Quiz App Requirements Document

Project Objectives

Participants will:

- Gain hands-on experience with React components, state, and props.

- Understand how to manage and display data in a React application.

- Learn how to handle user interactions in React.

- Develop a simple yet functional quiz application that can be expanded upon in future projects.

Project Structure

The Quiz App will be structured into several components:

1. App.js

- **Purpose:** The main component that manages the application's state, handles user interactions, and controls the flow of the quiz.

- **Responsibilities:**

  o Import and render other components (Question, Score).

  o Track the current question, user's score, and whether the quiz is complete.

  o Update the state based on user interactions and determine when to show the final score.

2. Question.js

- **Purpose:** Display the current question and its associated options.

- **Responsibilities:**

  o Receive the current question and options as props.

  o Render the question text and a list of possible answers.

  o Pass user selections back to the App.js component via a callback function.

3. QuestionBank.js

- **Purpose:** Serve as a repository for the quiz questions and answer options.

- **Responsibilities:**

  o Contain a static array of objects where each object represents a question with its associated answer options.

  o Provide this data to the App.js component.

4. Option.js

- **Purpose:** Display individual answer options and handle user selections.

- **Responsibilities:**
    - Receive option text and correctness as props.
    - Render a button for each option.
    - Notify the parent component (Question.js) when an option is selected.

5. Score.js

- **Purpose:** Display the user's final score at the end of the quiz.
- **Responsibilities:**
    - Receive the total score and number of questions as props.
    - Render a message showing the user's performance.

Functional Requirements

- **Start Quiz:** The quiz begins automatically when the application loads.
- **Question Navigation:** Users can only move to the next question after selecting an answer.
- **Answer Feedback:** No immediate feedback is given after selecting an answer; the quiz proceeds to the next question.
- **Scoring:** Each correct answer increases the user's score by one point.
- **Final Score Display:** Once all questions are answered, the user's final score is displayed along with the total number of questions.

Quiz App

What is the capital of France?

○ Madrid

○ Berlin

● Paris

○ London

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