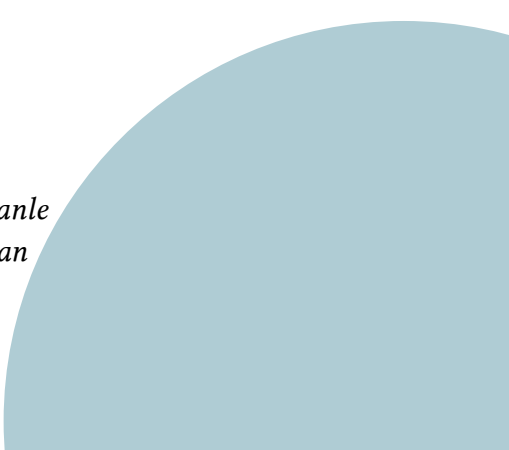# CSIT883
System Analysis and Project Management
User Requirements

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Contents

1. Sign Up

Purpose

Allows new users to create an account.

Details

- **Fields Required:** Nickname, password, and email.
- **Role Selection:** Users choose between `student` or `teacher` roles.
- **Validation:** Email verification for authenticity confirmation.

2. Login

Purpose

Secure entry point for returning users.

Details

- **Login Credentials:** Users can use either their nickname or email.
- **Post-login Redirect:** Directs to the `Dashboard` upon successful login.

3. Dashboard

Purpose

Central hub for user activities and analytics.

Features

- **Statistics:** Visual analytics display performance metrics.
- **Access Points:** Quick links for question creation, review, and quizzes.
- **Settings Access:** Link to update personal and account settings.

4. Settings

Purpose

Manages personal and account information.

Features

- **Personal Information:** Update name, email, and other details.
- **Password Management:** Secure password updating.
- **Account Preferences:** Customize notifications, privacy, and sharing settings.

5. Create Questions

Purpose

Enables the creation of customized practice questions.

Process

- **Input Specifications:** Define number of questions, subject, specific knowledge points in a subject, and type(multiple/single-choice questions or fill-in-the-blank questions).
- **GAI Library Integration:** Uses AI to generate tailored questions. The library will return the questions in json formats with its answers and the reason of it. But the fill-in-the-blank questions will be somehow special: the answer of it could be vigrous.
  - **Feedback Loop:** If a user's fill-in-the-blank answer differs from the AI-generated one, it is sent back to the library for validation.

6. Question Bank

Purpose

Stores and manages created questions.

Capabilities

- **Storage:** Saves questions in a personal repository.
- **Review and Modify:** Options to revisit or alter stored questions.
- **Export Functionality:** Export questions in multiple formats for offline use.

7. Answer Questions

Purpose

Engages users with their created or saved questions.

Options

- **Sequential Mode:** Answer all questions before reviewing corrections.
- **Instant Feedback Mode:** Immediate feedback after each question.

Function

- **Progress Tracking:** Shows how many questions have been answered.
- **Question Type Prompt:** Should have clear prompts to show the type of question.

8. Analyze Performance

Purpose

Provides analytical insights into user performance. Also display in the `Dashboard`.

Details

- **Performance Metrics:** Analysis of correct and incorrect responses.
- **Improvement Suggestions:** Recommends areas for further study.
- **Custom Reports:** Generate detailed performance reports.