**Step 1: Set Up Your Files**

* + Create a folder on your computer where you want to store your quiz files (HTML, CSS, and JavaScript).
  + Inside the folder, create three files: index.html, styles.css, and script.js.
  + And create a folder as static and move styles.css and script.js into the static folder.
  + Copy and paste the provided HTML code into the index.html file.
  + Copy and paste the provided CSS code into the styles.css file.
  + Copy and paste the provided JavaScript code into the script.js file.

**Step 2: Organize Your Files**

* + Your folder structure should look like this:

- Your\_Project\_Folder/

- static/

- styles.css

- script.js

- index.html

**Step 3: Open the Quiz in a Web Browser**

To run the quiz, open the index.html file in a web browser. You can do this by:

* Right-clicking on index.html and selecting "Open with" and choosing your preferred web browser (e.g., Google Chrome, Mozilla Firefox, Microsoft Edge).

(OR)

* Navigate to the folder containing index.html using your file explorer (e.g., Windows Explorer, Finder), then double-click index.html.

**Step 4: Take the Quiz**

Once you have opened index.html in your web browser, you should see the quiz interface. Here's how to use it:

* Read the quiz questions presented one by one.
* Choose an answer by clicking on one of the options.
* Click the “Submit” button to know whether the answer is correct or incorrect.
* Click the "Next" button to move to the next question.
* If you want to retake the quiz after completing it, you can click the "Retake Test" button.

**Step 5: Review Your Score and Wrong Answers**

* After completing the quiz, you will see your final score and, if you got any answers wrong, a list of the questions you answered incorrectly will be displayed.

**Step 6: Restart or Retake the Quiz**

* If you wish to restart the quiz, click the "Retake Test" button.
* That's it! You have successfully set up and run the quiz. You can customize the questions, options, and styles in the code to create your own quizzes.

**Additional Features Implemented :**

**1. Timer Feature:**

In the provided quiz code, there is a timer feature that adds a time limit to each question. Here's how it works:

* The timer starts at 20 seconds when a new question is displayed.
* It counts down in real-time, updating the "Time Left" display.
* If the timer reaches 0 seconds before you select an answer and click "Next," the quiz will automatically move to the next question and mark the current question as "Time's up!"

**Benefits of the Timer Feature:**

* Adds an element of time pressure to the quiz, making it more challenging and engaging.
* Encourages participants to answer questions quickly, simulating real-time scenarios where quick decision-making is necessary.
* Enhances the overall user experience by providing feedback on time management.

**2. Retake Test Button:**

The "Retake Test" button allows participants to restart the quiz and take it again. Here's how it works:

* After completing the quiz and viewing your final score, you have the option to click the "Retake Test" button.
* Clicking this button resets the quiz, including the questions, score, and timer, and allows you to start the quiz from the beginning.

**Benefits of the Retake Test Button:**

* Provides users with the opportunity to retry the quiz and improve their score.
* Useful for educational purposes where learners can practice and reinforce their knowledge.
* Enhances user experience by offering a seamless way to restart the quiz without needing to refresh the entire page.

**3. Review Answers:**

* After completing the quiz, you will see your final score and, if you got any answers wrong, a list of the questions you answered incorrectly will be displayed.

**Benefits of the Review Answers:**

* **Immediate Feedback and Learning Opportunity:** Providing a final score and listing incorrect answers immediately after completing the quiz allows participants to assess their performance instantly. They can identify areas where they need improvement and gain insights into their knowledge gaps.
* **Motivation to Improve:** Knowing which questions were answered incorrectly motivates quiz takers to learn from their mistakes and strive for better results. It encourages a growth mindset by showing that mistakes are opportunities for improvement.

**4. Fade-In Animations for Questions:**

**Using CSS Transitions:**

* Apply CSS rules to the question element to control its opacity.
* Use CSS transitions to smoothly transition the opacity from 0 (invisible) to 1 (fully visible) when a new question is displayed.

**Using JavaScript Animations:**

* Use JavaScript to add a class or inline style to the question element.
* Apply CSS animations or transitions to the class or style, controlling the opacity over time to create a fade-in effect

**Benefits of Fade-in-Animations:**

**Visual Appeal:** Animations, including fade-ins, make the user interface more visually appealing and engaging. The gradual appearance of the question can capture the user's attention.

**Smooth Transition:** A fade-in animation provides a smooth and seamless transition between questions, making the quiz experience more polished and professional.

**Focus on Content:** By gradually revealing the question, users are less likely to feel overwhelmed, as they can focus on one question at a time without distractions.