**EQuiz**

**Project Overview**

The **EQuiz** project is a C++ based console application designed to provide users with an interactive quiz experience. It allows users to answer a series of questions, track their score, and provides additional features such as displaying information about the application. The program is designed to be simple and user-friendly, supporting multiple functions such as starting a quiz, viewing about the app, and exiting the app.

**Functional Requirements**

* **Main Menu:**
  + The main menu presents the user with options to:
    - Start the quiz
    - View information about the quiz app
    - Navigate to the menu
    - Exit the app
* **Quiz:**
  + The user is presented with a series of multiple-choice questions.
  + Each question has four options (a, b, c, d).
  + The user selects an option, and the program tracks whether the answer is correct or incorrect.
  + After answering all questions, the user is presented with a result displaying the number of correct and wrong answers.
* **About Section:**
  + Displays information about the app, including the developer's details, platform used, and contact information.
* **Exit:**
  + The app allows users to exit the quiz and end the application.

**Flow Chart:**

A screenshot of a computer program

AI-generated content may be incorrect.

**System Architecture**

The **EQuiz** system follows a simple procedural design and consists of the following key components:

* **Quiz Structure (quiz struct):**
  + Stores information related to the user's current quiz session, including:
    - count (number of correct answers)
    - wrong (number of incorrect answers)
    - ch (the user's current answer for a question)
    - num (the option selected from the main menu)
* **Functions:**
  + main(): Initializes the program and starts the menu.
  + menu(): Displays the main menu options, takes user input, and navigates based on user selection.
  + start(): Begins the quiz, displays questions and options, and evaluates user answers.
  + about(): Displays information about the quiz app and developer.
  + exit(): Exits the application.

**Code Breakdown**

**a. Quiz Structure (QZ struct)**

cpp

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typedef struct quiz {

int count = 0;     // Tracks the number of correct answers

int wrong = 0;     // Tracks the number of wrong answers

char ch;           // Stores the current choice (answer) from the user

int num;           // Stores the user's menu choice

} QZ;

**b. Menu Function:**

Displays the main menu options and processes user input to navigate to other parts of the program.

cpp

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void menu(QZ q) {

// Display menu and accept user input

}

**c. Start Quiz Function:**

Contains all the questions, options, and logic for scoring the quiz.

cpp

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void start(QZ q) {

// Presents questions and checks user input for correctness

}

**d. About Function:**

Displays developer and platform information.

cpp

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void about() {

// Displays developer info, contact details, and platform used

}

**e. Exit Function:**

Exits the program.

cpp

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int exit() {

return 0;  // Terminates the program

}

**Flowchart**

1. **Start:**
   * Show the welcome message and call the main menu function.
2. **Main Menu:**
   * User selects an option (Start Quiz, About, Menu, Exit).
   * If Start Quiz is selected, call start().
   * If About is selected, call about().
   * If Exit is selected, call exit().
   * If Menu is selected, show the menu again.
3. **Quiz:**
   * Ask the user each question.
   * Store answers and calculate correct or incorrect responses.
4. **End:**
   * Show the final score and ask if the user wants to take the quiz again or exit.

**Conclusion**

The **EQuiz** project provides a simple, fun, and engaging experience for users to test their knowledge on various topics. The program offers an intuitive interface, keeps track of the user's score, and provides useful information about the app and the developer. The design is modular, making it easy to extend with additional features in the future.