

Project idea

Lab rescheduling management

- **Requirements to Consider**
- **User Roles:** Students, Subject coordinator, Lab Instructor
- **Lab Details:** Lab ID, Lab Name, Location, availability
- **Rescheduling:**
 - Request rescheduling of lab sessions
 - Submit Approval letter by faculty
 - Subject coordinator forward to Lab Instructor
 - Notification to students
- **Notification System:** Email notifications for approved/rejected reschedules
- **Reporting & Logs:** Track lab usage and reschedule history

Workflow & Steps

Step 1: Lab Schedule Creation

- Subject coordinator set the initial lab schedule.
- Lab details and time slots are stored in the **Lab_Schedule Table**.

Step 2: Student Reschedule Request

- A student submits a request to reschedule their lab session.

Step 3: Approval Process

- Subject coordinator reviews the request and letter by faculty.
- If approved, coordinator forward to Lab Instructor

Step 4: Notification Update

- Students and coordinator receive an email with the rescheduled schedule.

Step 5: Lab Session Execution

- Students attend the lab at the newly scheduled time.
- Attendance is recorded in the **Attendance Table**.

Laboratory Booking system

Requirements to Consider

- **User Roles:** Students, Lectures In charge, Lab TO, Instructors
- **Lab Information:** Lab ID, Type, Availability, capacity
- **Booking Process:**
 - Allow Instructors to book labs
- **Lab Equipment Availability:** Ensure booked labs have required equipment.
- **Usage Logs & Reports:** Maintain historical data for analysis

Workflow & Steps

Step 1: Lab Registration

- The system stores lab details in the **Lab Table**.
- Lab availability is updated regularly.

Step 2: Instructors Booking Request

- The user selects a lab and submits a booking request.
- The system checks the **Lab_Schedule Table** for availability.

Step 3: Confirmation & Approval

- If available, the system confirms the booking.
- Booking details are recorded in the **Lab_Bookings Table**.

Step 4: Lab Usage & Equipment Handling

- On the booking date, students access the lab.
- Equipment details are logged in the **Lab_Equipment Table**.

Step 5: Reporting & Logs

- The system generates reports on lab usage.

Hostel management system

Requirements to Consider

- **User Roles:** Students, Hostel Wardens, Admins
- **Room Allocation:**
 - Track available and occupied rooms
 - Assign rooms based on preferences (single/double, AC/non-AC)
- **Student Details Management:** Name, ID, Room Number, Duration of Stay
- **Fee Management:** Monthly rent, payment tracking, penalty for late payments
- **Visitor Tracking:** Logs visitors entering/exiting hostel
- **Complaint & Maintenance Requests:** Allow students to report issues (plumbing, electricity, etc.)

Workflow & Steps

Step 1: Student Enrollment

- A new student applies for hostel accommodation.
- Their details are stored in the **Students Table**.

Step 2: Room Assignment

- The system checks the **Rooms Table** for availability.
- If space is available, the student is assigned a room.
- The **occupied_count** field in the **Rooms Table** is updated.

Step 3: Fee Payment & Registration

- The student pays hostel fees.
- Payment details are recorded in the **Payments Table**.

Step 4: Visitor & Security Management

- Visitors sign in and out at the hostel entrance.
- The system logs entries in the **Visitor_Log Table**.

Step 5: Warden Assignment

- The warden manages hostel

Step 6: Reporting & Room Monitoring

- The warden/admin can view student details and room occupancy.

Step 7: Student Check-Out

- A student leaves the hostel.
- Their record is deleted from the **Students Table**.
- The **occupied_count** in the **Rooms Table** is reduced.

Scholarship management system

Requirements to Consider

- **User Roles:** Students, Scholarship Coordinator, lecturers, scholarship providers
- **Scholarship Database:** Name, Eligibility Criteria, Deadline, Amount
- **Application Process:**
 - Allow students to apply for multiple scholarships
 - Upload necessary documents (ID, personal details, financial proof, family details)
- **Application Review & Approval:**
 - Verification process by committee
 - Adding points to students according to details and eligibility
 - Shortlisting based on eligibility
- **Fund Disbursement:** Track scholarship payments and transactions
- **Notification System:** Notify students about application status
- **Add new scholarship :** Add new scholarship and pending students as per priority

Workflow & Steps

Step 1: Scholarship Registration

- The university creates scholarship programs.
- Details are stored in the **Scholarships Table**.

Step 2: Student Application Submission

- Students submit applications with required documents.
- Their details are stored in the system.

Step 3: Eligibility Verification

- The system checks the **Eligibility Criteria**.
- Applications meeting the criteria are shortlisted.

Step 4: Committee Review & Approval

- The scholarship committee reviews applications.
- Approved applications are updated in the **Scholarships_Awarded Table**.

Step 5: Scholarship Fund Disbursement

- Approved students receive funds in their accounts.
- Payment transactions are recorded in the **Scholarship_Payments Table**.

Step 6: Reporting

- The system tracks students and payments history.