

## Windows Forms Application – Project Report

**Project Title:** School Management System

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### Introduction

This project is a basic Windows Forms Application created using C# and Visual Studio. It is designed to perform simple tasks like [adding records, saving data, displaying information, etc.].

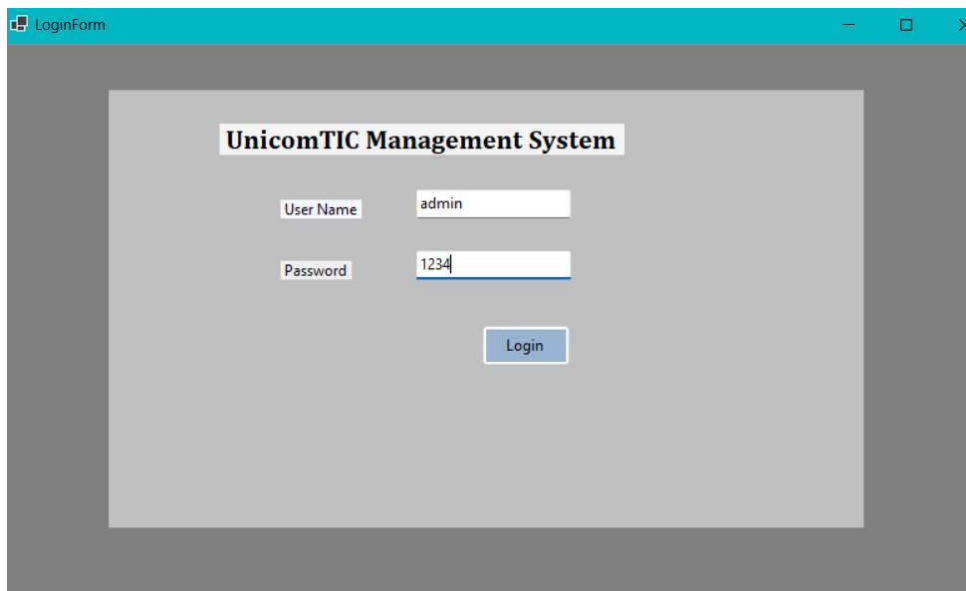
### Tools & Technologies Used

Tool	Description
Visual Studio	IDE used to develop the project
C#	Programming Language
.NET Framework	Platform for building the app
Windows Forms	For designing the user interface

### Screenshots

#### Login Form

Hard-coded value (U. Name, Password) => **To Login First**

The screenshot shows a Windows Forms application window titled "LoginForm". Inside the window, there is a light gray rectangular area containing the login interface. At the top of this area, the text "UnicomTIC Management System" is displayed in a bold, black font. Below this, there are two input fields. The first is labeled "User Name" and contains the text "admin". The second is labeled "Password" and contains the text "1234". Below these fields is a blue button with the text "Login" in white. The window has a standard Windows title bar with a teal background and minimize, maximize, and close buttons.

Course Adding Form

CourseForm

**Course Deatails :**


Course Name

	ID	Course Name

Subject adding form

SubjectForm

**Subject Details :**

Subject Name  

Course

	ID	Subject Name	Course

Staffs adding form

StaffForm

**Staff Details :**

Staff Name

Position

Email

	ID	Name	Position	En

Lecture adding form

LectureForm

**Lecture Details :**

Lecture Name

subject

Qualification

Email

	ID	Name	Subject	Qualification

Student adding form

StudentForm

**Student Details :**

Student Name

Address

Age

Course

ID	Name	Age	Address	Course

Room creation form

RoomForm

**Room Details :**

Room Name

Room Type

ID	Room Name	Room Type

Timetable Form

TimetableForm

**Timetable Details :**

Subject

Time Slot

Room

	ID	Subject	Time Slot	Room

## Exams Form

ExamForm

**Exam Deatails :**

Exam Name

Subject

	ID	Exam Name	Subject

## Marks Form

The screenshot shows a window titled "MarkForm" with a teal header bar. Inside, the "Mark Details :" section contains three input fields: "Student" (a dropdown menu), "Exam" (a dropdown menu), and "Mark" (a text box). Below these fields are three buttons: "Add", "Edit", and "Delete". At the bottom is a table with five columns: "ID", "Student", "Exam", and "Score". The table body is currently empty.

