IIT GUWAHATI FEEDBACK MANAGEMENT SYSTEM

BY:-

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Our sincere thanks to the following tools

- Python and Django
- NLTK
- HTML CSS JAVASCRIPT
- Libraries for Charts and Word Cloud

Key Focus Areas

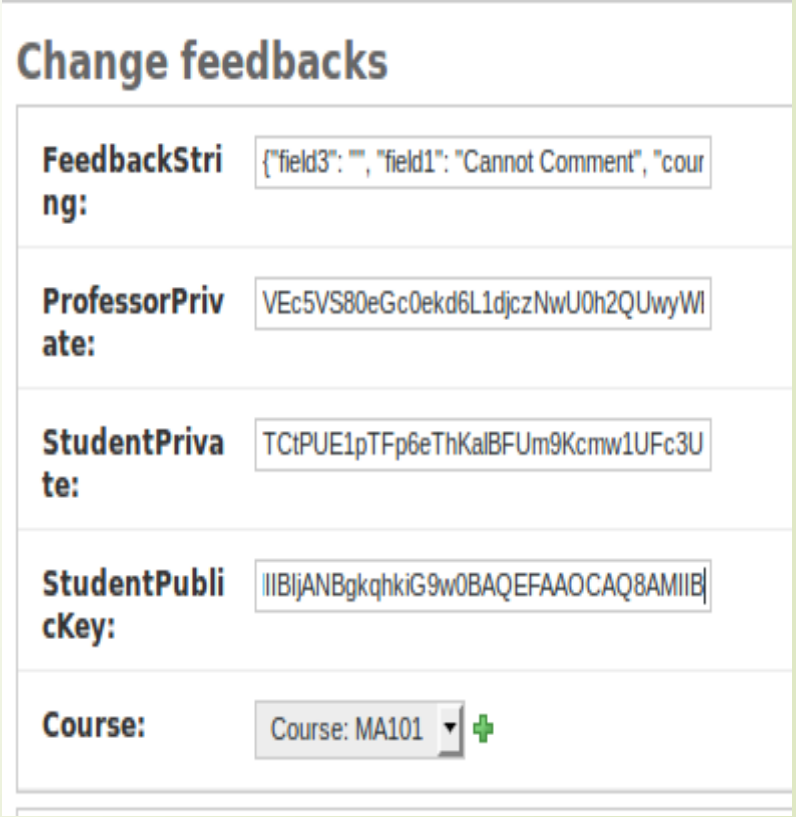
- Anonymity
- Data Analytics
- User Experience

