Student Feedback System

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Abstract: The Student Feedback System is a vital component of educational institutions, offering a structured framework for students to provide constructive input on their learning experiences. This system collects feedback on courses, instructors, and facilities. It features a user-friendly interface for students, secure data handling, and robust data analysis tools to derive actionable insights. The collected data aids in enhancing teaching methodologies, curriculum development, and overall educational quality. Implementing privacy safeguards, user authentication, and scalability ensures that the system aligns with the institution's needs and regulatory requirements.

1. INTRODUCTION

Previously, we were using paper for obtaining the feedback from student, which was time consuming and complex task. To achieve the entire problem's solution, we have developed "Student Feedback System".

Our system is time saving and also user friendly. It will help user to work confidently while interacting, which will also help them to make good selection while giving the feedback. A student feedback form system is like a special tool that helps students share their thoughts and feelings about their college classes. It's like giving students a voice to tell their teachers and the college what they like and what they think needs to be better. In simple terms, a student feedback form system helps students express their opinions about college faculty so that things can get even better.

This system is user friendly and windows compatible. It is developed using Fluter, Firebase Authentication and Firestore as database.

Project Goals and Objectives
The Student Feedback System project aims to:

- Enhance the educational experience by providing a robust platform for students to offer valuable feedback on their courses and instructors.
- Our goal is to create a user-friendly interface accessible to all, ensuring ease of use regardless of technical proficiency. Security and reliability are paramount, safeguarding student data.
- The project seeks to integrate an efficient feedback mechanism that empowers students to share their perspectives on various aspects of their learning journey.
- By fostering transparency, the system aims to continually improve the educational environment for both students and faculty.

Literature Review

This literature survey explores various existing feedback systems. Google Forms is simple and versatile but lacks personalization and real-time interaction. Slide Lizard focuses on educational feedback with anonymous options but faces anonymity issues and high costs, needing integration with performance data. Wufoo is accessible and fast, yet it offers limited interaction, standardized responses, and requires coding, while also allowing anonymity. Formsite covers a broad range of topics but is generic, expensive, and outdated, with limitations in interactivity and customization. JotForm offers systematic feedback collection and data analytics but lacks mobile optimization, interactivity, and can be complex. It also encounters challenges with data security and slowdown due to form scripting.

We propose the development of an enhanced student feedback form system that offers timely data analysis and reporting   capabilities. This solution aims to provide educators and administrators with instant insights from student feedback, enabling them to promptly address issues and enhance the learning environment on time.

2. METHODOLOGY

Planning

The project begins by defining the scope and objectives of the feedback system. We identify key user, including students, instructors, and administrators, and gather their specific requirements. Project goals are set, focusing on designing user-friendly feedback forms, data collection, and generating reports. A comprehensive project plan is created, outlining tasks, and responsibilities to ensure a structured and efficient development process.

Design

Designing the user interface for feedback forms involves an Entity-Relationship (ER) diagram which help represent the data structure, showcasing entities like "Feedback," "User," and their relationships. Additionally, a Use Case diagram can illustrate user interactions with the system, showing actors (students, instructors, administrators) and their actions, such as "Submit Feedback" or "Access Reports."

Development

In the development phase, we use Flutter, Firebase Authentication, and Firestore to create a student feedback system. We'll focus on UI development, crafting user-friendly interfaces to

the needs of students, instructors, and administrators. Firebase Authentication will ensure secure user access. Data integration involve feedback data collected from end-of-course surveys into Firestore, enabling efficient storage.

Testing
To ensure the student feedback system's quality, we tested functionality, usability, security, and performance. We started with unit testing, then integration testing, followed by system testing to assess the entire process. Finally, User Acceptance Testing which involve real users for usability and accessibility checks.

