

Quiz App Using External API

The quiz app will have the following features:

- Sign-in functionality for users and admin (No sign up)
 - Users can attempt the test whereas admin panel will display the list of users and their score.
 - User can view 1 question per screen and there is button "Next" where user can move to next question
 - Calculate and store the score on each step and score should not be void if browser/ tab reopened/ refreshed.
 - If user closes the browser/ tab and reopens, the same question and time will appear where user left.
 - The quiz will have 8 questions for each user. Users have a 10 min time limit to complete the Quiz and if the time passed the final score will be calculated based on the completed questions.
 - When user submits the test, save the result in the Database. Users cannot re-attempt the test.
 - Admin panel will display the list of users and their score.
- A unique email address to sign-in, it's not actually an authentication, it is just to make sure that a person with unique email should be allowed to give the test and any person with same email must not be able to give quiz again. If email already exists display an error message "You have already submitted the Quiz".
- For login purposes use the following firebase URL:
- <https://orcalotest-default-rtdb.firebaseio.com/LoggedInEmails.json>
- You will make a POST request as you will be creating a document but before that you have to make sure that no user of the same email exists in the database (GET request). I.e., we will be judging from the database that a person with email abdulrehman@orcalo.com has a document in the database so he has given the test.
- URL to get the quiz questions (GET request):
- <https://orcalotest-default-rtdb.firebaseio.com/quizAppQuestions.json>
- Show the progress of the quiz like (1/10) ... (10/10).
- When the user completes the quiz, display the final score card at the end and save the result of that user in the database. If the session of 10 minutes has expired show a related message to the user.
- Use the following firebase URL to save the score, email, and answers along with their questions.
- <https://orcalotest-default-rtdb.firebaseio.com/scoreCard.json>

Example object:

```
{
  email: "user@any.com",
  score: 4/10,
  result: [
    {
      question: "Which function is used to serialize an object into a JSON string in Javascript?",
      answerSelected: "Stringify()",
      correctAnswer: "Stringify()"
    },
    .
    .
    .
    And remaining attempted questions like that.
  ]
}
```

If the session was expired still save the object with same example objects but obviously that object will have score = corrected answers performed during the time and result array would be empty in case user has not entered any answer

- Display the score card with percentage of right answers on the screen.

Mandatory Requirements:

- ⇒ UI/ UX must look good. You are free to use MUI or any other UI library.
- ⇒ Comment the code (Make good documentation) so any person can understand your code your implementation.
- ⇒ Make sure your code is optimized and keep in mind the concept of time complexity while implementing logic.