The Encryption Mechanism

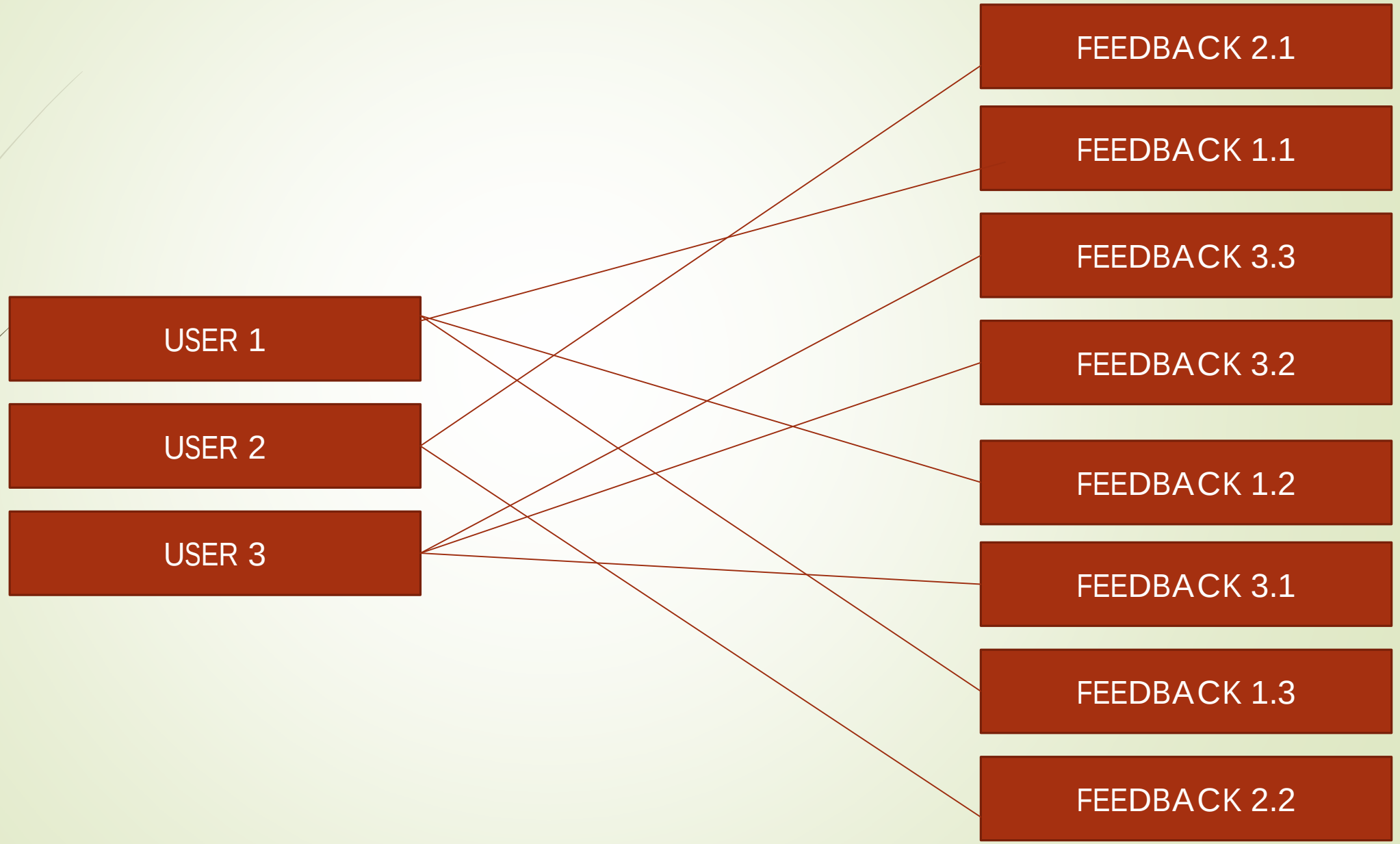
Anonymity: First we permute the set of feedbacks among the set of students. We then store the id of each feedback against the student after encrypting with the student's password (AES encryption).

Private Chat: 2048-bit RSA encryption keys are generated for each student and professor. The public keys are stored unencrypted while the private keys are encrypted (by AES encryption) using the respective passwords.

Certification: (proposed) We further propose that all data be certified (using public key encryption) so that data can only be edited/accessed by the people with permission.



