

(Team No:10)

(FACULTY EVALUATION THROUGH STUDENT FEEDBACK)

Software Design Document

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1.0 INTRODUCTION

1.1 Purpose

The project aims to enhance teaching evaluations by sorting feedback into positive, negative, or neutral categories. Its goal is to provide clear feedback from students to help teachers improve their teaching methods.

1.2 Scope

Collaborating with schools, colleges, or universities to implement our project in their existing feedback systems, allowing for real-time analysis of student feedback. Involving not only faculty members and students but also other stakeholders such as academic advisors, department heads, and alumni in the feedback analysis process to provide a more holistic understanding of teaching effectiveness and student learning experiences.

1.3 Overview

Introducing a project centered on advancing teaching evaluation methods through feedbacks, this initiative aims to revolutionize how feedback from students is categorized and utilized. By implementing an automated system capable of discerning feedback into positive, negative, or neutral categories, the project seeks to provide educators with actionable insights for refining their teaching approaches. Through the provision of clear and tailored feedback derived from student responses, this endeavor endeavors to empower teachers in enhancing their methodologies and ultimately fostering an environment conducive to enriching teaching and learning experiences.

1.4 Reference Material

1) "SENTIMENT ANALYSIS OF STUDENTS COMMENT USING LEXICON APPROACH".

KHIN ZEAWAR AUNG, NYEIN NYEIN MYO [University of Computer Studies, Mandalay, Myanmar.]
(2017)

https://scholar.google.com/scholarhl=en&as_sdt=0%2C5&q=sentiment+analysis+of+students+comment+using+lexicon+approach+&btnG=

2) "Sentiment Analysis of Students Feedback Using Lexicon Based Method and Hybrid Machine Learning Method".

Shital A Patil, Krishnakant P Adhiya, Girishkumar K Patnaik
(2023)

<https://ijisae.org/index.php/IJISAE/article/view/4498/3172>

3) "Using Sentiment Analysis to Explore Student Feedback: A Lexical Approach".

(2023)

Rdouan Faizi ,Mohammed V University in Rabat, Rabat, Morocco

<https://doi.org/10.3991/ijet.v18i09.38101>

2.0 SYSTEM OVERVIEW

System Overview is a crucial step for software and application developers to describe the basic software structure by separating functional areas into layers. It depicts how a typical software system might interact with its users, external systems, data sources, and services. The architecture of implementing system is mentioned below (Figure 3.1).

