

University Management System

1. User Requirements

Student Requirements

- Register courses.
- View grades and attendance.
- Update personal information.
- Request transfer and certificates.
- Pay tuition fees and view invoices.

Administrator Requirements

- Register and manage students.
- Add, update, and remove courses.
- Manage faculty information.
- Calculate fees and track payments.
- Generate academic and administrative reports.

Faculty Requirements

- View teaching schedules.
- Manage student attendance.
- Update personal information.

Instructor

- Update Course schedules
- Update personal info
- Upload grades after checking the enrollment of the students

Registrar office

- Process transfer requests
- Issue certificates
- Manage academic records
- Add new course
- Set registration deadlines
- Generate enrollment reports

2. System Requirements

Functional Requirements

A. Student Management :

- register new students.
- Update student information.
- Manage academic records (grades, attendance). - Process transfer requests.

B. Course Management :

- Add and remove courses.
- Enroll students in courses.- Display course offerings.

C. Faculty Management :

- Register faculty members.
- Update their information.
- Manage class schedules.

D. Certification Management :

- Issue certificates for graduating students.
- Process certificate requests.

E. Fee Management :

- Calculate tuition fees.
- Process payments.- Generate invoices.

F. Reporting :

- Generate academic and administrative reports.
- Analyze academic data

Non-Functional Requirements

Performance

- Support many users at the same time.
- System response time less than 2 seconds.

Security

- Protect personal and academic data.
- Secure login with access permissions.

Compatibility

- Works on computers and smartphones.
- Compatible with Windows, mac, OS, and Linux.

Usability and Maintainability

- Easy to use interface.
- Easy to maintain and update.

Scalability

- Ability to add new features and users without performance issues.