").append(yesButton, noButton);
71     } else {
72         $("#wrongAnswer").html('<p style="color: red;">No. Please try again!</p>');
73         $("#userAnswer").val('').focus();
74     }
75 }
76
77 // When the user chooses to end multiplication, display a message and restart the
game after a delay.
78 function endScript() {
79     clear();
80     $("#questionBox").html("");
81     // Display a message to the user
82     $("#theEnd").html('<p>Thanks for playing, see you next time!</p>');
83     // Delay for 2 seconds before calling the restartGame function
84     setTimeout(restartGame, 2000);
85 }
86
87 // Function to restart the game and redirect to the beginning page.
88 function restartGame() {
89     // Change the message to indicate a restart
90     $("#theEnd").html('<p style="color: red;">Restarting...</p>');
91
92     // Delay for 2 seconds before redirecting
93     setTimeout(function () {
94         // Redirect to the beginning page
95         window.location.href = "hw3-extra-credit.html";
96     }, 2000);
97 }
98 });

```