

STUDENT COMPLAINT MANAGEMENT SYSTEM

Project Proposal :

Project Name : Student Complaint Management System (SCMS)

Programming Languages : C# , XAML, SQLite

1. Introduction

The Student Complaint Management System (SCMS) is a WPF-based application that allows students to submit complaints and enables administrators to track and resolve them. The project is built using the MVVM (Model-View-ViewModel) architecture to ensure modularity and maintainability.

2. Target Users

- **Students** : Can submit complaints, track complaint statuses, and receive updates.
- **Administrators** : Can review, update, and resolve complaints efficiently.

3. Key Features

Student Features

Submit Complaints : Students can file complaints with details like category, description, and priority.

View Complaint Status : Students can track the progress of their complaints.

Edit or Delete : Before resolution, students can modify or remove their complaints.

Administrator Features

View Complaints : Admins can filter complaints by status, date, or category.

Update Complaint Status : Admins can mark complaints as "Pending," "In Progress," or "Resolved."

Assign Complaints : Complaints can be assigned to responsible personnel for resolution.

Common Features

User Authentication : Login system for students and admins.

Search & Filter : Search complaints based on category, date, or status.

Export Data : Save complaints as CSV/PDF for records.

4. MVVM Architecture Integration

- **Model (M)** : Represents the `Complaint` and `User` classes, handling data storage and logic.
- **ViewModel (VM)** : Connects data and UI, manages user interactions, and handles commands.
- **View (V)** : Provides UI components, including buttons, text boxes, and data grids, using WPF XAML.

5. Use Case Scenarios

- **Student Submits a Complaint**
 - The student logs in and fills out the complaint form.
 - The system saves the complaint and assigns a unique ID.
 - A confirmation message is displayed.
- **Admin Resolves a Complaint**
 - The admin logs in and reviews pending complaints.
 - The admin updates the complaint status to "Resolved" with a resolution note.
 - The student gets notified about the update.

6. Project Execution & Presentation

- **Development Tools** : Visual Studio, C# (.NET 5), WPF, SQLite
- **Final Presentation** : Live demo showcasing submission, tracking, and resolution of complaints.
- **Architecture Explanation** : Overview of MVVM structure and data handling.

7. Agenda and Scope

- **Objective**: Develop an efficient system for students to submit complaints and track resolutions.
- **Problem Addressed**: Lack of a structured platform for complaint management in institutions.
- **Expected Outcome**: A streamlined process for complaint submission, tracking, and resolution.
- **Scalability**: Can be extended to mobile applications or integrated with institutional portals.
- **Security Measures**: Role-based authentication ensures data privacy and integrity.