



COLLEGE OF COMPUTING AND INFORMATION TECHNOLOGY

DEPARTMENT OF NETWORKS

STUDENT FEEDBACK SYSTEM - FINAL REPORT

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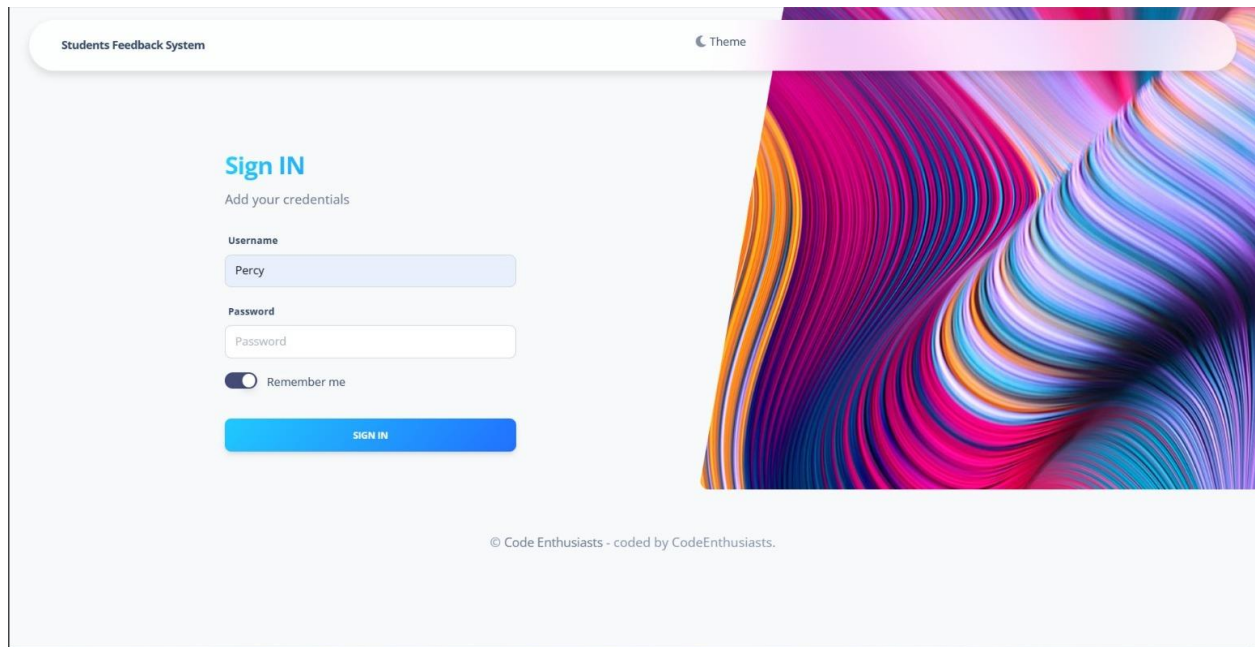
Introduction:

We are pleased to present the final report of our Student Feedback System project, a web application designed to streamline the process of collecting feedback from students on courses, instructors, and campus facilities. In this project, we utilized the Django web development framework to create a user-friendly and efficient system. Additionally, we integrated a sentiment analysis model to enhance the application's functionality and gain valuable insights from the feedback data.

Screenshots of Our Project:

