Student Performance Prediction and Feedback Analysis

Guided By,Asst. Prof. HREDYA SUNDARAN

Presented By,ANSHA ANTONY

MCA, Semester VI
Department of Computer Application

Government Engineering College, Thrissur

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Outline

INTRODUCTION

- Massive Open Online Courses attract and enroll a high number of students.
- High ranking universities have adopted MOOCs as an efficient dashboard platform where learners from around the world can participate in such courses.
- One of the essential and most challenging issues for these educational institutions is the prediction of students performance and collecting the feedback from the students while the course is underway.
- This could be very useful in e-learning platforms to improve and manage the courses

EXISTING SYSTEM

- Most MOOCs are still taught by an individual instructor or a relatively small team of instructors.
- Due to the high student-to-teacher ratio in MOOCs, traditional methods for feedback are not efficient. Consequently, an innovative approach is needed to manage the course, especially to monitor student progress and analyze student feedback

LITERATURE REVIEW

- It is based on the IEEE paper “Students Performance Prediction in Online Courses Using Machine Learning Algorithms “ which describes how to predict the student performance
- Two predictive models have been designed namely students’ assessments grades and final students’ performance.
- It is based on the IEEE paper “Improving MOOCs Using Information From Discussion Forums: An Opinion Summarization and Suggestion Mining Approach” which describes how posts made on forums by participants can also provide meaningful information to assess and improve the effectiveness of MOOCs.

Objectives

- To develop a system able to predict the student outcome based on the students activities.
- And a system able to analyze the student feedback.

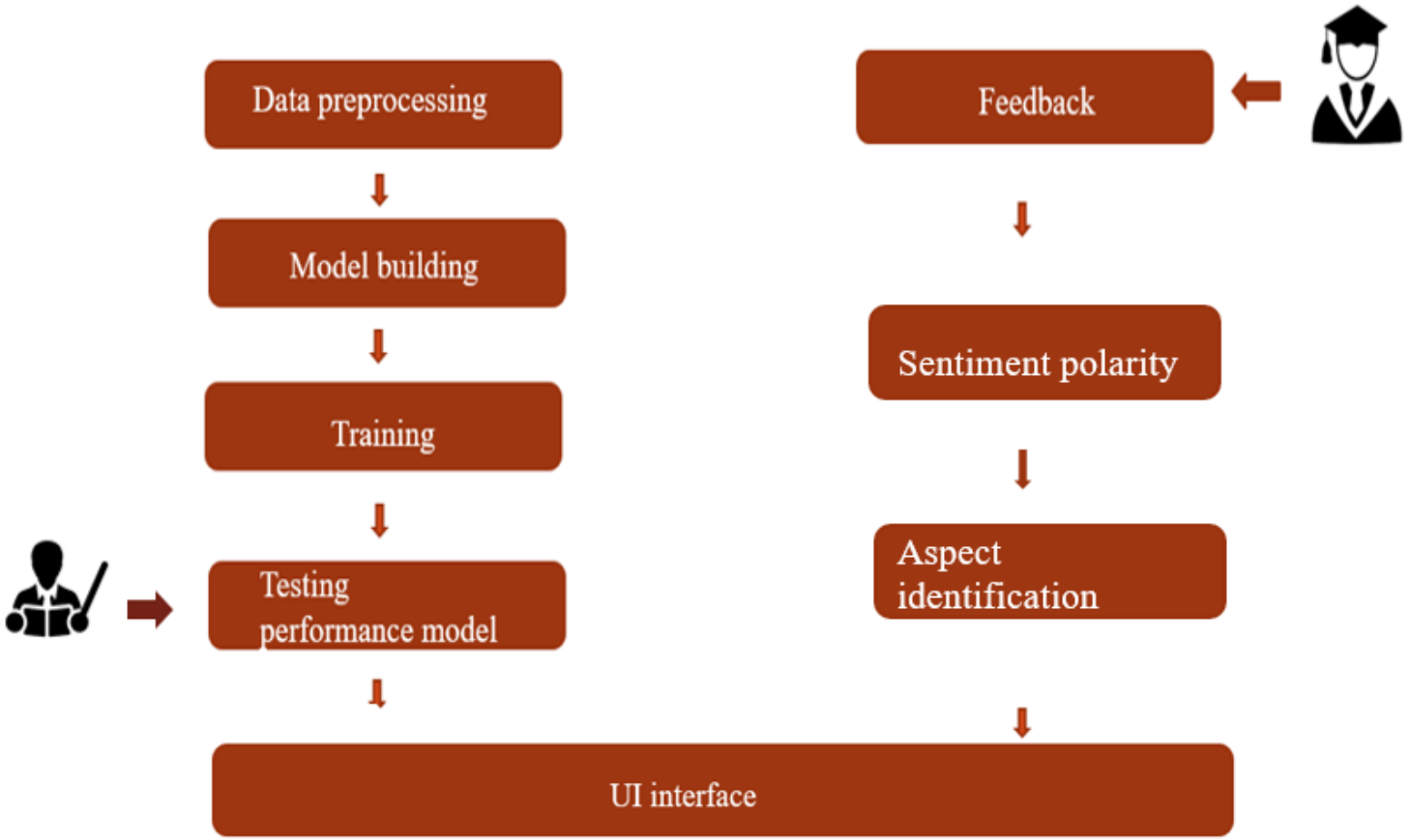
PROPOSED SYSTEM

- A predictive model have been designed namely students performance prediction this model can be used to predict the performance that influence students' learning achievement in MOOCs.
- And also propose a model to categorize the students feedback that allows instructors to improve their course and thereby student engagement and learning.