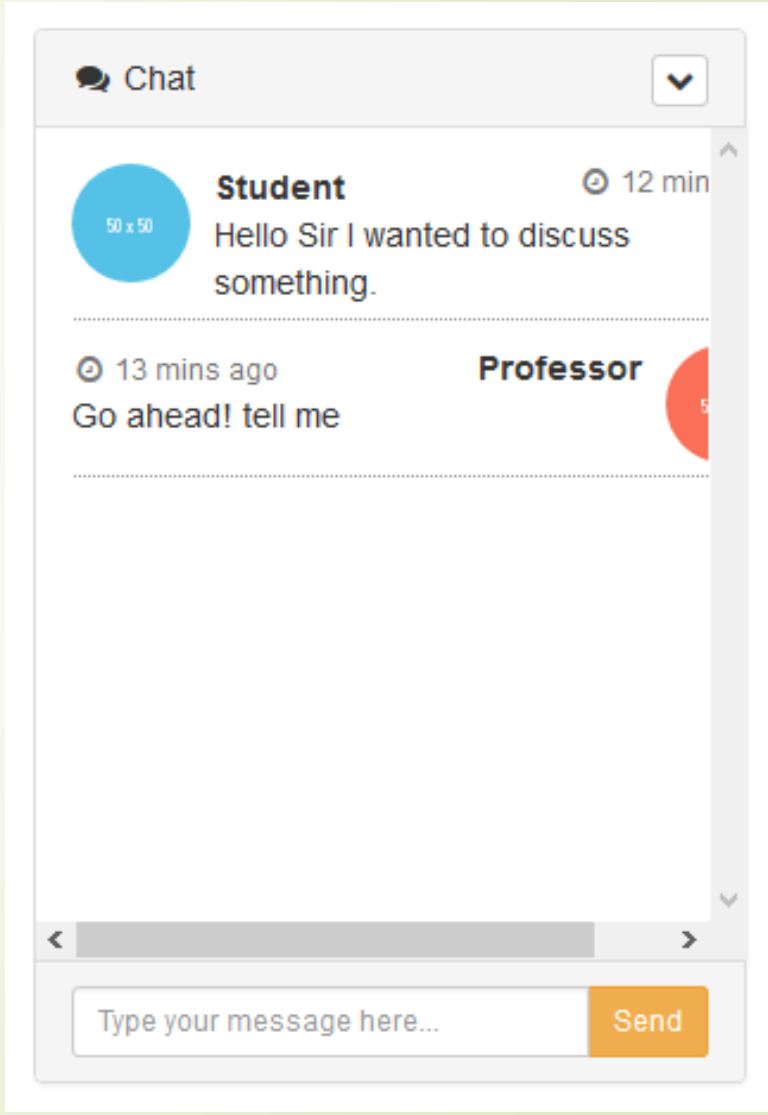
Anonymity


USER 1
USER 2
USER 3
FEEDBACK 2.1
FEEDBACK 1.1
FEEDBACK 3.3
FEEDBACK 3.2
FEEDBACK 1.2
FEEDBACK 3.1
FEEDBACK 1.3
FEEDBACK 2.2

UNIQUE PRIVATE CHAT

Private Anonymous Chat: This is the *only* common platform which enables students to *anonymously* and *privately* discuss their concerns with the professor in a chat box. This is enabled by our novel anonymity system.

Private Chat Encryption: 2048-bit RSA encryption keys are generated for each student and professor. The public keys are stored unencrypted while the private keys are encrypted (by AES encryption) using the respective passwords. Whenever a message is to be sent, it is encrypted using the two (instructor's and student's) public keys and stored twice. Thus this conversation can be read only by the two parties involved. It may be shared with the administrator at their discretion only and is not visible otherwise.

