

Daily Task Report

Date: 28-Jan-2026

Project: Student Management System

1. Models.py

- Designed **professional and comprehensive models** for a Student Management System:
 - **Department:** name, code, description
 - **Course:** Linked to Department, includes name, code, credits, description
 - **Teacher:** Linked to User, department, designation, phone (with **Nepal phone validation**), profile picture
 - **Student:** Linked to User, roll_no, department, courses (ManyToMany via Enrollment), DOB, gender, phone, address, guardian, profile_pic, active status, join date
 - **Enrollment:** Many-to-Many through table for Student ↔ Course, with status and date
 - **Attendance:** Tracks student attendance per course per date with status and remarks
 - **Exam:** Course linked, with exam name, date, total marks
 - **Grade:** Student and Exam linked, with marks obtained and grade
 - **Notification:** Linked to User, title, message, timestamp, read/unread status
- Added **validators** for professional data integrity:
 - nepal_phone_validator ensures **+9779XXXXXXXXXX** format for phone numbers.
 - Used **unique_together** in Enrollment, Attendance, and Grade for database consistency.

2. admin.py

- Registered all models with **Django admin** with **professional admin interfaces**:
 - DepartmentAdmin:** list_display and search_fields
 - CourseAdmin:** list_display, list_filter, search_fields
 - TeacherAdmin:** list_display, list_filter, search_fields
 - StudentAdmin:** list_display, list_filter, search_fields, filter_horizontal for courses
 - EnrollmentAdmin:** list_display, list_filter, search_fields

AttendanceAdmin: list_display, list_filter, search_fields

ExamAdmin: list_display, list_filter, search_fields

GradeAdmin: list_display, list_filter, search_fields

NotificationAdmin: list_display, list_filter, search_fields

- Fixed issues related to list_filter, list_display, and ManyToMany fields for proper admin display.

The screenshot shows the Django Admin interface for the 'Authentication and Authorization' app. The left sidebar has a dark theme with categories like 'Authentication and Authorization' and 'Student'. Under 'Authentication and Authorization', there are links for 'Groups' and 'Users', each with 'Add' and 'Change' buttons. Under 'Student', there are links for 'Attendances', 'Courses', 'Departments', 'Enrollments', 'Exams', 'Grades', 'Notifications', 'Students', and 'Teachers', each with 'Add' and 'Change' buttons. To the right, there's a 'Recent actions' sidebar with a timeline of five entries: 1. 'Added "Addde d ''.' 10 minutes ago. 2. 'Added "English (5758)"' 11 minutes ago. 3. 'Added "anup (526440)"' 11 minutes ago. 4. 'Added "Department of Science and Technology (526440)"' 12 minutes ago. 5. 'Activated "Activate Windows. (526440)"' 12 minutes ago. A message at the bottom right says 'Go to Settings'.