3.0 SYSTEM ARCHITECTURE

3.1 Architectural Design

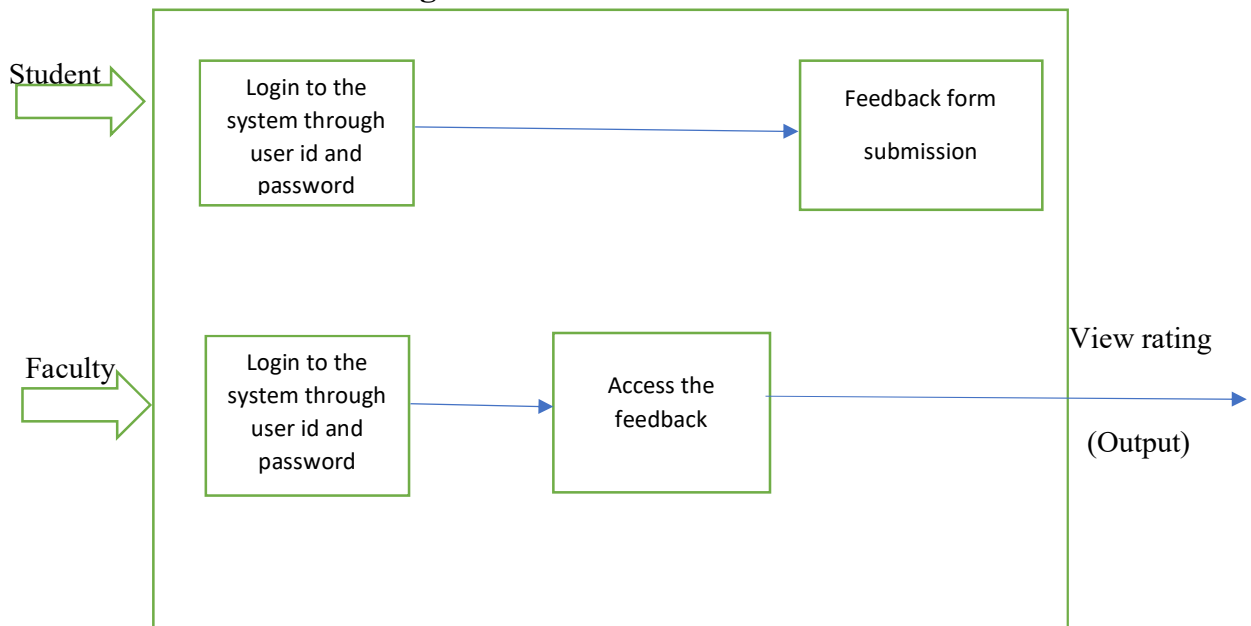


Figure 3.1 Software Architecture Diagram

3.2 Decomposition Description

Object-oriented description

SEQUENCE DIAGRAM

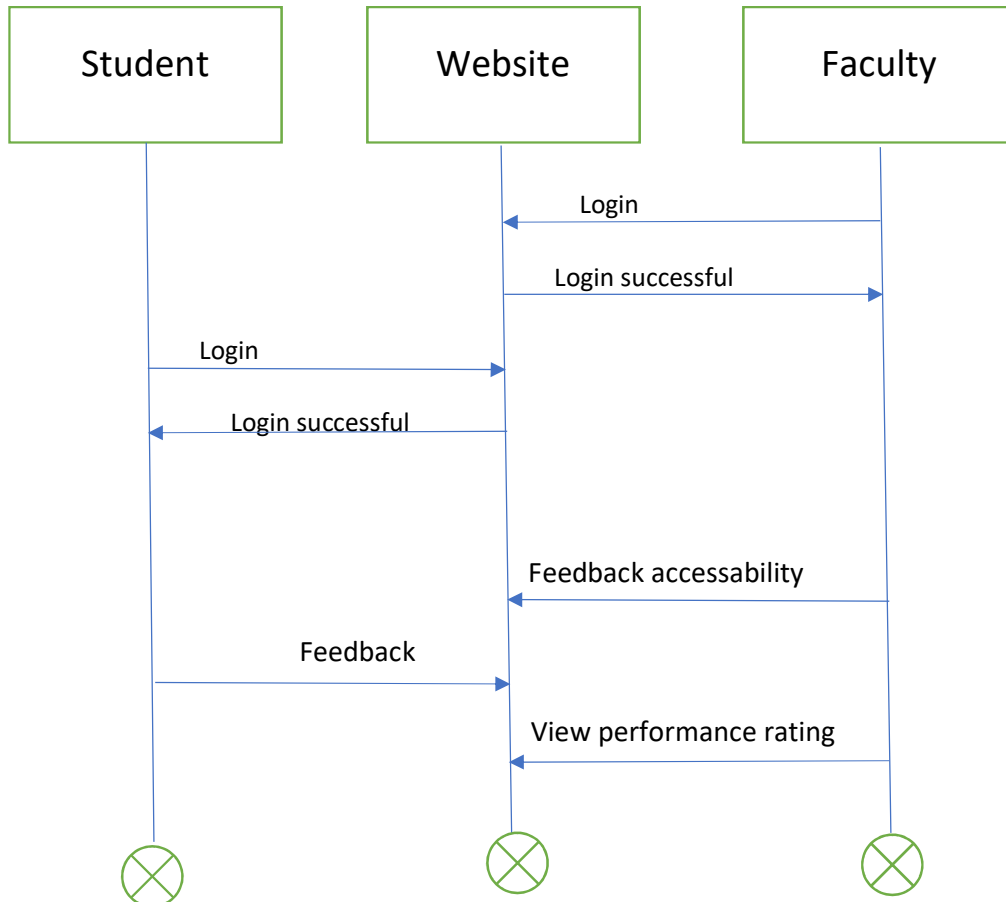


Figure 3.2 Sequence Diagram

3.3 Design Rationale

We choose the above mentioned architecture as a reference for developing our Application since it is more efficient compared to other architectures. Also it allows adding new features or any other modifications on the Application at ease.