ID	Student	Exam	Score
----	---------	------	-------

User Password Setting Form  
(Admin, Staff, Lecture, Student)

The screenshot shows a window titled "UserForm" with a teal header bar. Inside, the "User Details :" section contains three input fields: "Username" (a text box), "Password" (a text box), and "Role" (a dropdown menu with "Admin" selected). Below these fields are three buttons: "Add", "Edit", and "Delete". At the bottom is a table with five columns: "ID", "Username", "Password", and "Role". The table body is currently empty.

ID	Username	Password	Role
----	----------	----------	------

## Code Samples

```

public static List<Lecture> GetAllLectures()
{
    List<Lecture> lectures = new List<Lecture>();

    using (var cmd = DataCon.GetConnection().CreateCommand())
    {
        cmd.CommandText = @"
            SELECT l.LectureID, l.Name, l.SubjectID, l.Qualification, l.Email
            FROM Lectures l";

        using (var reader = cmd.ExecuteReader())
        {
            while (reader.Read())
            {
                lectures.Add(new Lecture
                {
                    LectureID = Convert.ToInt32(reader["LectureID"]),
                    Name = reader["Name"].ToString(),
                    SubjectID = Convert.ToInt32(reader["SubjectID"]),
                    Qualification = reader["Qualification"].ToString(),
                    Email = reader["Email"].ToString()
                });
            }
        }
    }
}

```

1 reference | Mohamed Fazal, 7 hours ago | 1 author, 1 change

```

public static void AddLecture(string name, int subjectId, string qualification, string email)
{
    using (var cmd = DataCon.GetConnection().CreateCommand())
    {
        cmd.CommandText = "INSERT INTO Lectures (Name, SubjectID, Qualification, Email) VALUES (@n, @s, @q, @e)";
        cmd.Parameters.AddWithValue("@n", name);
        cmd.Parameters.AddWithValue("@s", subjectId);
        cmd.Parameters.AddWithValue("@q", qualification);
        cmd.Parameters.AddWithValue("@e", email);
        cmd.ExecuteNonQuery();
    }
}

```

1 reference | Mohamed Fazal, 7 hours ago | 1 author, 1 change

```

public static void UpdateLecture(int id, string name, int subjectId, string qualification, string email)
{
    using (var cmd = DataCon.GetConnection().CreateCommand())
    {
        cmd.CommandText = "UPDATE Lectures SET Name = @n, SubjectID = @s, Qualification = @q, Email = @e WHERE LectureID = @id";
        cmd.Parameters.AddWithValue("@n", name);
        cmd.Parameters.AddWithValue("@s", subjectId);
        cmd.Parameters.AddWithValue("@q", qualification);
        cmd.Parameters.AddWithValue("@e", email);
        cmd.Parameters.AddWithValue("@id", id);
        cmd.ExecuteNonQuery();
    }
}

```

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public stati

{

{

cmd.

cmd.

1 reference | UT010621, 4 days ago | 1 author, 1 change

```
public static void DeleteLecture(int id)
{
    using (var cmd = DataCon.GetConnection().CreateCommand())
    {
        cmd.CommandText = "DELETE FROM Lectures WHERE LectureID = @id";
        cmd.Parameters.AddWithValue("@id", id);
        cmd.ExecuteNonQuery();
    }
}
```

```
private void MainForm_Load(object sender, EventArgs e)
{
    lblWelcom.Text = $"Welcome {loggedInUser.Username} ({loggedInUser.Role})";

    if (loggedInUser.Role == "Admin")
    {
        EnableAll();
    }
    else if (loggedInUser.Role == "Staff")
    {
        btnUser.Visible = false;
        btnLecture.Visible = false;
    }
    else if (loggedInUser.Role == "Lecturer")
    {
        btnUser.Visible = false;
        btnCourse.Visible = false;
        btnStudent.Visible = false;
    }
    else if (loggedInUser.Role == "Student")
    {
        btnUser.Visible = false;
        btnStudent.Visible = false;
        btnLecture.Visible = false;
        btnMark.Visible = false;
    }
}
```



Reference: Mohamed Fathy / 1 day ago / 12 authors / 0 changes

```
private async void btnLogin_Click(object sender, EventArgs e)
{
    string username = txtUsername.Text.Trim();
    string password = txtPassword.Text.Trim();

    var user = await LoginController.LoginUserAsync(username, password);

    if (user != null)
    {
        this.Hide();
        new MainForm(user).Show();
    }
    else
    {
        MessageBox.Show("Invalid username or password.");
    }
}
```