**Project Report**

**Unicom TIC Management System (UMS)**

**1. Project Title:**

C-UMS: Unicom Tic Management System using C# and SQLite

**2. Objective:**

To build a desktop application for managing university operations such as Lecturers, Courses, Students, Staff, Exams, and Timetables efficiently using C# WinForms and SQLite.

**3. Technologies Used:**

* **Programming Language:** C#
* **Framework:** .NET WinForms (Windows Forms)
* **Database:** SQLite
* **IDE:** Visual Studio

**4. Features:**

* **Lecturer Management:** Add, update, delete lecturer information with profile images.
* **Course Management:** Assign and manage courses offered by the university.
* **Student and Staff Handling:** Maintain records for students and staff.
* **Exam and Timetable Management:** Manage exams, marks, and timetables.
* **Role-Based Access:** Separate access for Admin, Lecturer, Student, and Staff roles.
* **User Interface:** Simple and intuitive WinForms interface with DataGridView support.

**5. Modules Overview:**

* Controllers: Handle logic for forms and database operations.
* Models: Define the data structure like Lecturer, Course, Student.
* Views: WinForms (e.g., LecturerForm, Form1) for interaction.
* Repositories: Handle database connections and queries.

**6. Database:**

Uses SQLite to store persistent data. Tables include:

* Lecturer
* Course
* Student
* Staff
* Timetable
* Exams

**7. How to Run:**

1. Open the solution Unicom TIC.sln in Visual Studio.
2. Restore dependencies (if any).
3. Run the project (F5) — ensure SQLite DLLs are properly referenced.
4. Use the WinForms GUI to interact with the system.

**8. Conclusion:**

C-UMS provides a practical desktop application to automate university processes. It simplifies recordkeeping, improves accuracy, and enhances productivity for university staff and administrators.