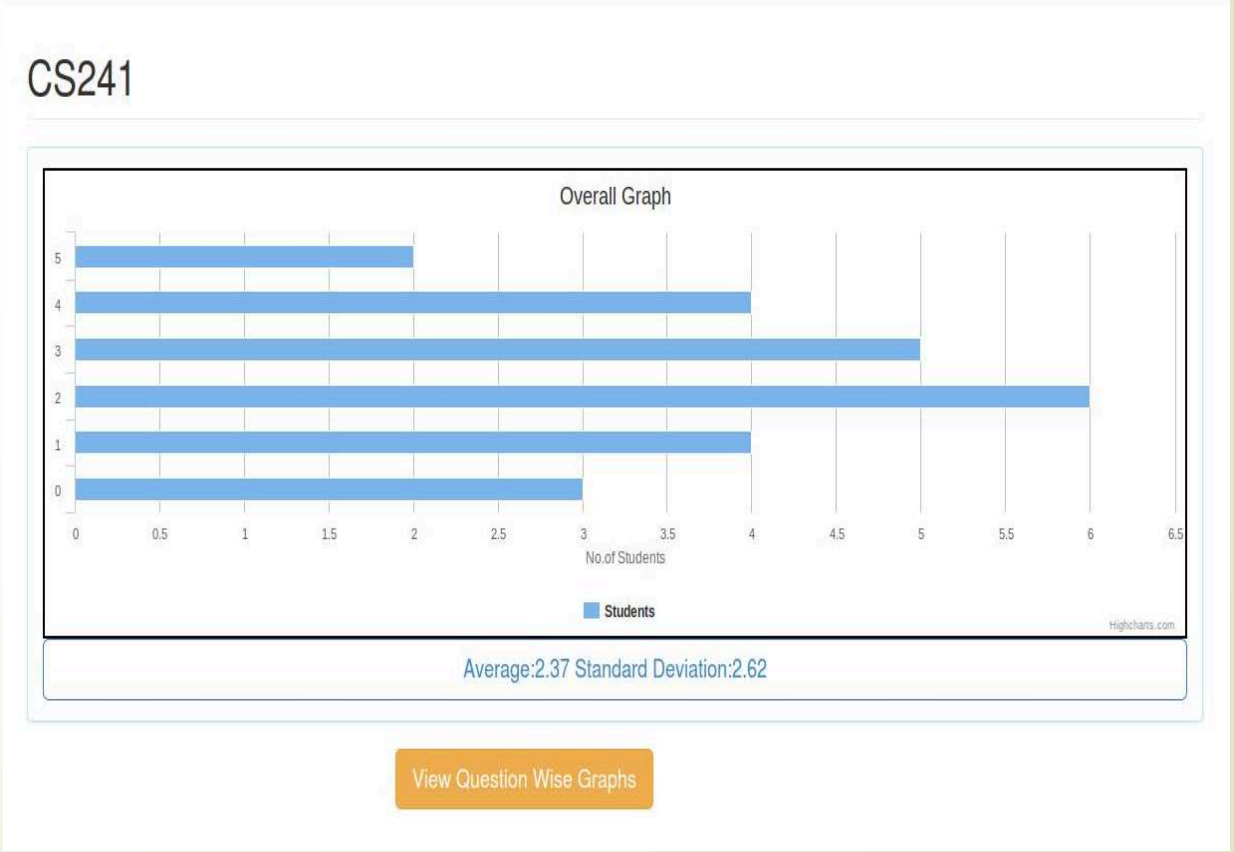


ANALYSIS

Analytics: We provide easy to view statistics on the course feedback throughout the semester as question-wise and overall graphs

The graphs have hover option so that whenever you hover over any bar it shows you the details related to that bar.

Below each graph you get the average and standard-deviation of the graph.



WORD CLOUD

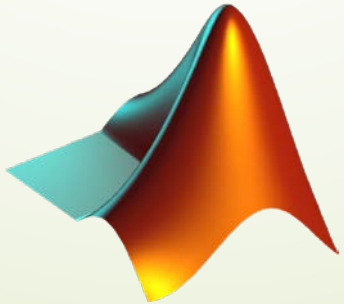
We have a word-frequency analysis presented as a word cloud.
It takes input from all the descriptive answer questions and displays it as a word cloud.

By this the professor and the admin gets a better analysis as to what type of feedbacks are being given to descriptive based questions whether its positive or negative

CSV

--everything at one go

We output raw data in a format that is universally readable by common powerful statistical software such as R, SPSS, SaS, Matlab, Mathematica, Excel etc. for in-depth analysis.