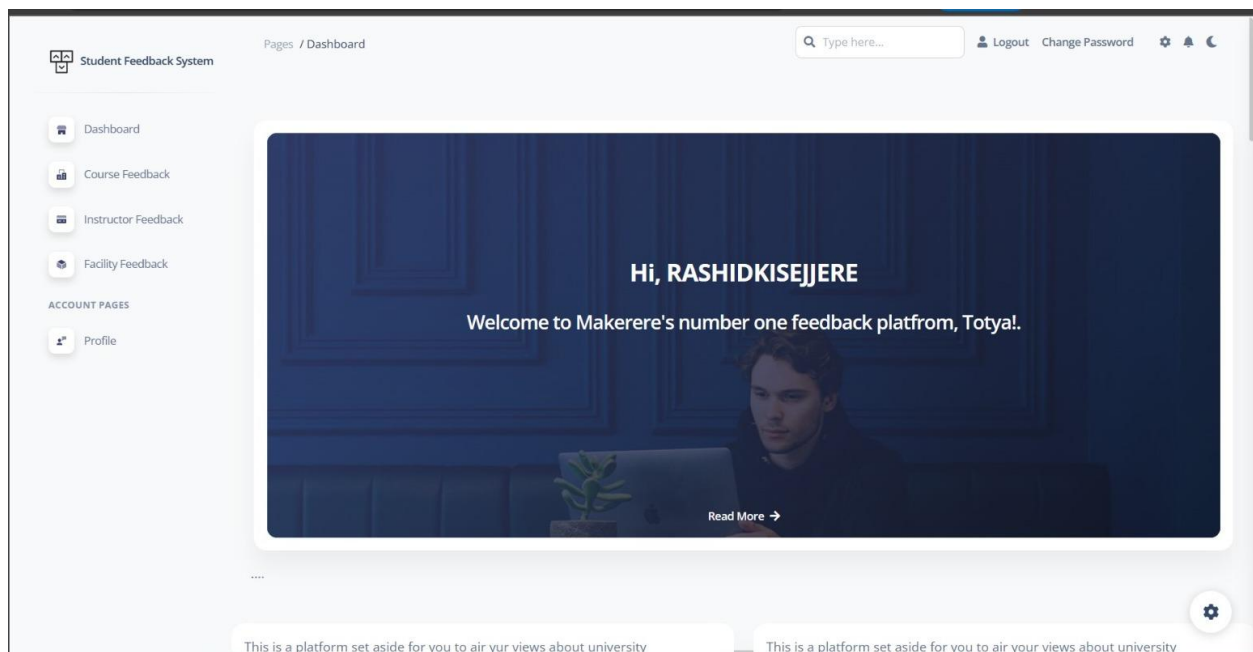
Below are some screenshots of our web application to provide an overview of its design and functionality:

1. SignIn Page:



Our login page provides a secure entry point for authorized users. Students can easily access the feedback system by entering their unique credentials. This ensures a seamless and protected experience for submitting evaluations and feedback.

2 . Homepage:



The landing page offers a concise explanation of the feedback process's significance and features a prominent call-to-action button leading to the feedback form.

3. Course Feedback Form:

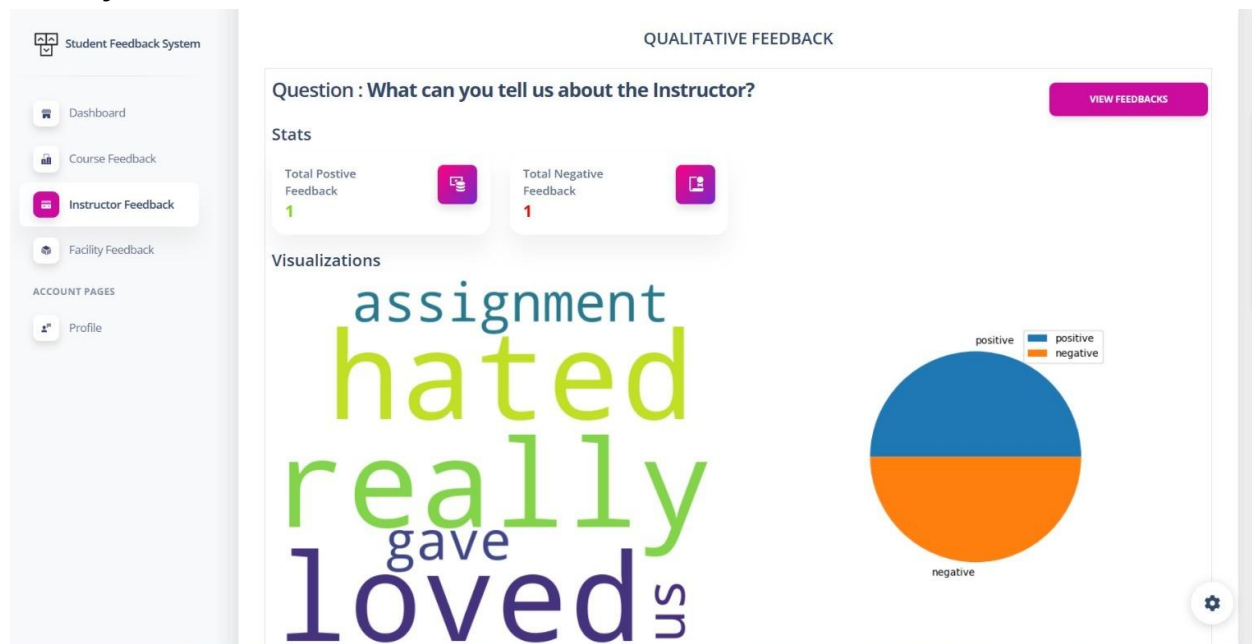
The screenshot displays the 'Course Feedback Form'. The sidebar is identical to the homepage. The form fields include: 'Student Number' and 'Registration Number' (text inputs), 'Course Name' (text input), and 'Course Code' (text input with the value 'BSE2105, CSC2100, IST1203'). Under the 'Course Evaluation' section, there are three dropdown menus: 'Overall Course Rating' (selected 'Excellent'), 'Assignments and Assessments' (selected 'Excellent'), and 'Course Coverage & Impact' (selected 'Excellent'). Below these are two more dropdown menus: 'Course Coverage' (selected 'Excellent') and 'Course Impact On Your Skills' (selected 'Excellent'). The form ends with a 'Level Of Individual Participation' label. A settings gear icon is located at the bottom right of the form area.

