SECTION Q;

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Title: Implementation of Google Classroom - Project Report

Introduction:

The goal of this project is to implement a web-based platform, similar to Google Classroom, to streamline the teaching and learning process in educational institutions. The platform will have two major panels: the Teacher Panel and the Student Panel. The Teacher Panel allows teachers to manage classes, create and grade assignments, communicate with students, and view progress reports. The Student Panel enables students to enroll in classes, submit assignments, and interact with teachers.

Approach:

To solve the problem, we followed a systematic approach involving the following steps:

2.1. Requirement Gathering:

We identified the key functionalities for both the Teacher Panel and the Student Panel based on the requirements mentioned in the project description. These functionalities include class management, announcements, assignments, class materials, deadlines, grading, comments, and reporting.

2.2. Design:

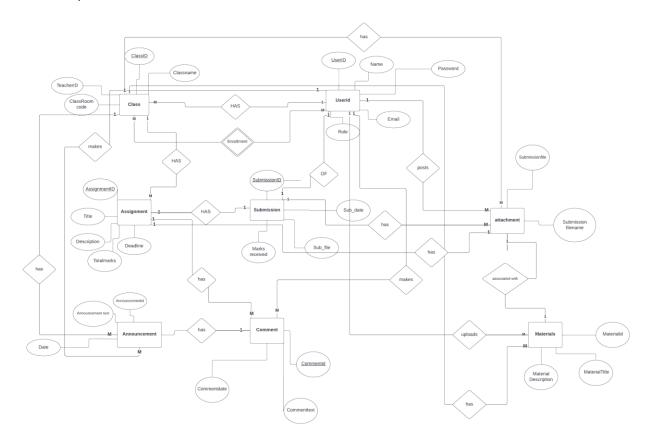
We designed user interface for both panels. The design focused on providing a user-friendly experience with clear navigation and intuitive controls. We also designed the database schema to store and manage the necessary data.

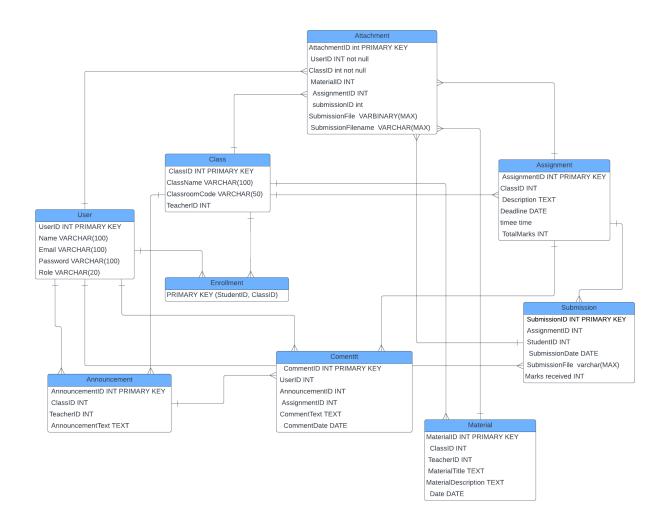
2.3. Development:

The implementation phase involved developing the frontend C# and backend SQL SERVER components of the system.

Entity Relationship Diagram (ERD)/Enhanced Entity Relationship Diagram (EERD):

We created an ERD/EERD to model the database structure for the system. The diagram captures the relationships between all entities.

