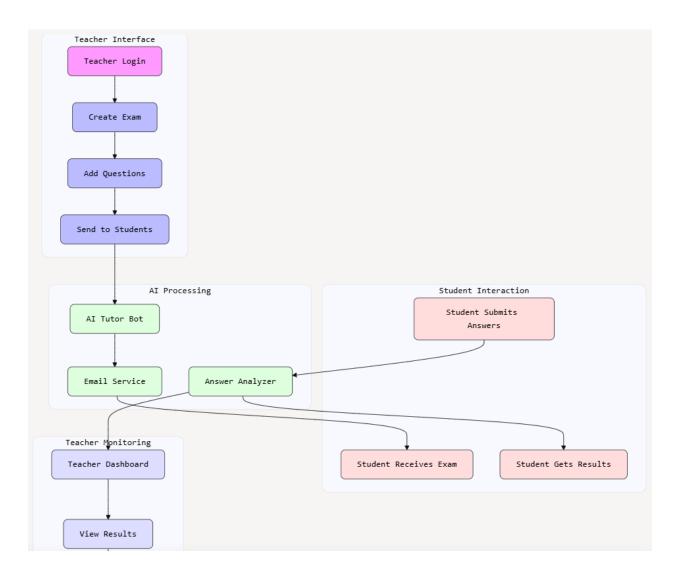
System Overview

The AI Tutor Bot is an educational platform that combines AI-powered tutoring with traditional teaching methods. It allows teachers to manage students, create and distribute questions, and automate the grading process through email notifications.



Understanding the Architecture

The diagram above illustrates the system's core components and their interactions:

- The User Interfaces section contains the three primary screens requested:
 Teacher Login, Student Management, and Question Interface
- Core Systems handle the business logic:

The teacher ask Arieo Iris Bot, to create Exam, after exam creation teacher will ask Bot send exam. Students will get an email for exam. Students will open solve and submit answers. That answers will get read by Bot and bot again send and confirmation email to students regarding answer. And same will be visible to teacher in Inbox.

Data Storage ensures persistence through the Database and Email Service integration

Technical Specifications

- 1. Database Schema Design
- 2. Core Components Implementation

User Interface Screens

- 1. Teacher Login Screen
 - a. Username/password fields
 - b. Login button
- 2. Student Management Screen
 - a. Add new student
 - b. Student list view
 - c. Search/filter functionality
 - d. Edit/delete options
- 3. Question Interface

Email Flow Process

- 1.teacher creates questions through interface
- 2. system generates email with quiz questions
- 3. email sent students
- 4.studnets receive and respond via email
- 5.system process student response
- 6.confirmation email sent to students with feedback

Implementation Guidelines

1. Security Considerations

- a. Implement password hashing
- b. Use HTTPS for all communications
- c. Validate email addresses
- d. Rate limit email sending

2. Error Handling

- a. Email delivery failures
- b. Invalid responses
- c. Database connection issues
- d. Authentication errors

3. Performance Optimization

- a. Cache frequently accessed questions
- b. Batch email processing
- c. Optimize database queries
- d. Implement proper indexing

Al Integration:

Natural Language Processing for better grading

Personalized learning paths

Intelligent difficulty adjustment