Our user-friendly feedback form allows students to submit their feedback effortlessly. They can provide evaluations for courses, instructors, and campus facilities through free-text input.

4. Sentiment Analysis Model:

Our system incorporates a sentiment analysis model to automatically assess the sentiment of the feedback text. This enables us to categorize the feedback into positive, negative, or neutral sentiments.

5. Analysis Results:



The sentiment analysis results are presented on a separate page, providing an aggregated view of the feedback sentiments. These results assist administrators in identifying areas that require improvement and recognizing areas of excellence.

Overview of Web Application Systems:

We have developed the following systems and functionalities within our Student Feedback System:

1. User Registration and Authentication:

We implemented a secure user registration and authentication system to ensure only authorized students can access the feedback form and submit their evaluations.

2. Feedback Submission:

The screenshot shows the 'Student Feedback System' interface. On the left is a sidebar with navigation links: Dashboard, Course Feedback, Instructor Feedback, Facility Feedback (highlighted), and ACCOUNT PAGES (Profile). The main content area is titled 'Student Feedback System' and contains several input fields: 'Student Number', 'Registration Number', 'Facility Name', and 'Learning Environment'. Under 'Learning Environment', there are three dropdown menus for 'Classroom Facilities', 'Use of Technology(e.g WIFI)', and 'Class Size', all set to 'Excellent'. Below these are two text areas: 'Overall Experience' with the prompt 'What can you tell us about the facility?' and 'Any suggestions for improvement on the facilities?'. A settings gear icon is in the bottom right corner.

Our feedback form is designed to capture structured feedback from students. They can select the specific course, instructor, or facility they are evaluating and share their comments accordingly.

