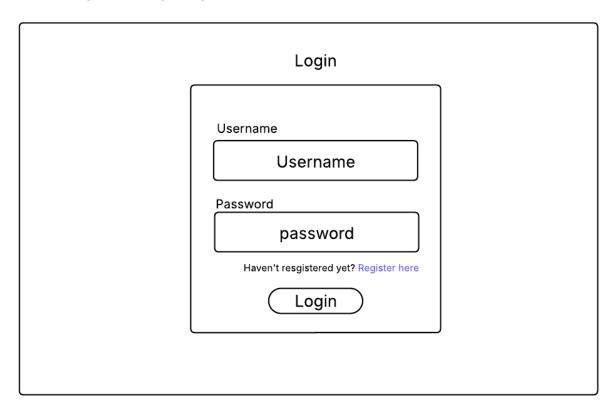
Project Requirements

Summary: - It's an **Management System** where Admin has full control — managing students, teachers, courses, attendance, exams, fees, and notices.

Students and teachers can only view most data and update their own profiles, and have some basic function to update the data.

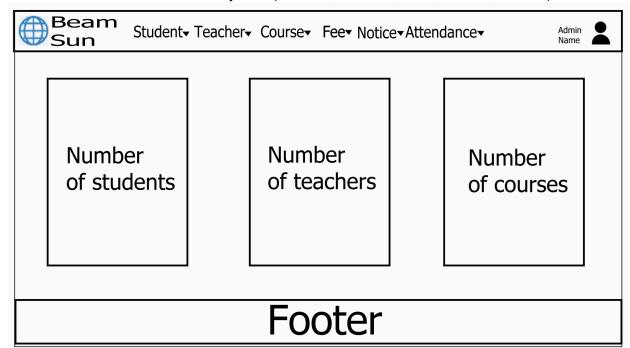
1. User Roles & Authentication

- Pre-created Admin accounts hardcoded in the database (3 Admins).
- Students and Teachers have login credentials.
- Student registration is allowed only **if enrolled** in an institute (based on email and phone verification).
- Role-based access control (Admin, Teacher, Student).
- Session management (Login/Logout).



2. Admin Functionalities

• Admin Dashboard: Overview of system (students, teachers, fees, courses, notices).



- Manage Students:
 - View/Add/Update students.
 - o Mark students inactive (do not hard delete).
 - View student profile (attendance, fees,marks).
- Manage Teachers:
 - View/Add/Update teachers.
 - Mark teachers inactive.
- Manage Courses & Subjects:
 - o Create/Update/View courses.
 - Assign teachers to courses and subjects.
 - Assign students to courses and subjects.
 - Mark courses inactive instead of deleting.

• Manage Attendance:

- Add and edit attendance for students and teachers.
- o Total working days, toal present days, Total Absent Days.
- o Filter attendance result (by either course or student name).

• Fee Management:

- Create fees per course.
- o Update individual student fee payment status (Paid/Unpaid/Pending).
- View/search student fee records(filter: student name,)
- Send fee reminders (optional email integration).

• Exam and Result Management:

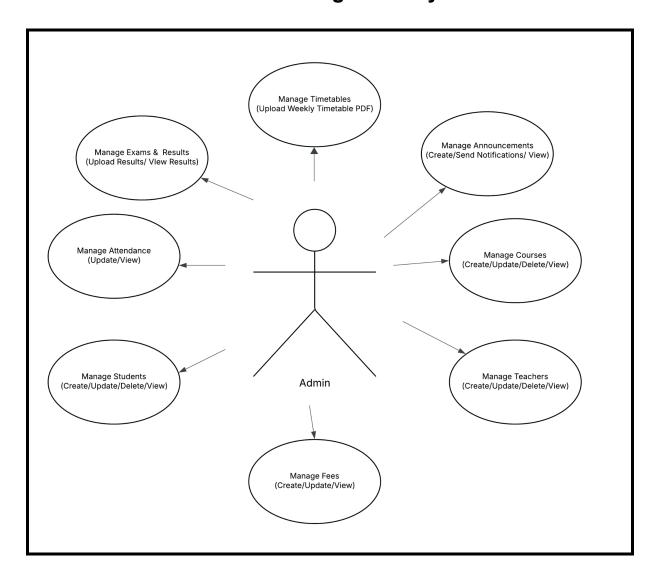
- Upload exam schedule (subject, course, date, total marks).
- Upload exam results (marks) for students (per subject).
- Send result notifications to parents (optional).