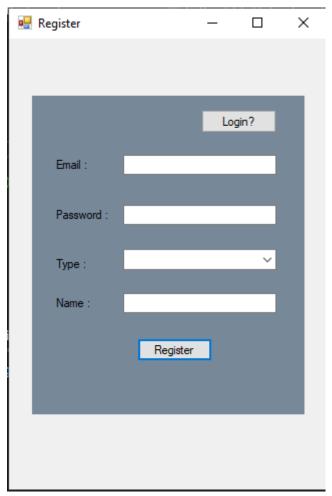




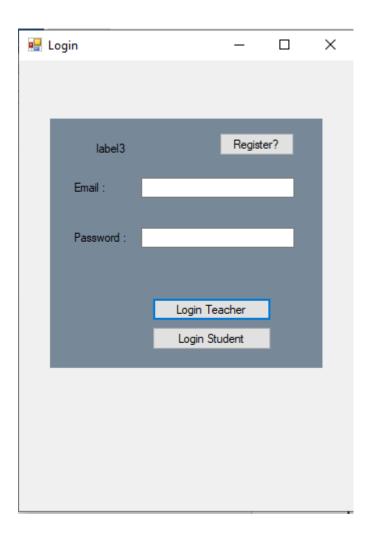
Screenshots of Reports Generated:

To demonstrate the functionality of the system, we generated sample reports showcasing the following:

REGISTRATION:

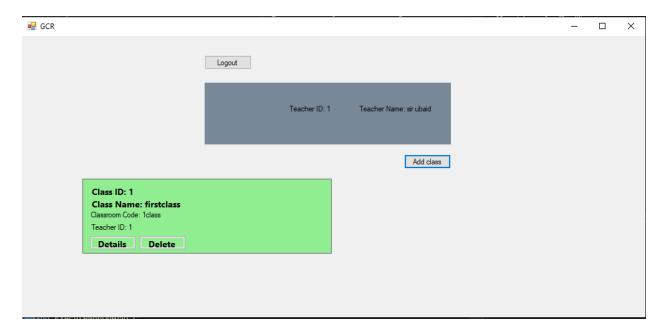


LOGIN:

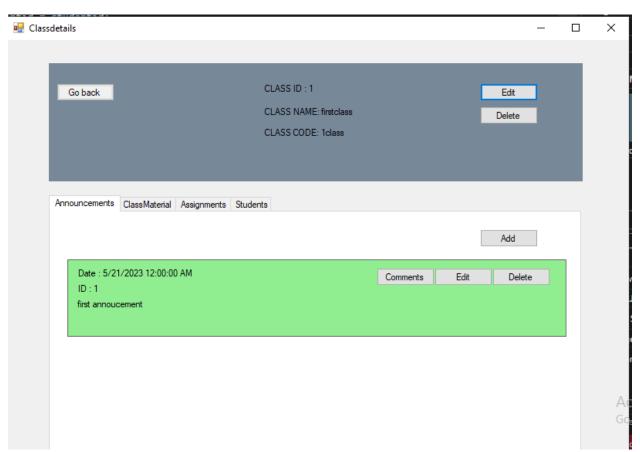


4.1. Teacher Panel Reports:

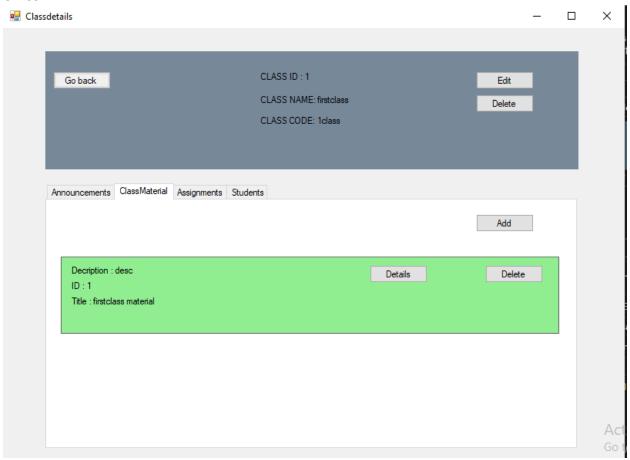
TEACHER HOMEPAGE:



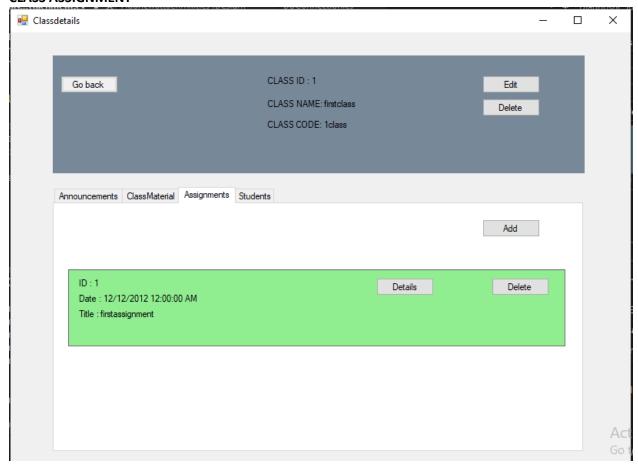
CLASS ANNOUCEMENT DETAIL



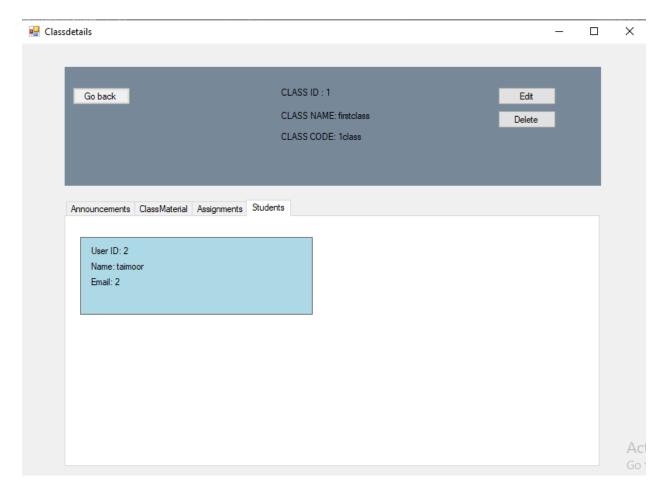
CLASS MATERIAL



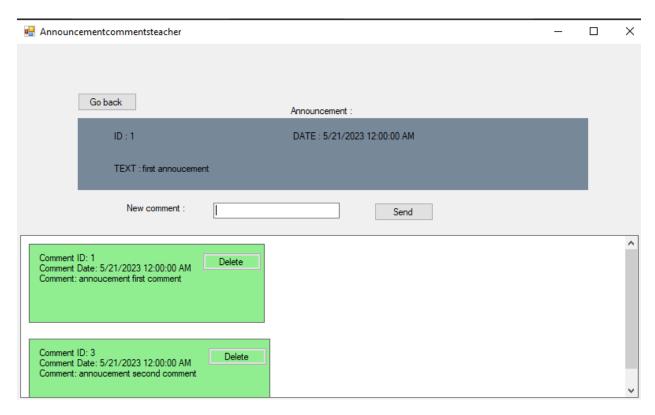
CLASS ASSIGNMENT



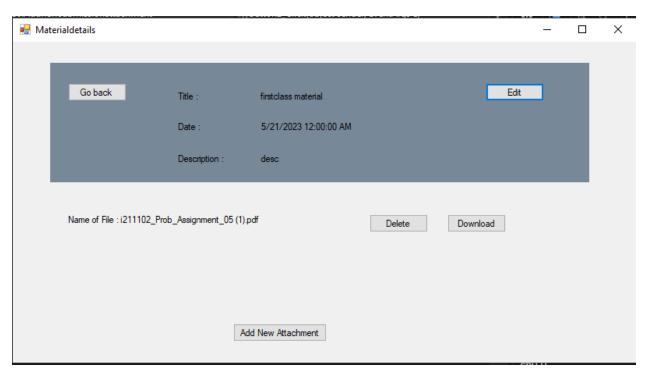
STUDENT ENROLL IN CLASS



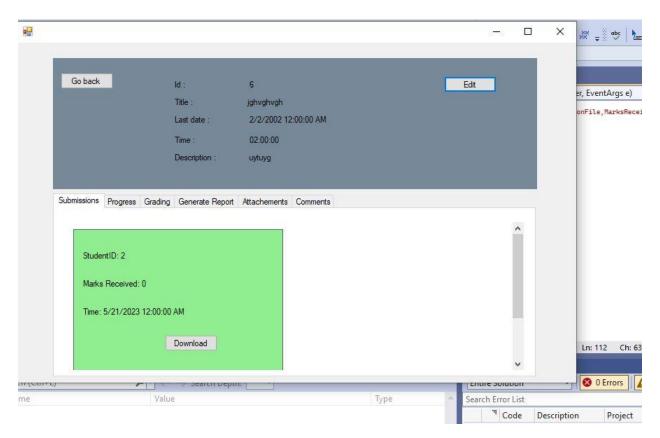
ANNOUCEMENT COMMENT:



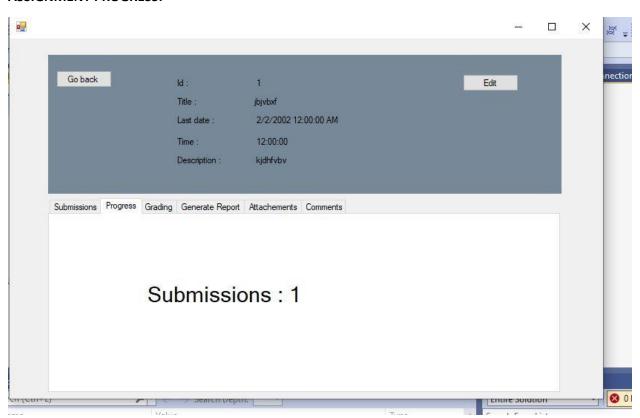
MATERIAL DETAIL:



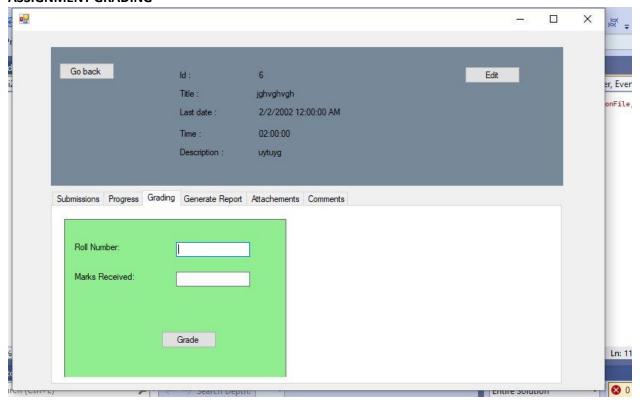
ASSIGNMENT SUBMISSION:



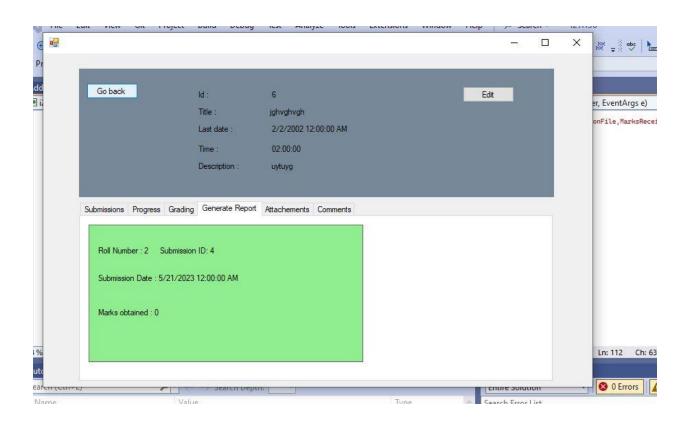
ASSIGNMENT PROGRESS:



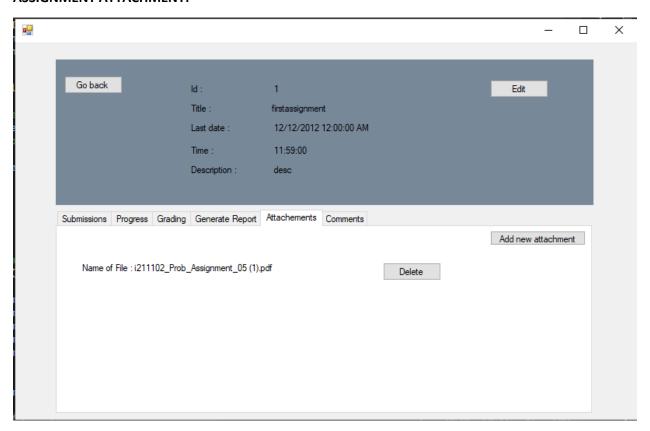
ASSIGNMENT GRADING



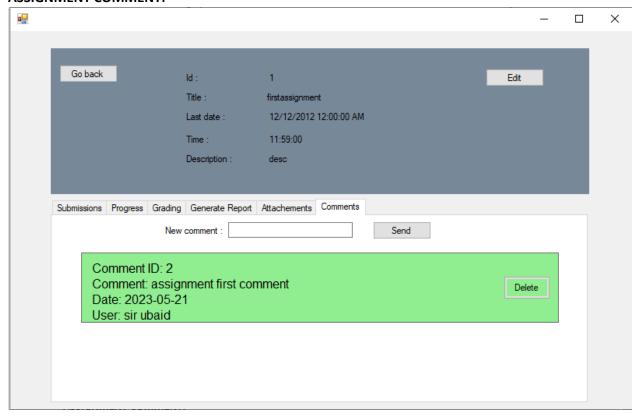
ASSIGNMENT REPORT:



ASSIGNMENT ATTACHMENT:



ASSIGNMENT COMMENT:

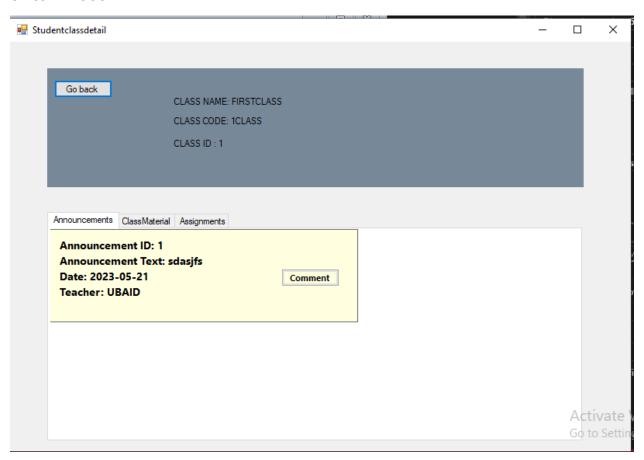


4.2. Student Panel Reports:

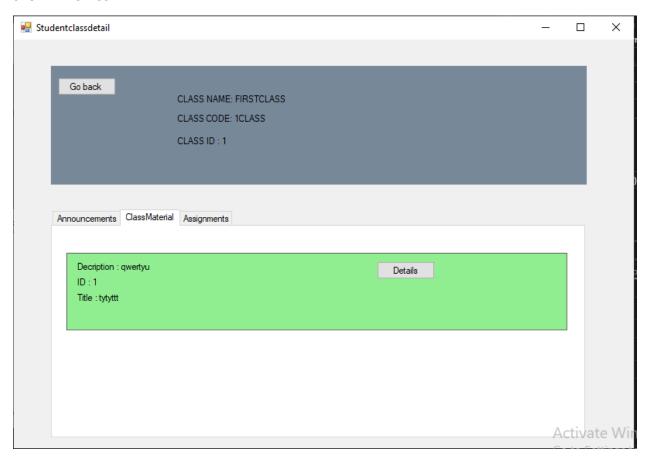
STUDENT HOME:



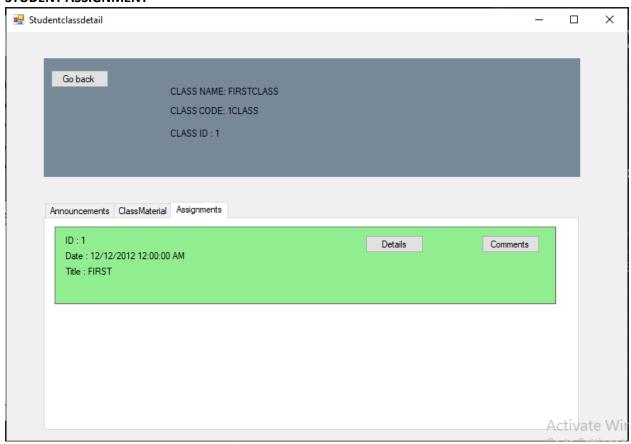
CLASS ANNOUCEMENT:



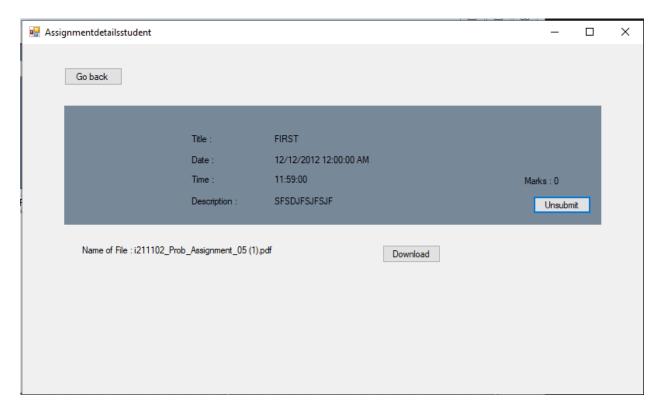
STUDENT CLASS MATERIAL:



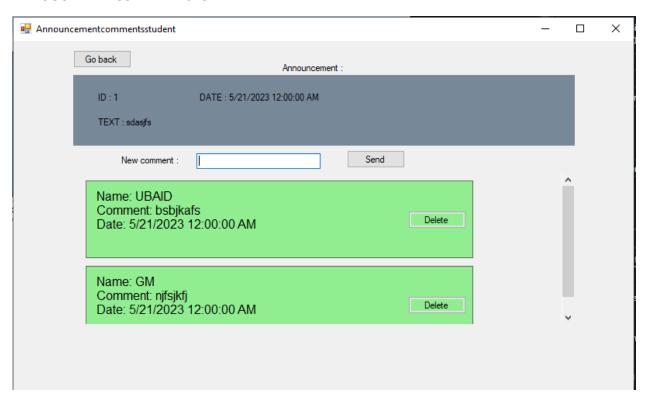
STUDENT ASSIGNMENT



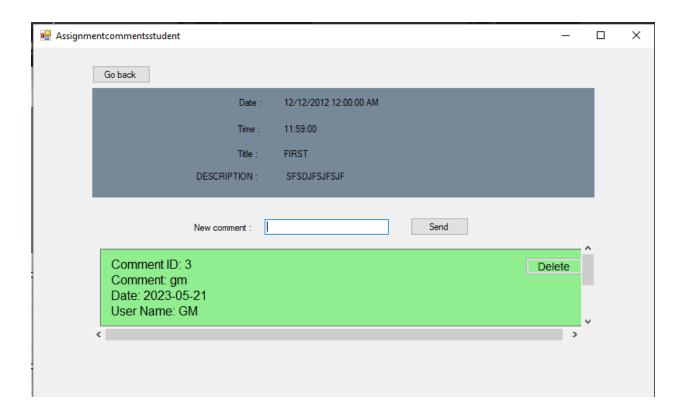
ASSIGNMENT SUBMISSION:



ANNOUCEMENT COMMENT STUDENT:



ASSIGNMENT COMMENT STUDENT:



Lessons Learned:

Throughout the implementation of this project, we gained valuable insights and learning experiences.

5.2. System design and architecture: We learned how to design an effective and intuitive user interface, as well as the importance of a well-structured database schema to support the required functionalities.

Conclusion:

In conclusion, the implementation of the Google Classroom-like platform successfully addressed the goals and functional requirements mentioned in the project description. The system provides teachers and students with a streamlined and secure online environment for managing classes, assignments, and communication.

Overall, this project provided an excellent opportunity to enhance our skills on frontend C# and backend SQL.