3. Sentiment Analysis:

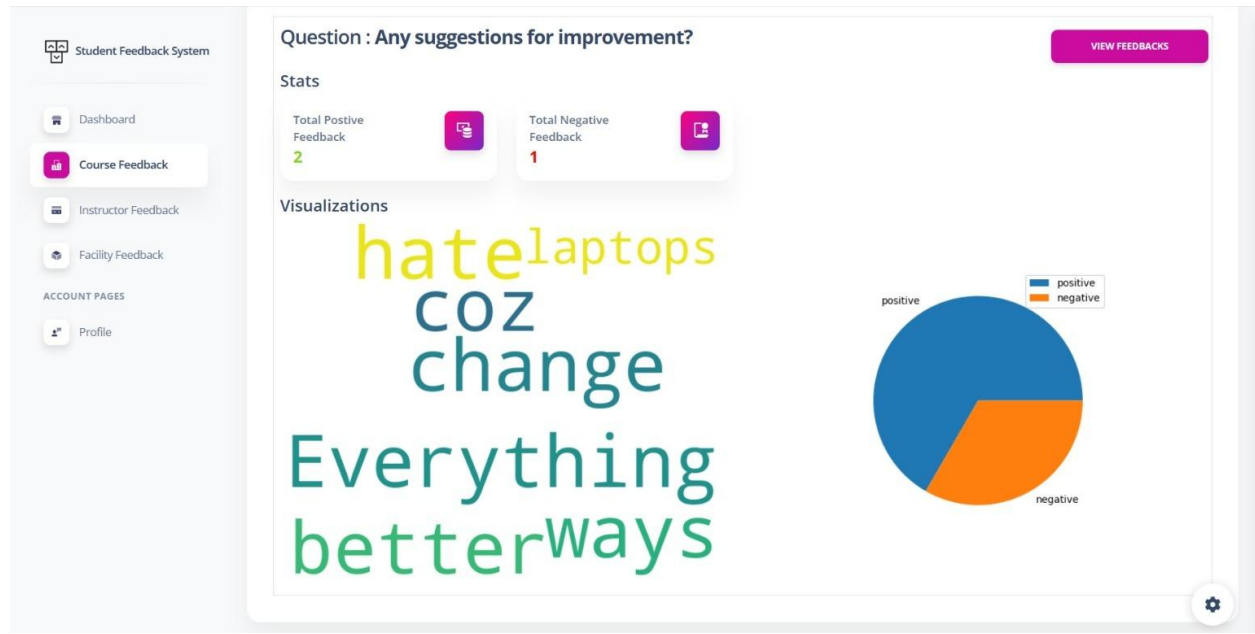
The screenshot shows the 'Student Feedback System' interface with the 'Suggestions' tab selected. The table displays feedback data with sentiment analysis results. The browser address bar shows 'localhost:8000/course/view_feedback/Suggestions'.

Student Number	Registration Number	Feedback	Sentiment
131243546	13432435647	Everything should change but not all coz he is better in some ways	Positive
21007114358	21/U/14358/EVE	i hate you	Negative
21007114358	21/U/14358/EVE	laptops	Positive

By integrating a sentiment analysis model, we can automatically analyze the feedback text and determine the overall sentiment expressed by students.

4. Feedback Analysis and Reports:

Our system generates comprehensive reports that allow administrators to review and analyze the feedback data. The summarized reports highlight sentiment trends and help make data-driven decisions to enhance the overall student experience.



User interactions

1. Student Feedback Submission

Students interact with the system by accessing the web application and submitting feedback about courses, instructors, and campus facilities through an intuitive and user-friendly feedback form.

2. User Authentication and Security

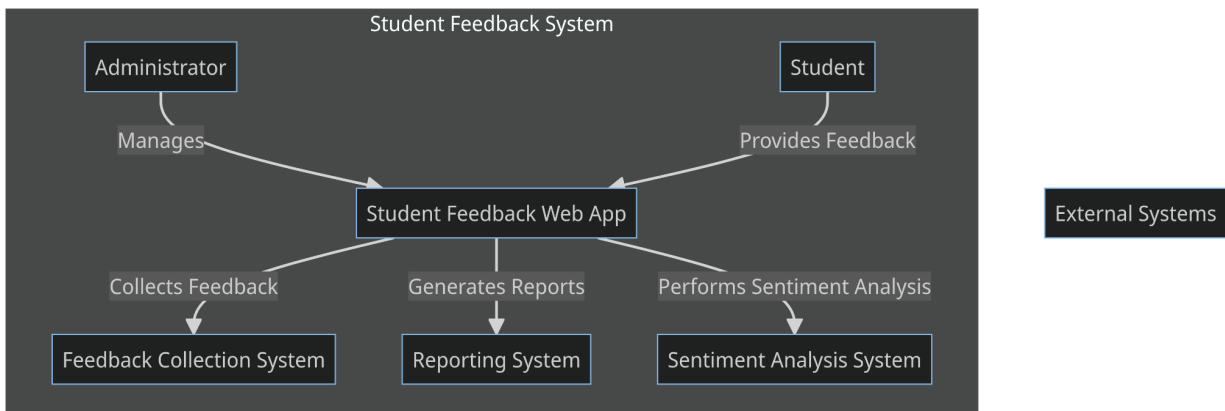
To ensure data privacy, students log in securely to the system using their unique credentials, which grants them access to the feedback submission functionality.

