

Unicom Tic Management System

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- UT No : UT010458
- Batch :2025
- Under the guidance of: Lecture and ChatGPT

▪ Introduction & Acknowledgement

The "Unicom Management System" is developed using the MVC (Model-View-Controller) architecture with C# and SQLite. It is designed to manage students, staff, timetable, rooms, attendance, and exams. This project supports role-based login (Admin, Staff, Lecturer, Student) with password authentication, and each module supports full CRUD operations.

I thank my institution and staff for their support. My heartfelt thanks to my friends, AI tools and family for their motivation and encouragement.

■ Objective of the Project

- To manage educational institution data efficiently.
- To implement secure login with role-based access.
- To use proper design (OOP concepts, MVC) for better maintainability.
- To provide user-friendly UI in WinForms.
- To store and manage data securely using SQLite.

■ Extra Features

- Role-Based Login (Admin, Staff, Lecturer, Student)
- Password Access
- All Forms with Add, Update, Delete, View
- Try-Catch Exception Handling
- Data Persistence with SQLite
- Section-wise subject mapping

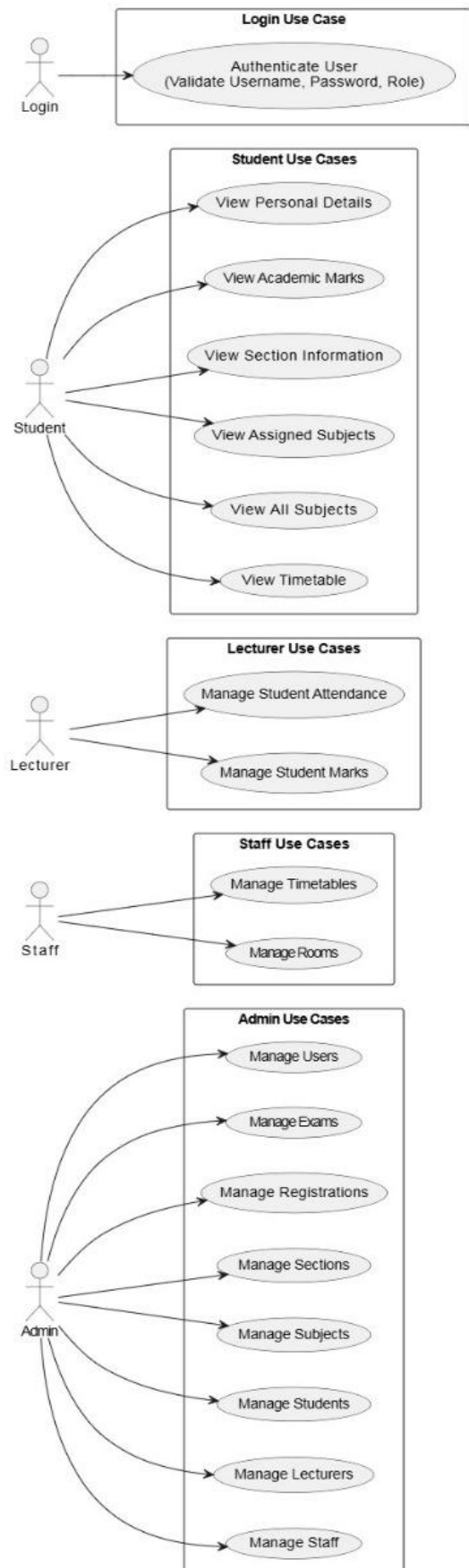
■ Technical Details

<u>Feature</u>	<u>Technology Used</u>
• Language	C#
• UI Framework	WinForms
• Architecture	MVC (Model-View-Controller)
• Database	SQLite
• Diagram Tool	Draw io
• Project Planning	Excel (Gantt Chart)
• IDE	Visual Studio