4.0 DATA DESIGN

4.1 Data Description

A sound database design will be the key to success of proper system. To ensure the same, at this stage, all the relevant information is incorporated into the system, the rest of the system design will fall easily around the database. Database design is generally involves the modeling of different Entities, Relationships and Attributes. The design of the database is broken down into three different stages:

- Conceptual database design
- Logical database design
- Physical database design

The conceptual design stage is used to build an understanding of each of the entities, relationships and attributes that have been identified. This is then translated to form a logical design by creating valid relations. The physical design must then be created and will be dependent on the Database Management System in use.

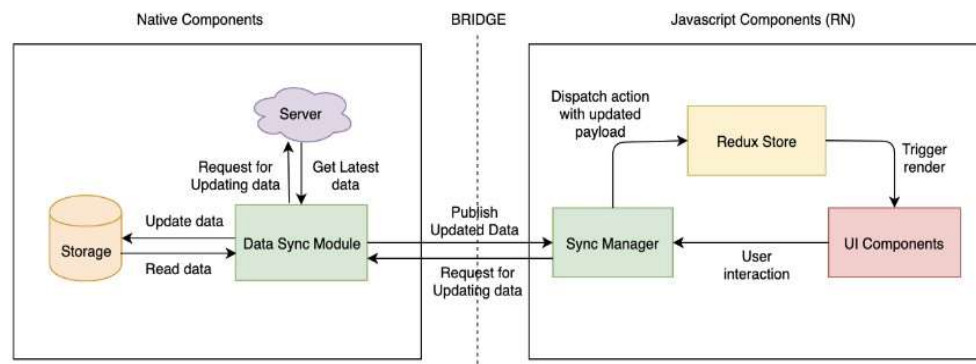


Figure 3.3 Data Description

4.1 Data Dictionary

Feedback: A system that will give the permission for students to fill the form for faculty evaluation.

Student: A person that is a user of the system but has created an account.

Faculty: A person that is a user of the system he/she would have access to the feedback provided by students for their own sessions or classes.

History: It is a system that shows how many student have appeared here for feedback submission.

College/Universities: A organization that will have feedback system will work.

5. COMPONENT DESIGN

At the beginning of the implementation prepared a planned which state the developments that has to be carried out with expected time frames. During the implementation few minor deviations were identified against the plan and has taken the necessary actions to prevent the recurrence. These actions plans with time line were recorded in a separate design pattern which consists the description of the problem and the essence solution. Design pattern was studied when preparing the test plan to enhance the upcoming procedures.



Figure 3.4 Component Design

6. HUMAN INTERFACE DESIGN

6.1 Overview of User Interface

~We will have 2 login options, one for student, one for faculty . On this dashboard, the student will be able to view their data and request form as well as their history.

~There shall be a fixed menu bar at the top with following buttons (All, Profile, Request, History).

~There should be fixed drop down menu pointer at top left with following options (Profile, Help, Settings, Logout).

~On clicking the logo, the system shall return to Home Page.

~There should be a “Contact us” and “Logout” buttons at bottom.

~The layout would be simple and easy to use and also provide maximum user experience. In case of any errors, it will provide proper guidelines to resolve.

~After making the feedback submission, it goes to the faculty portal then faculty validate credentials .

~For a particular student, they will have a profile page which will allow them to type feedback

7.0 REQUIREMENTS MATRIX

Module name	Applicable roles	Description
Login and Logout	Student Faculty	Student can login to fill the feedback and logout after it. Registered faculty can login to check the feedback and then view the performance rating .Logout after it.
Feedback Request	Student	Student can log onto the app and make necessary feedback.
Validation of feedback	Faculty	Registered Faculty can login to access to the feedback provided by students for their own sessions or classes.

Table 7.1 Requirement Matrix