

Unicom TIC Management System (UMS)

1. Project Title

Unicom TIC Management System (UMS)

2. Introduction

This WinForms C# application is designed for educational institution management under the concept of Total Information Control (TIC). It provides different users (Admins, Staff, Students, Lecturer) access to manage relevant data and actions.

3. Objective

- Manage students, subjects, courses, exams, marks, and timetables through a unified GUI.
- Provide login with role-based UI.
- Use SQLite for data persistence.

4. Technologies Used

- Programming: C#
- Framework: .NET Framework (WinForms)
- IDE: Visual Studio
- Database: SQLite
- Architecture: MVC Pattern
- UI Components: Windows Forms Controls

5. System Architecture (MVC)

- Model: Business Logic & Data Access (e.g., StudentModel.cs, CourseModel.cs)
- View: WinForms UI (*.cs [Form], *.Designer.cs)
- Controller: Handles events and binds UI with data (StudentController.cs, etc.)

6. Modules Overview

- Login: Role-based login validation
- Dashboard: Role-specific access (Admin/Student/Staff/Lecturer)
- Student: Add, edit, delete, view student info
- Course: Manage course data
- Subject: Create/manage subjects under each course

- Exam: Create exams
- Mark Entry: Assign marks to students
- Timetable: Schedule management
- Room Allocation: Allocate exam/class rooms

7. Database Design

Database: ums.db (SQLite)

Major Tables:

- users (username, password, role)
- students (name, email, course_id)
- courses (course_name, duration)
- subjects (subject_name, course_id)
- exams (exam_name, date, course_id)
- marks (student_id, subject_id, mark)
- timetable (day, time, subject, room)
- rooms (room_number, capacity)

8. Sample Form Screens

(Screenshots can be inserted here.)

- Login Form
- Admin Dashboard
- Student Management Form
- Exam Creation Form
- Timetable Display

9. How to Run the Project

1. Open Visual Studio.
2. Open the WindowsFormsApp1.sln file.
3. SQLite DB (UNICOM.db) is included in the solution.
4. Use NuGet Package Manager to install System.Data.SQLite.
5. Press F5 or click Start to run the application.

10. Conclusion

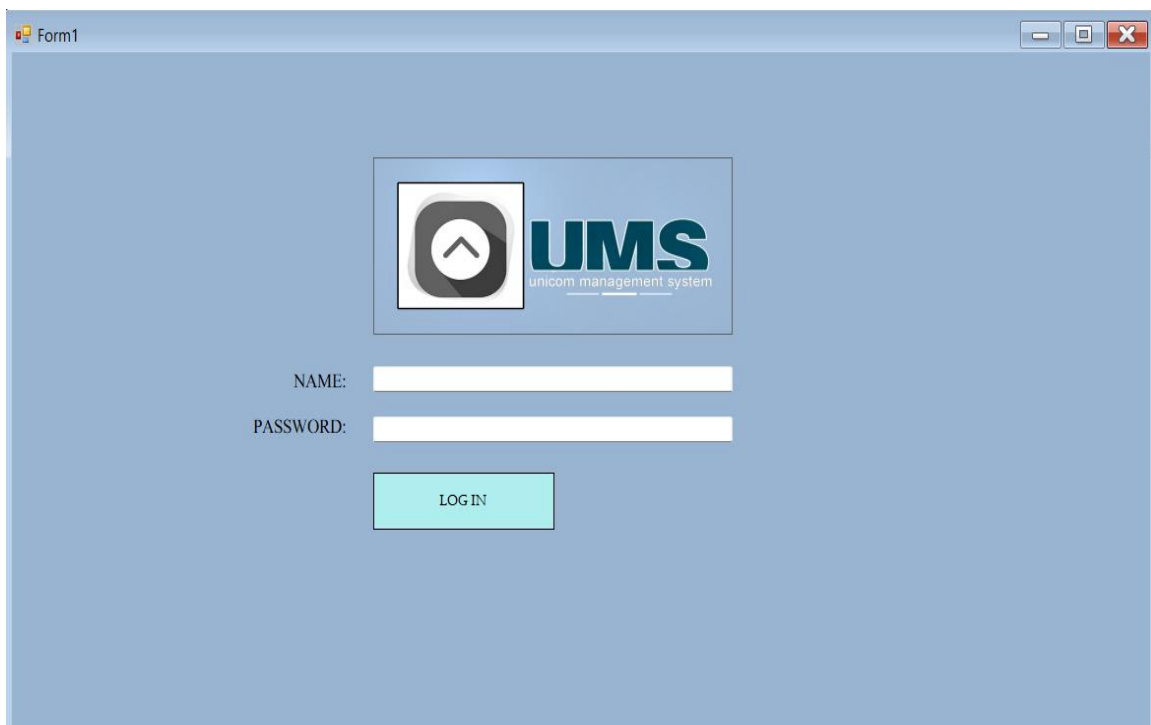
The UMS WinForms project provides a practical, role-based academic management solution for educational institutions.