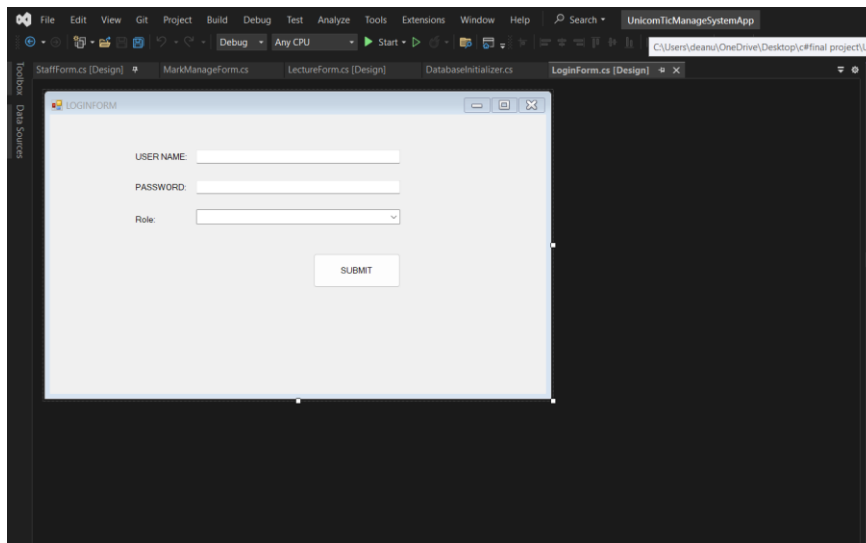
▪ Budget Plan

<u>Item</u>	<u>Estimated Cost (LKR)</u>
• Developer	15,000
• Domain Name	3,000
• Server Hosting	5,000
• Software Tools (VS, DB, Draw.io - Free)	0
• Maintenance (Yearly)	4,000
• Profit Margin	8,000
• Total	35,000

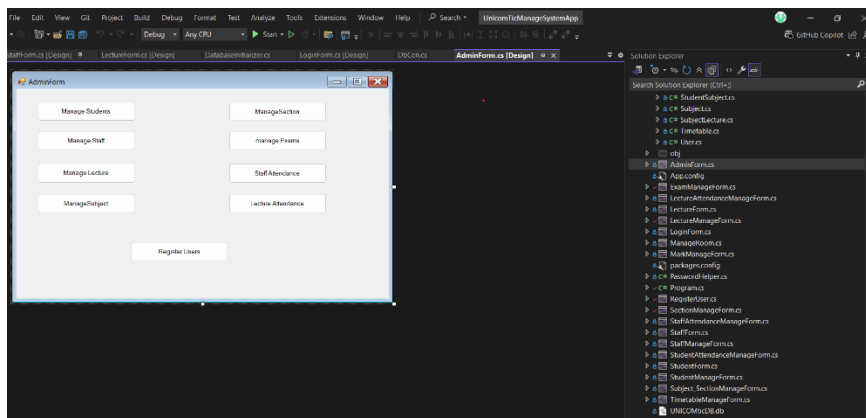
■ Design – Use Case Diagram



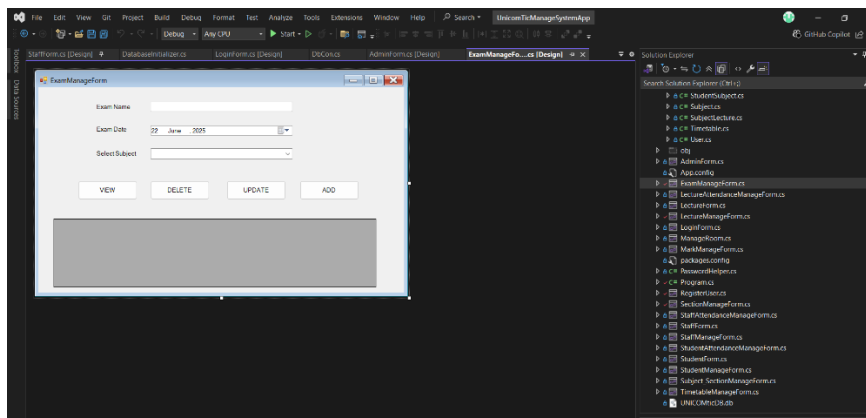
MVC Pattern(my code)



