This project is a \*\*Student Registration System\*\* built using Windows Forms in .NET.

1. \*\*Login Form (Form1)\*\*

- This is the main entry point of the application.

- It contains text boxes for entering a username and password.

- On clicking the login button, it checks if the credentials match the hardcoded admin credentials.

- If the credentials are correct, it navigates to the `Students` form; otherwise, it displays an error message.

2. \*\*Dashboard\*\*

- This form displays various statistics about the students and departments.

- It uses a custom `Functions` class to fetch data from the database.

- It displays the total number of students, total number of departments, and the count of male and female students.

- Navigation buttons allow users to move to the `Students` form, `Departments` form, or exit the application.

3. \*\*Departments\*\*

- This form manages the departments within the system.

- It allows users to add, update, and delete department records.

- It uses a DataGridView to display department data fetched from the database.

- The `Functions` class is utilized for database operations.

4. \*\*Students\*\*

- This form manages student records.

- It allows users to add, update, and delete student records.

- It fetches department data to populate a dropdown for assigning departments to students.

- A DataGridView displays student data.

- The `Functions` class handles database interactions.

5. \*\*Functions Class\*\*

- This class encapsulates the database operations.

- It establishes a connection to a SQL Server database and provides methods to execute queries and fetch data.

- The `GetData` method executes SELECT queries and returns results as a DataTable.

- The `SetData` method executes INSERT, UPDATE, and DELETE queries.

6. \*\*Program Class\*\*

- This is the entry point of the application.

- It configures the application to use visual styles and starts with the `Form1` (login form).

### Key Features and Functionalities

- \*\*User Authentication:\*\* Basic login mechanism to authenticate users.

- \*\*Dashboard:\*\* Displays key metrics about students and departments.

- \*\*CRUD Operations:\*\* Provides forms to create, read, update, and delete records for students and departments.

- \*\*Data Binding:\*\* Uses DataGridViews to display and interact with data.

- \*\*Database Integration:\*\* Connects to a SQL Server database to store and retrieve data.

### Technical Highlights

- \*\*Windows Forms:\*\* Utilizes Windows Forms for the user interface.

- \*\*C#:\*\* Written in C# with structured object-oriented programming.

- \*\*SQL Server:\*\* Uses SQL Server for database operations, with connection handled through the `Functions` class.

- \*\*Event Handling:\*\* Implements various event handlers for user interactions like button clicks and form loading.

This description should give you a solid overview of your application, its structure, and its functionality.