

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.