Deployment
With the deployment of the Student Feedback System successfully accomplished, the system is now live and accessible in a secure environment. Users, including students, instructors, and administrators, can begin utilizing the platform to provide and access feedback.
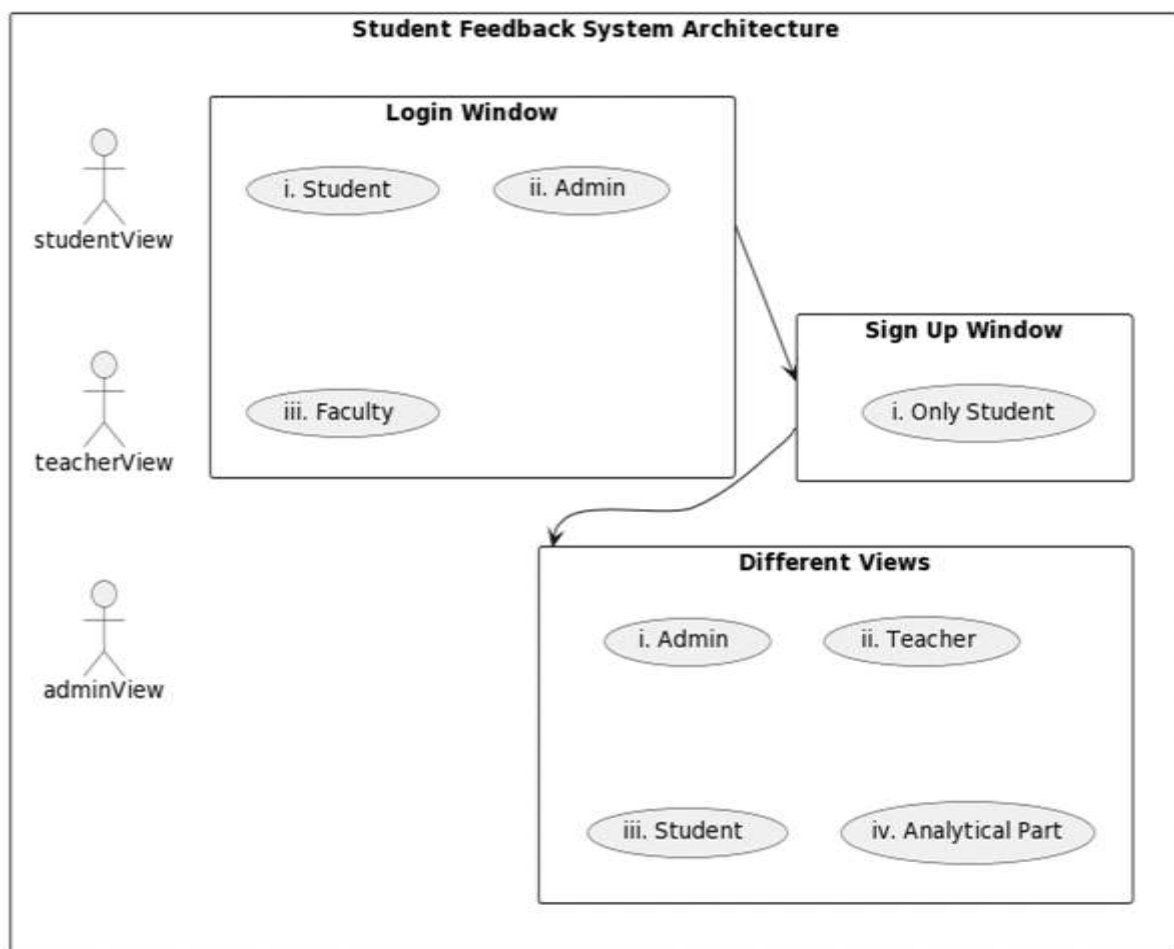
System Architecture
1. User Authentication and Roles:

Login window with roles for students, faculty, and administrators.
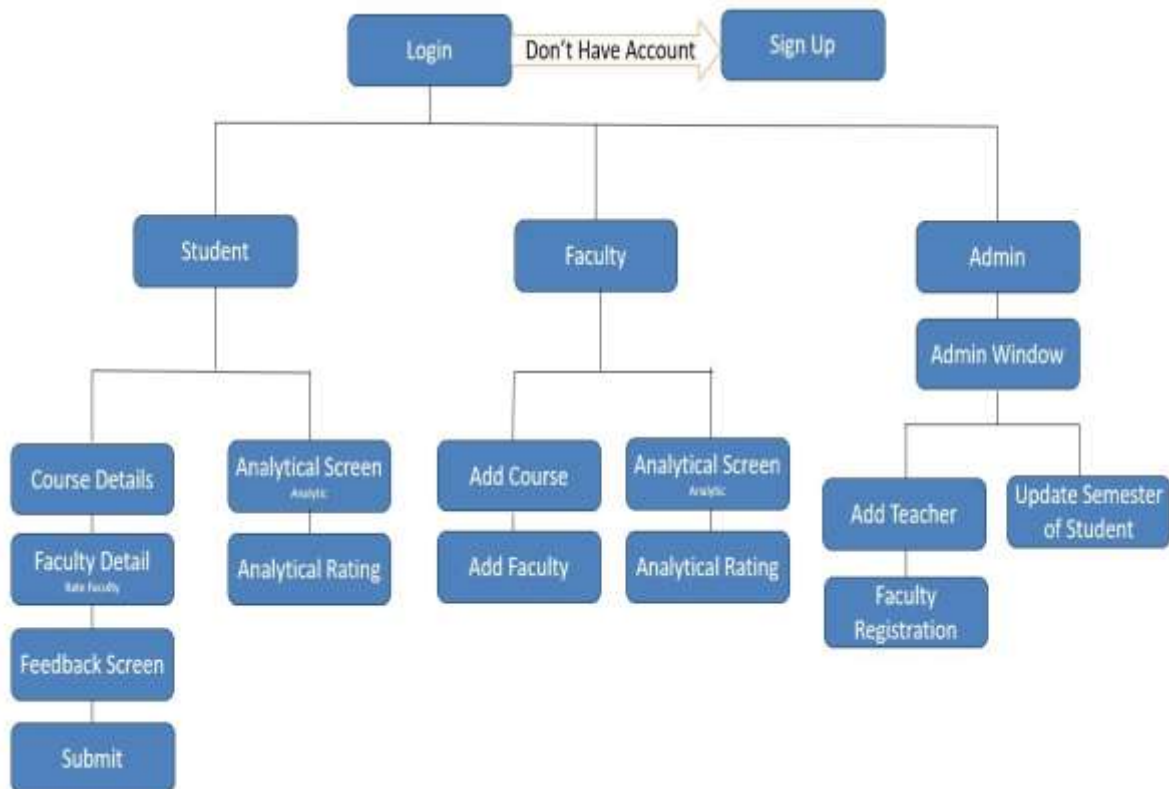2. Student signup window.
3. User Views:
Admin view for system management.
Teacher view for survey creation and monitoring.
Student view for providing feedback.
Analytics view for data analysis.

Activity Diagram
Login: Users log in.
Sign Up: New users register.

