

College Examination Management System

1. Introduction

The College Examination Management System is designed to automate and manage the examination process within colleges. The system provides a centralized platform that allows administrators, lecturers, and students to interact efficiently. It aims to reduce manual work, minimize errors, and ensure fairness and transparency in examinations.

2. Objectives

The main objectives of the system are:

- To manage examinations electronically in a secure and efficient manner.
- To allow lecturers to create, manage, and evaluate exams easily.
- To provide students with controlled access to exams and results.
- To help administrators manage users, subjects, and exam results effectively.
- To ensure accuracy, fairness, and transparency in grading and result publishing.

3. Functional Requirements

Administrative Module

- Authenticate administrators using secure usernames and passwords.
- Add, update, delete, list, and search for students and lecturers.
- Manage subjects and assign them to students and lecturers.
- Review, approve, and publish students' grades.

Lecturer Module

- Create, manage, and modify exams and questions.
- Define exam duration and correct answers.
- Automatically grade exams based on students' responses.
- Generate reports and statistics for classes and exams.

Student Module

- Access exams only for registered subjects.
- Take each exam only one time.
- View results and corrected exams after publication.
- Submit re-correction requests if necessary.
- Provide feedback on exams.

User Module

- Allow all users to log in and log out securely.
- Enable users to update personal information except user ID.

4. Non-Functional Requirements

- **Security:** The system must protect user data and exam content using authentication and authorization mechanisms.
- **Performance:** The system should support multiple users simultaneously without significant delay.
- **Usability:** The system should have a user-friendly interface that is easy to learn and use.
- **Reliability:** The system should be available during exam periods with minimal downtime.

- **Scalability:** The system should handle an increasing number of users and exams.
- **Maintainability:** The system should be easy to update and maintain.