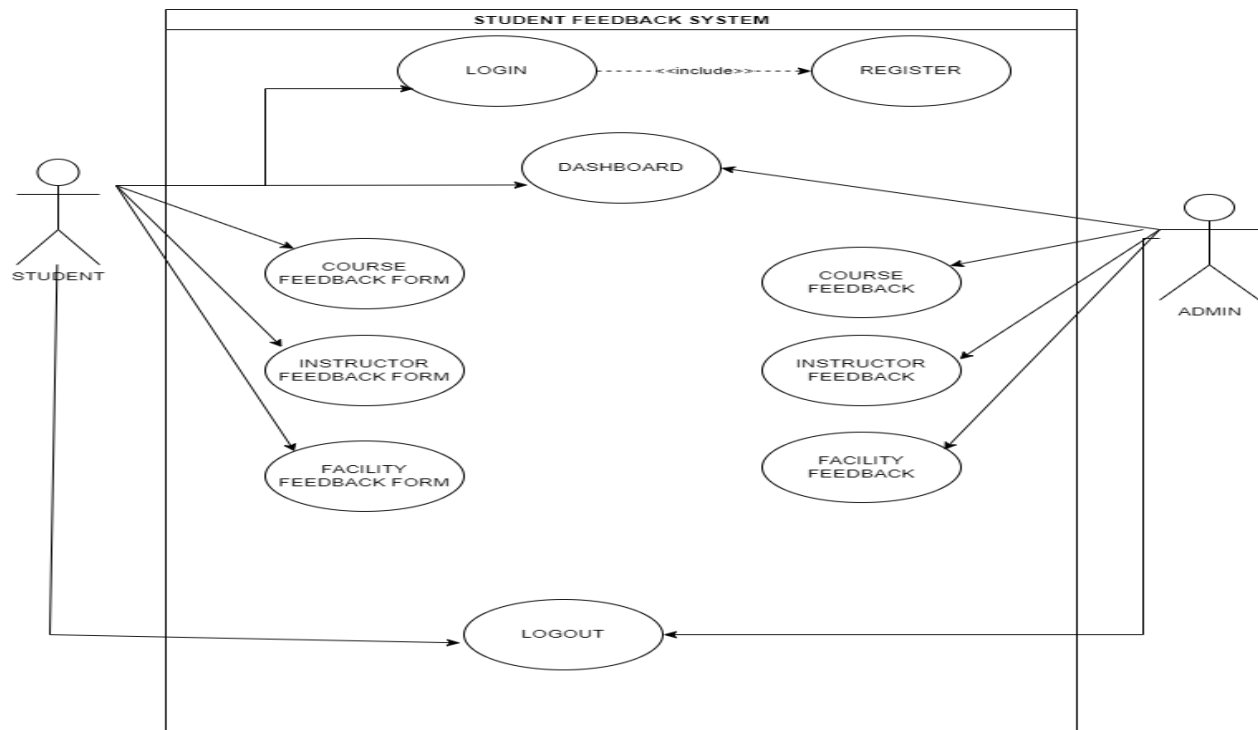
3. Sentiment Analysis Insights:

After submitting feedback, students receive sentiment analysis insights, allowing them to see an automatic evaluation of their feedback's sentiment, whether positive, negative, or neutral.

4. Access to Reports:

Administrators interact with the system to generate comprehensive reports that provide an overview of sentiment trends, allowing for data-driven decision-making to enhance the overall student experience.





References:

1. Smith, J. A., & Johnson, R. L. (2020). Enhancing Educational Quality through Student Feedback Systems. *Journal of Higher Education Management*, 45(2), 102-115.
2. Garcia, M. R., & Martinez, L. S. (2019). Leveraging Sentiment Analysis for Educational Decision Making: A Case Study. *International Journal of Educational Technology in Higher Education*, 16(1), 28.
3. Brown, C. G., & Williams, E. F. (2018). Designing User-Friendly Web Applications for Effective Student Feedback Collection. *Proceedings of the International Conference on Human-Computer Interaction (HCIC 2018)*, 124-137.

Source Code:

The source code of our Student Feedback System project's code repository can be accessed on GitHub at <https://github.com/rashidkisejjere0784/Student-Feedback-System>.

Conclusion:

Our team successfully developed the Student Feedback System using Django, creating a powerful and valuable tool for collecting and analyzing feedback from students. The integration of the sentiment analysis model further enhances the system's capabilities, enabling administrators to make informed decisions and improvements based on the feedback received. We believe that our web application can significantly contribute to enhancing the quality of education and campus facilities, ultimately leading to a better student experience.