11. User Roles and Credentials

Role	Username	Password
Admin	admin7	admin123
Staff	staff7	staff123
Student	student7	stud123
Lecturer	lecturer7	Lect123

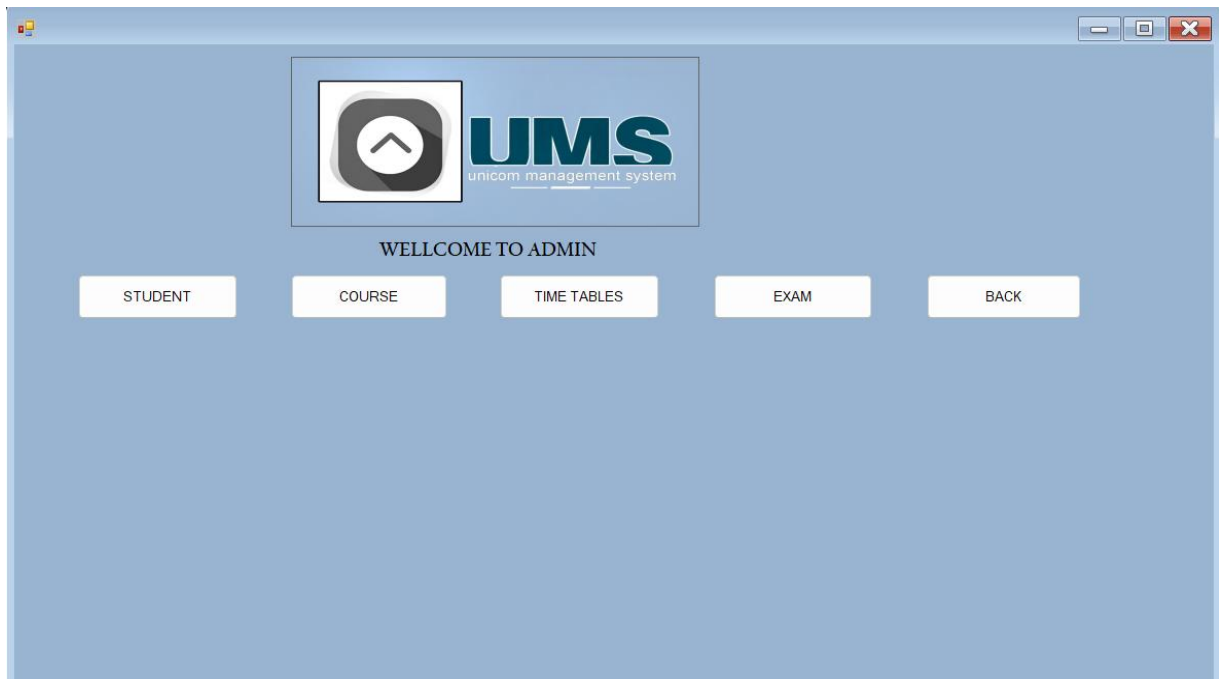
12. Application Screenshots

1. Login Form

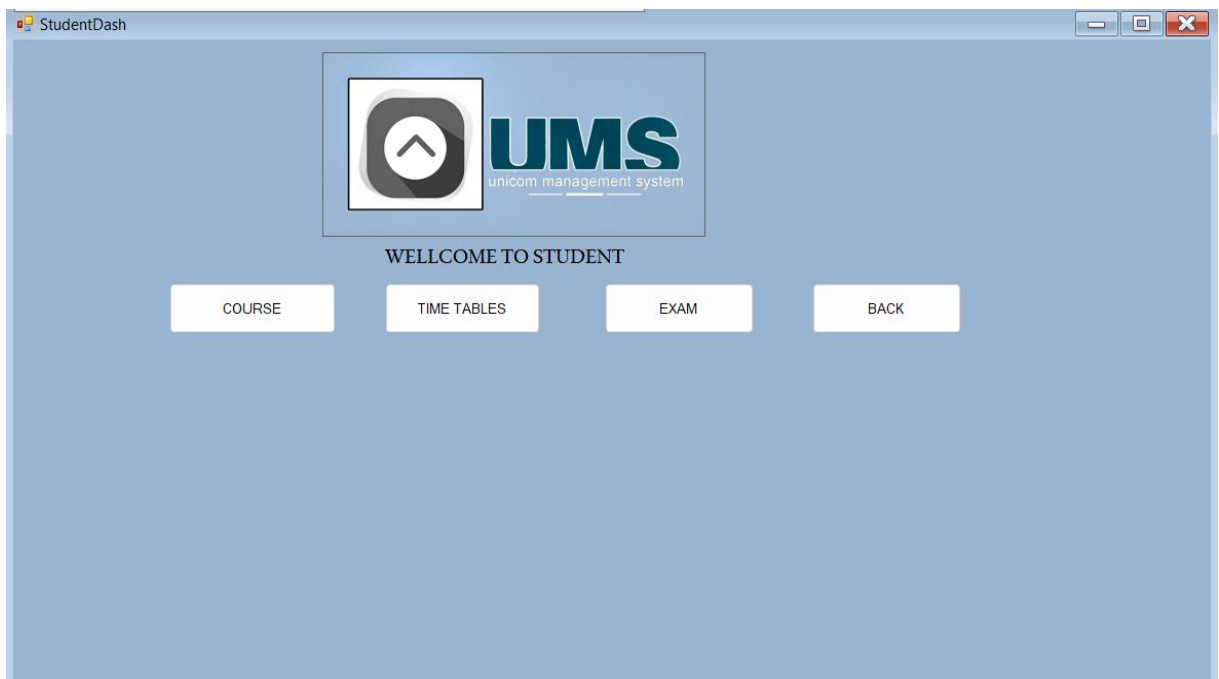


The screenshot shows a web application window titled "Form1". The background is a solid blue color. In the center, there is a logo for "UMS" (unicom management system) which