For Students:
Course Details: Access course info.
Feedback Screen: Provide feedback.
Submit: After providing feedback, they submit it.
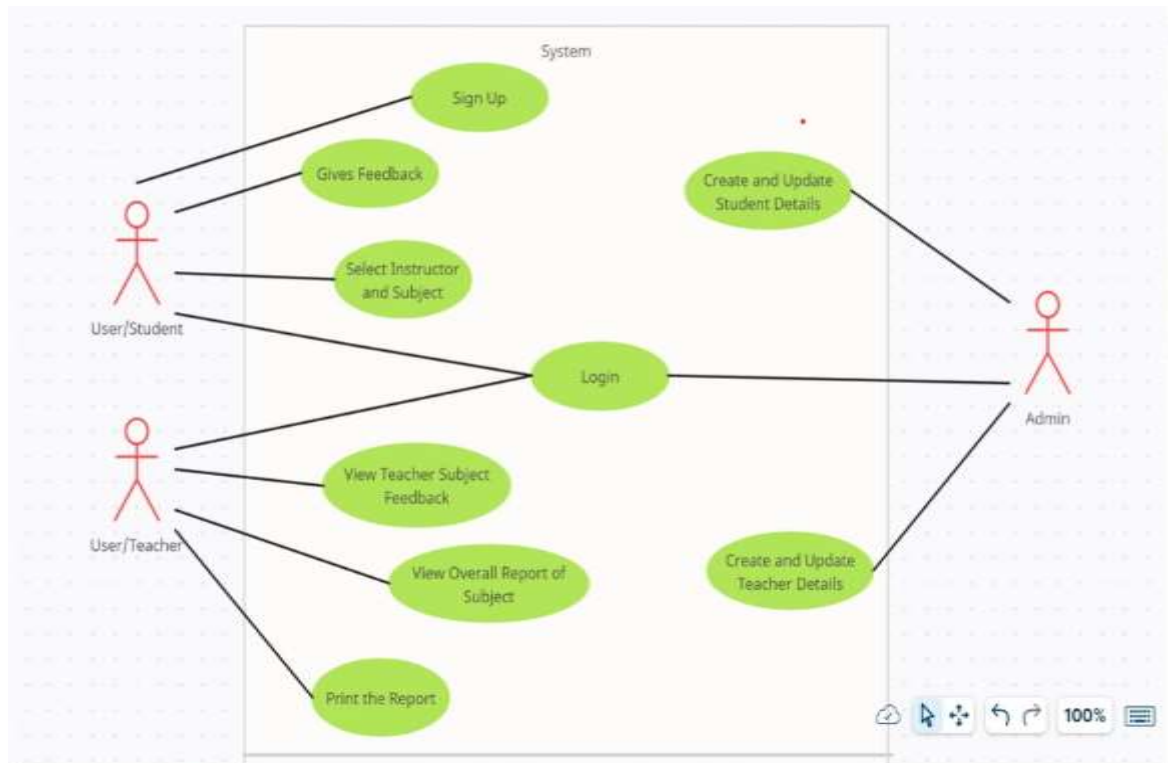
For Faculty:
Add Course: Add new courses.
Add Faculty: Include new faculty.
Analytical Screen: Access analytics.

For Admin:

Admin Window:
Admin manages teachers, faculty registration, and student semesters.

Use Case Diagram

Actors:
Student, Faculty and Admin.

Use Cases:
Sign Up (for Students and Faculty)
Give Feedback(for student)
Select Instructor and Subject (for Students)
Login (for all actors)
View Teacher Subject Feedback (for Faculty)
View Overall Report of Subject.
Print the Report (for Faculty)
Create and Update Student Details (for Admin)
Create and Update Teacher Details (for Admin)

This simplified description provides a quick overview of the actors and their associated use cases.

3. RESULT

- Students can provide course and faculty feedback through a rating system.
- The system enables comprehensive assessment based on student opinions.
- Educators can access analytical views to evaluate their performance.
- The system offers a user-friendly interface for easy navigation.
- Firebase authentication ensures data security and privacy.

This study represents that our system is very much successful and convenient. It is simple, user friendly and efficient paperless system. It can conserve time and overcome the problems which can be faced by old or traditional feedback system.

4. CONCLUSION

In conclusion, the student feedback system offers valuable insights to enhance education. With user-friendly interfaces and interactive features, it fosters collaboration and improves learning experiences effectively. Student feedback systems are an essential tool for educational institutions to improve the quality of teaching, learning, and assessment. By carefully designing and implementing a student feedback system, institutions can gain valuable insights into the student experience and make meaningful improvements to their programs and services

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