

QUIZ APP – Constraints and Requirements

Functions

The Interactive Quiz System provides the following key functions:

- **Create Quizzes:** Enables users to create new quizzes by adding various types of questions.
- **Edit Quizzes:** Allows users to modify existing quizzes, including updating quiz details and questions.
- **Delete Quizzes:** Permit users to remove existing quizzes from the system.
- **Add Questions:** Support the addition of new questions to quizzes, with multiple question types such as multiple choice and true/false.
- **Edit Questions:** Enable users to update the content of existing questions, ensuring quizzes remain accurate and relevant.
- **Take Quizzes:** Facilitate users in participating in quizzes by presenting questions and recording responses in a user-friendly interface.
- **Score Quizzes:** Automatically calculate and display scores immediately after quiz completion, providing immediate feedback on performance.

Objectives

The design of the Interactive Quiz System aims to achieve the following objectives:

- **User-Friendly:** The system should provide an intuitive and easy-to-navigate interface to improve user interaction and satisfaction.
- **Efficient:** The system should ensure a smooth and seamless user experience without causing errors.
- **Responsive:** The system should offer real-time scoring and immediate feedback upon quiz completion.
- **Reliable:** The system should function correctly and consistently under normal usage conditions, maintaining data integrity and accuracy.
- **Maintainable:** The system should be designed with clean and modular code, facilitating easy maintenance and future enhancements.
- **Secure:** The system should store user data and quiz content securely to prevent unauthorized access and ensure data privacy.

Constraints

The Interactive Quiz System must satisfy the following constraints:

- **Application Type:** The system must be a desktop application, focusing on providing interactive user experience.
- **Question Types:** The system must support multiple question types, including multiple choice and true/false.
- **Real-Time Scoring:** The system must provide real-time scoring upon quiz completion.
- **Compatibility:** The system must be compatible with Java 11 or later.
- **Timeline:** The project must be completed within a specified timeline, such as three months, to ensure timely delivery.