• Timetable Management:

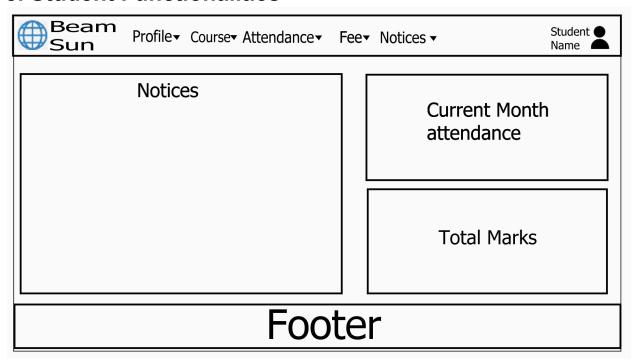
Create/View/Update/Delete class schedules by uploading a pdf file.

Notice Board:

- o Create/View announcements visible to teachers and students after login.
- The announcements can be for students, teachers or both.



3. Student Functionalities



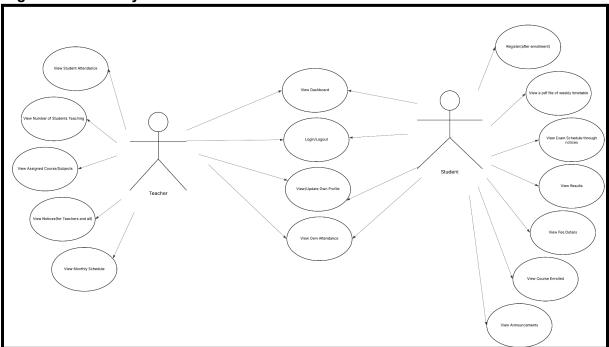
Student Dashboard:

- o View profile (photo, Name, roll number, course, batch, etc).
- View timetable.
- View attendance summary (monthly).
- View upcoming exams and past results.
- View fee payment status.
- Read notice board announcements.

• Profile Management:

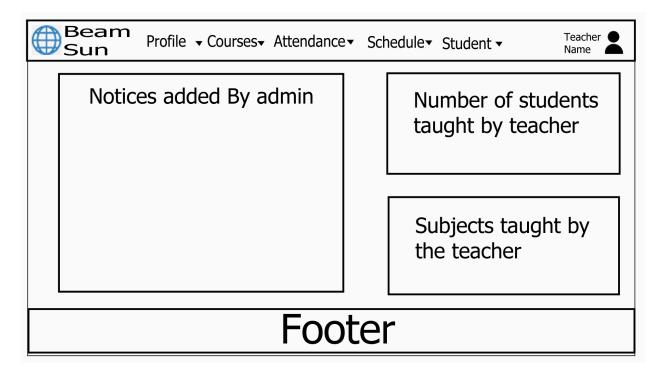
o Students can update their own profile info (parent contact, address, password).

• Logout functionality.

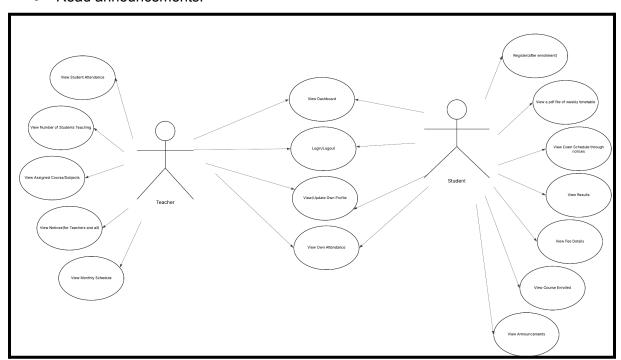


4. Teacher Functionalities

- Teacher Dashboard
 - o View Profile
 - View total number of students he/she is teaching.
 - View Announcements.



- View personal timetable.
- View assigned courses and subjects.
- View personal attendance.
- View student attendance records (for assigned classes).
- Update their own profile.
- Read announcements.



- o 3 Courses.
- 2 Subjects per course.
- Tables Required:
 - o admin
 - student
 - o teacher
 - o course
 - o subject
 - attendance
 - o notice
 - o fee
 - teacher_course_mapping
 - teacher_subject_mapping
 - o student_course_enrollment
 - student_notice_mapping
 - teacher_notice_mapping
- Each entity will have is_inactive(Status) flag for soft deletes.

6. Other Requirements

- Security:
 - o Password encryption (e.g., SHA256).
 - o Session expiration after logout.
- Responsiveness: (Optional)
- Error Handling: Friendly error messages (e.g., "Invalid login", "Student not found")