consists of a square icon with a stylized 'U' and the text "UMS" in large blue letters, with "unicom management system" in smaller text below it. Below the logo, there are two input fields: one for "NAME:" and one for "PASSWORD:". Below these fields is a light blue button with the text "LOGIN" in black capital letters.

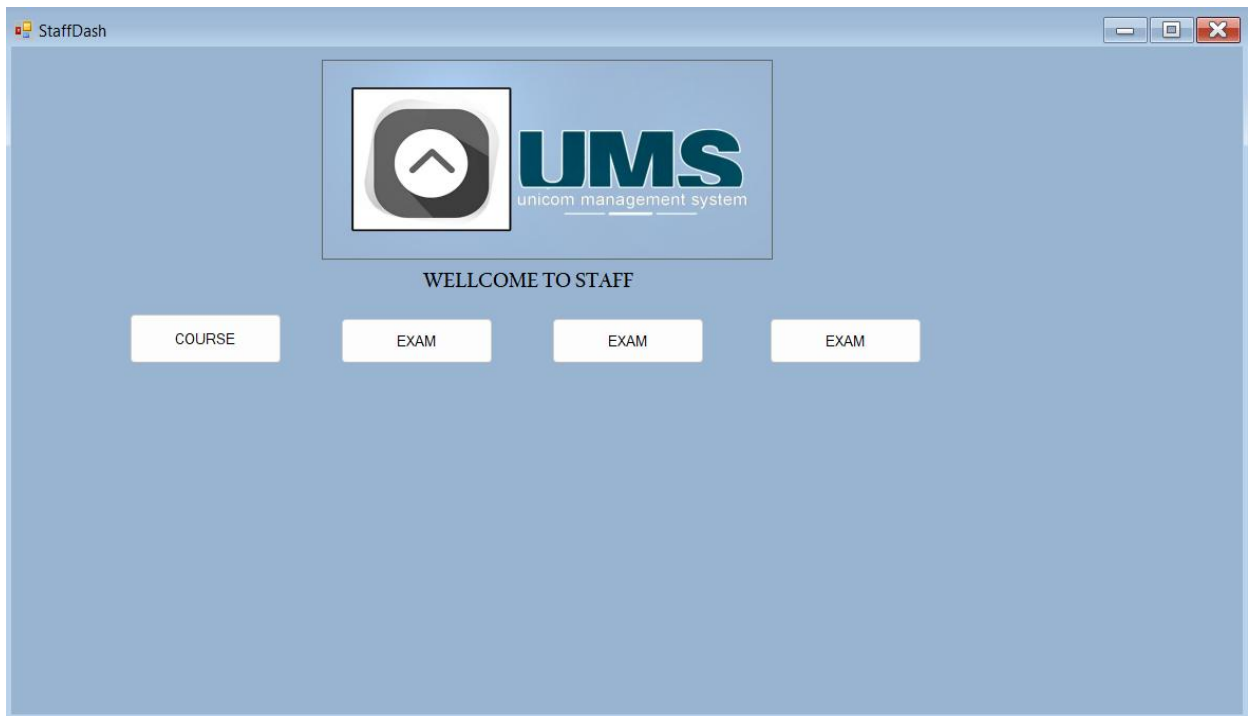
2. Admin Dashboard



3. Student Dashboard



4. Staff Dashboard



5. Lecturer Dashboard

