COLLEGE CODE : 9604

COLLEGE NAME : CSI Institute of Technology

DEPARTMENT : IT

STUDENT NM-ID : aut960423205019

ROLL NO : 960423205019

DATE : 16-09-2025

TECHNOLOGY PROJECT NAME : Interactive Quiz App

SUBMITTED BY,

NAME : Sanjeevikumar.S

MOBILE NO : 9488067180

1.Problem Statement

The traditional methods of knowledge assessment and learning, such as paper-based quizzes and static online tests, often suffer from a lack of engagement, immediate feedback, and personalization. This leads to several challenges for both users (learners, students, employees) and creators (educators, trainers, marketers).

2. Users & Stakeholders

- **Primary Users**

  - Students preparing for exams

  - Casual learners who enjoy quizzes

  - Teachers who want to create/share quizzes

- **Stakeholders**

  - **End Users:** Students, quiz enthusiasts

  - **Developers:** Responsible for building and maintaining the app

  - **Educators/Institutions:** Potentially use the platform for assessments

  - **Sponsors/Owners:** Individuals or organizations funding or using the app

3. User Stories

User Story: As a **learner**, I want to **search for quizzes by topic**, so that I can **find content relevant to what I'm studying**.

- **Acceptance Criteria:**
  - The app has a search bar on the homepage.
  - Searching for a keyword (e.g., "History") displays a list of all quizzes with that tag or in that category.
  - The search results include quiz titles, descriptions, and the number of questions.
-

User Story: As a **quiz taker**, I want to **answer multiple-choice questions**, so that I can **easily select the correct answer**.

- **Acceptance Criteria:**
  - Each question displays the question text and a list of answer options.
  - I can tap on an option to select it.
  - The app highlights my selected answer before I submit.

4. MVP Features

1. Core Functionality (The Essentials)

- **User Registration and Authentication:**
  - **User Story:** As a new user, I want to create an account, so that I can save my progress and access my quizzes later.
  - **Feature:** A simple sign-up/sign-in process (e.g., email/password or a single social media login option like Google).

2. For the Quiz Taker (The Learner)

This persona needs to be able to find and play a quiz.

- **Quiz Discovery:**
  - **User Story:** As a user, I want to see a list of available quizzes, so that I can choose one to play.
  - **Feature:** A basic landing page or "home screen" that displays a list of quizzes. This can be a simple grid or list view. No advanced search or filtering is needed yet.
- **Quiz Participation:**
  - **User Story:** As a quiz taker, I want to answer a quiz question, so that I can test my knowledge.
  - **Feature:** A quiz-taking interface that supports one basic question type (e.g., multiple-choice).
  - **User Story:** As a quiz taker, I want to receive instant feedback on my answer, so that I can see if I was correct or not.
  - **Feature:** Immediate "Correct" or "Incorrect" feedback after the user submits their answer. A simple visual cue (e.g., green/red) is sufficient.

3. For the Quiz Creator (The Educator/Content Provider)

This persona needs a way to create and share a quiz.

- **Quiz Creation:**
  - **User Story:** As a creator, I want to create a new quiz, so that I can add my questions and content.
  - **Feature:** A simple form to create a new quiz, including a title and description.
  - **User Story:** As a creator, I want to add questions and their answers to my quiz, so that users can take it.
  - **Feature:** An interface to add multiple-choice questions with one correct answer. This should be a simple form with fields for the question text and the answer options.
- **Quiz Management:**
  - **User Story:** As a creator, I want to view my created quizzes, so that I can access them later.
  - **Feature:** A basic dashboard or "My Quizzes" page that lists all the quizzes the user has created.
- **Quiz Sharing:**
  - **User Story:** As a creator, I want to share my quiz with others, so that they can play it.
  - **Feature:** A simple mechanism to get a unique, shareable URL for each created quiz.

5. Wireframes / API Endpoint List

1. Landing Page / Home Screen

This is the first screen a user sees after logging in.

- **Layout:** Simple and uncluttered. A central area for content with a navigation bar.
- **Elements:**
  - **Header:** App logo or name in the top-left corner.
  - **Navigation Bar:** Links for "Home," "My Quizzes" (for creators), and "Profile."
  - **Main Content Area:** A heading like "Featured Quizzes" or "Browse Quizzes."
  - **Quiz List:** A series of rectangles or cards, each representing a different quiz. Each card should show the quiz title, an image (if applicable), and the creator's name.
  - **Call to Action:** A prominent button like "Create a Quiz" for creators.

2. Quiz-Taking Interface

This is the screen where the magic happens—the user answers questions.

- **Layout:** The focus is on the current question, with minimal distractions.
- **Elements:**
  - **Progress Bar:** A horizontal bar at the top showing the user's progress (e.g., Question 3 of 10).
  - **Question Area:** A large text area for the question itself.
  - **Answer Options:** Rectangular buttons or selectable text boxes for each multiple-choice option. They should be clearly separated.
  - **Feedback:** An area that appears after an answer is submitted, displaying "Correct!" or "Incorrect!" with a brief explanation or the right answer.

3. Quiz Results Page

This screen provides a summary of the user's performance.

- **Layout:** A celebratory or conclusive screen that clearly shows the final score.
- **Elements:**
  - **Heading:** "Quiz Complete!" or a similar congratulatory message.
  - **Score Display:** A large, prominent number showing the score (e.g., "7/10").
  - **Summary:** A brief summary of the results, such as the number of correct answers.
  - **Call to Action:** A button to "Play Again" or "Go to Home."

6. Acceptance Criteria

- The user can start a quiz without login.

- The quiz displays **at least 5 questions** per session.

- Each question shows **4 options** (only one correct).

- The system gives **instant feedback** when an answer is selected.

- The user can navigate between questions.

- Final score is displayed at the end of the quiz.

- The UI is responsive and works smoothly on mobile and desktop.