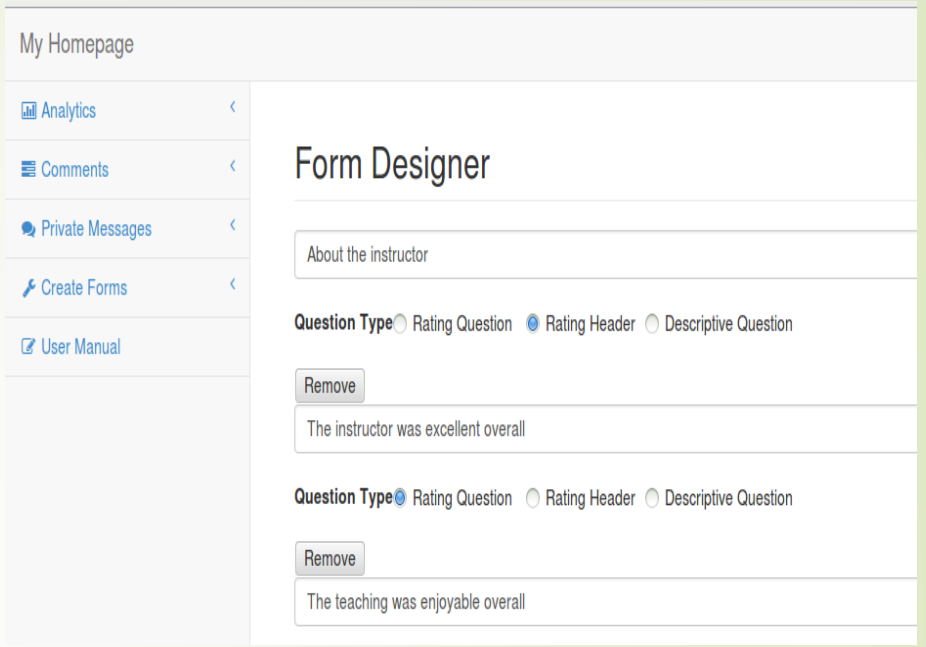


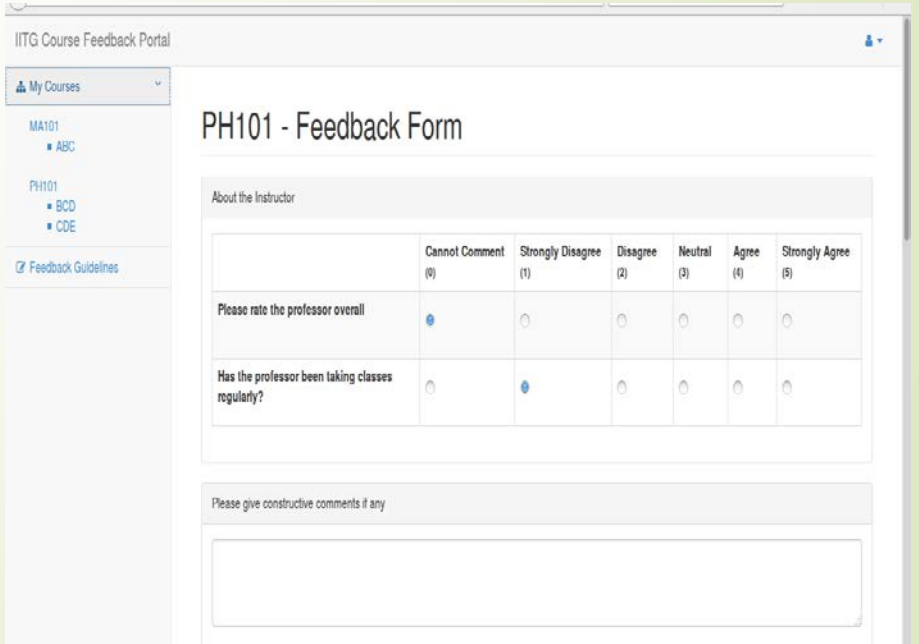
UX- USER EXPERIENCE

We have tried to make the front-end as modular as possible. None of the user have to make any effort in doing any of the stuff.

Like the form creator shown in the right is so modular and well-designed that the admin just need to type the question and select what type of question it is(rating or descriptive) and it creates the respective question in the feedback form page.

Below we can see that there is a feedback form where the student simple needs to select the respective answers. Each user has its control panel on the left-side through which he can re-direct himself to any of the other page within his permissible region.





THANK YOU HOPE YOU LIKE IT