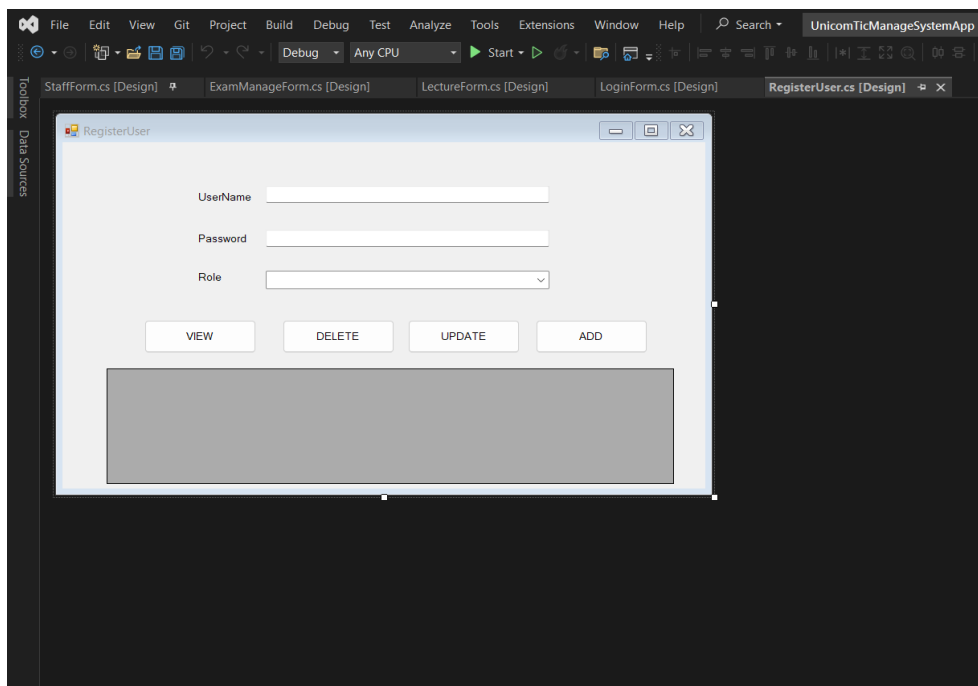
login form



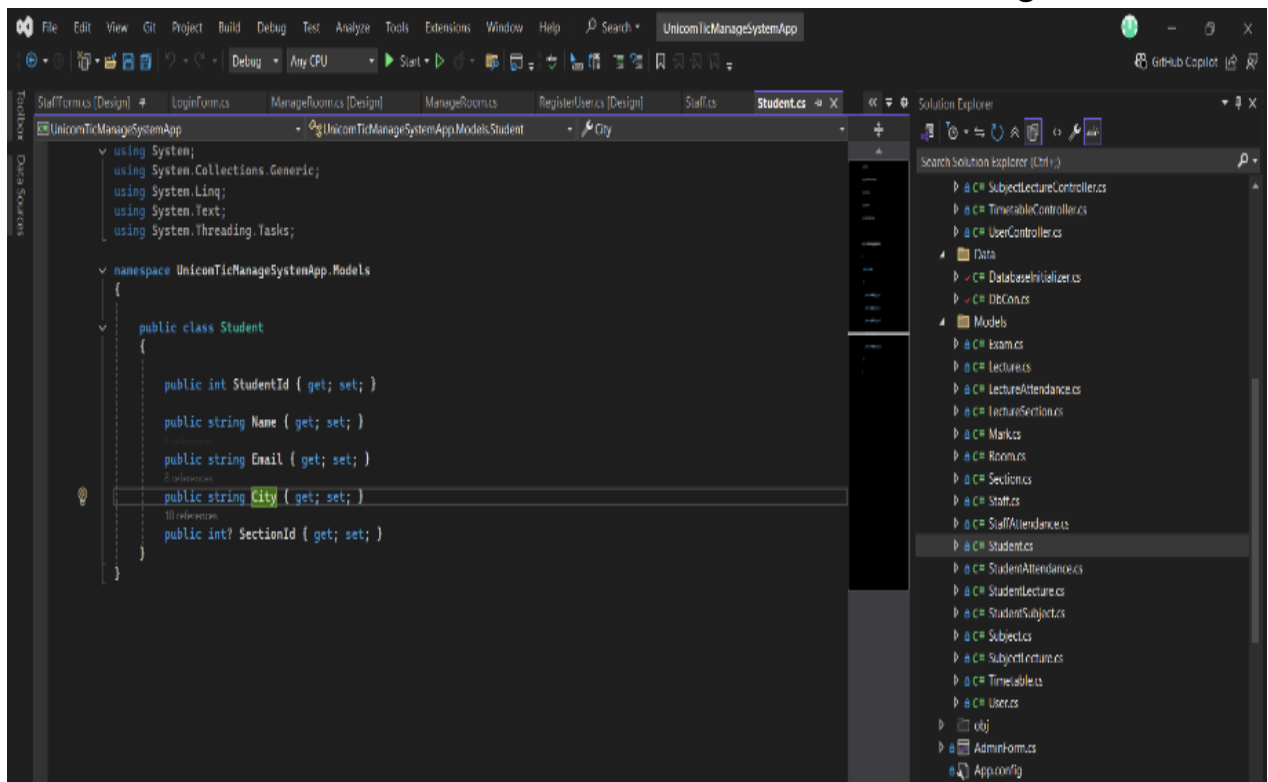
admin form



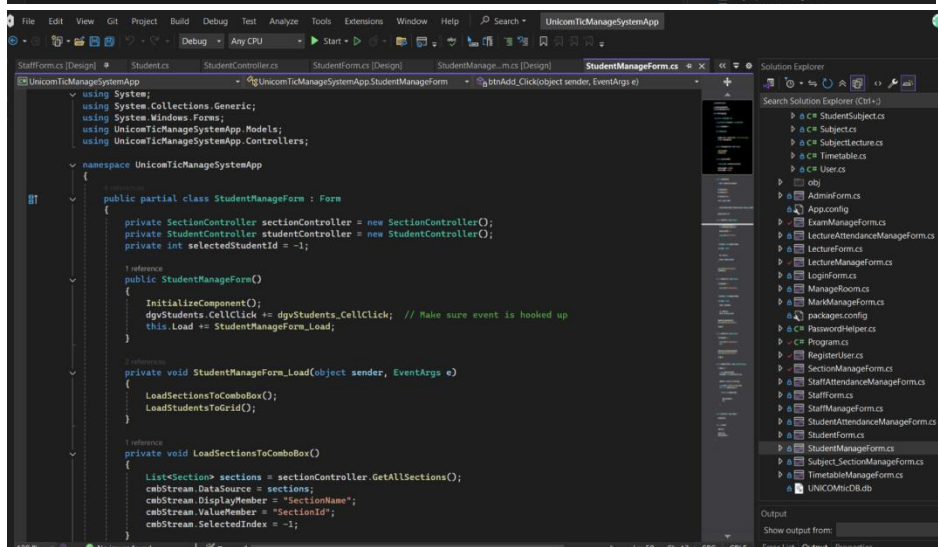
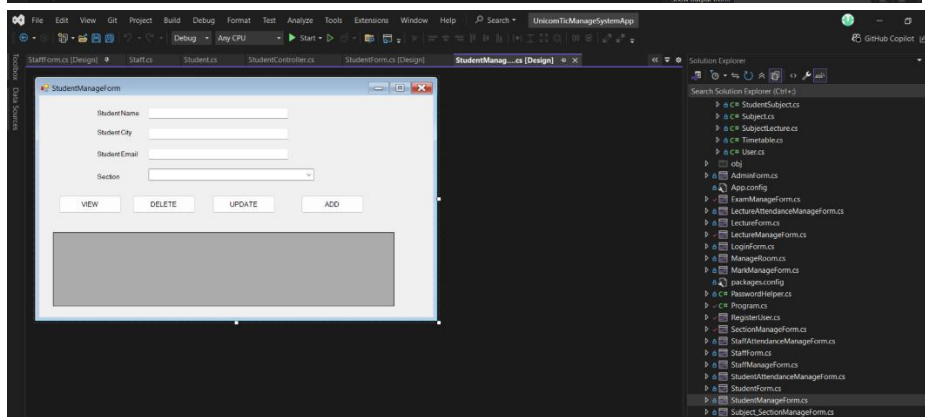
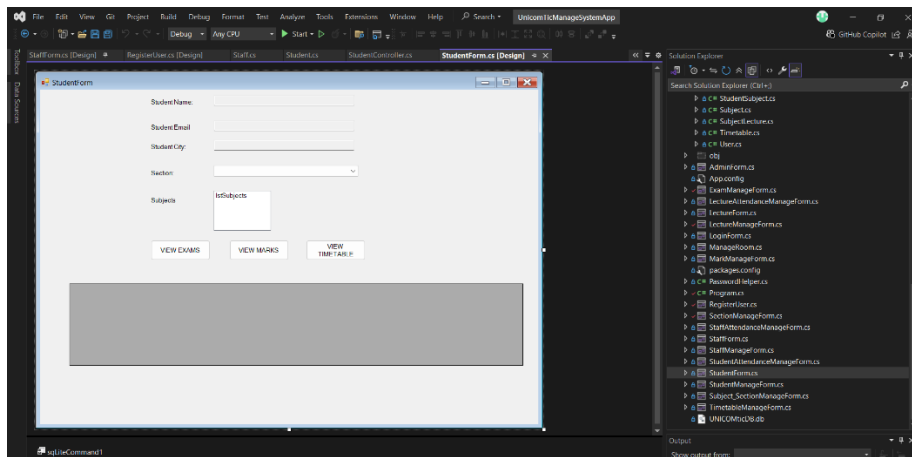
exam form



register form



student model class



student controller

Oop-student form :form

■ Gantt Chart



▪ **References**

- Microsoft Documentation – C# WinForms
- SQLite Official Documentation
- Draw.io – Diagramming Tool