

Exercise 8: Events

Class 11 Activity: Interactive Quiz Application

Upload a html file named USPnumber1.USPnumber2.html.

Objective: The goal of this activity is for students to apply their knowledge of advanced event handling, event objects, and custom events to create an interactive quiz application.

Instructions:

Open your preferred code editor or browser-based environment, such as JSFiddle or CodePen.

Create an HTML file and include the necessary tags for a basic HTML structure (`<!DOCTYPE>`, `<html>`, `<head>`, `<body>`). Add a `<script>` tag inside the `<head>` or at the end of the `<body>` to write your JavaScript code.

Design the layout of the quiz application with the following elements:

A question container to display the current question.

Multiple choice answer buttons.

A progress bar or counter to indicate the current question number.

A "Next" button to proceed to the next question.

A "Submit" button to submit the quiz and display the results.

Create an array of question objects, each containing a question, an array of possible answers, and the correct answer.

Implement the following functionality using advanced event handling, event objects, and custom events:

Display the current question and possible answers when the page loads or when the "Next" button is clicked.

Use event listeners to detect when an answer button is clicked and store the user's selection.

Update the progress bar or counter to reflect the current question number.

When the "Submit" button is clicked, calculate the user's score by comparing their selected answers with the correct answers, and display the results on the screen.

Add custom events to handle specific quiz-related actions, such as updating the progress bar or displaying the final results. A custom event is created specifically for an application, like "AnswerGiven".

As you work on the activity, discuss the implementation with your partner and ask for help or clarification from the instructor or teaching assistant if needed.

Remember, the goal of this activity is to practice your advanced event-handling skills while working collaboratively. Enjoy and have fun!