System Implementation Details

- The basic functionalities in the system are :
  - OULAD Dataset is used to train the Student performance Model and using Random Forest a model is build.
  - Feedback system has created,to obtain student feedback polarity and aspect identification (Assessment,Instructor,Course,Material) using LDA
  - Trained Models is Intergrated with Flask where tutor can input the student register number and prediction is available next and also tutor can check the students feedback.

ARCHITECTURE



RESULT

Login page.

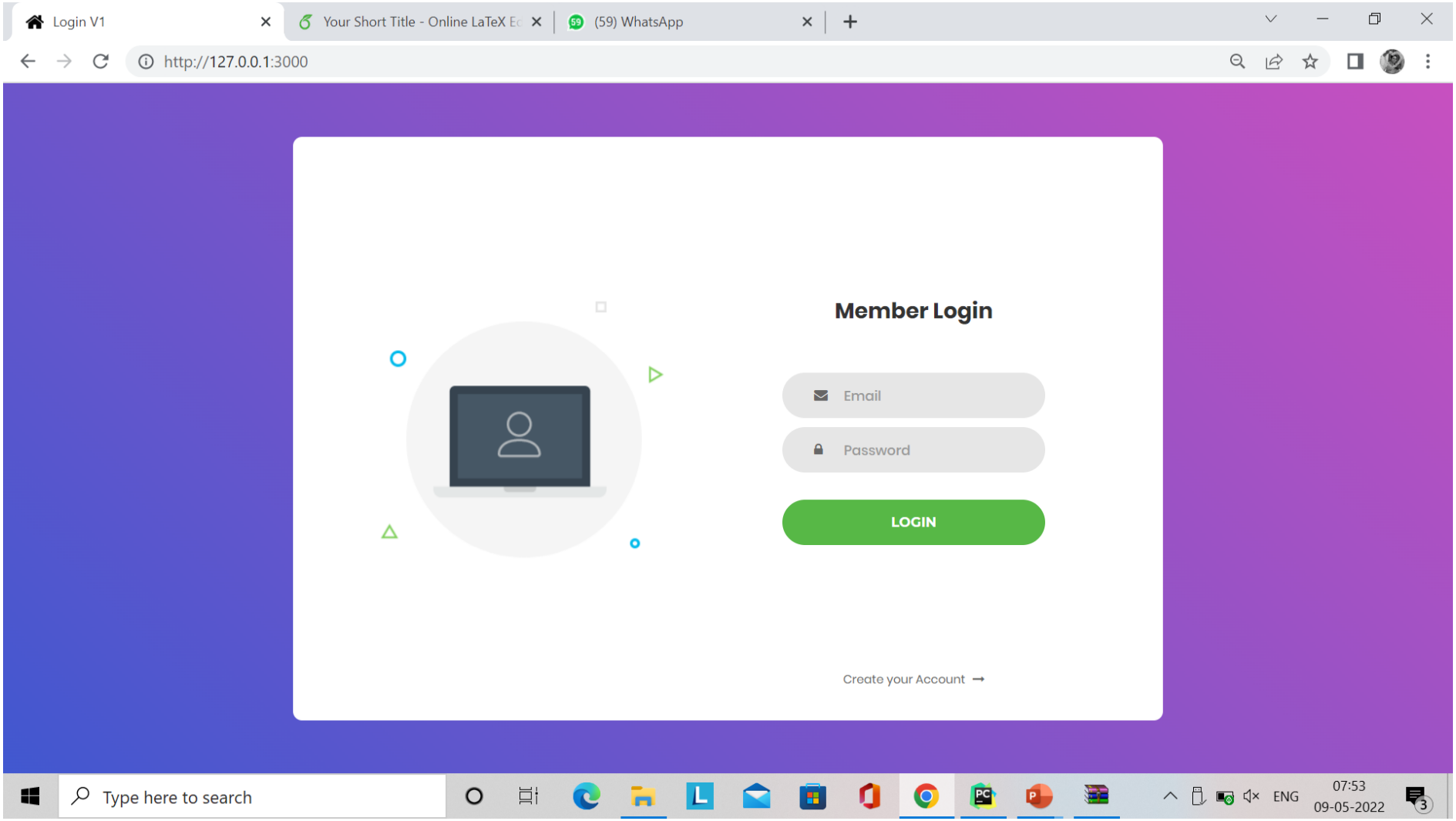


Figure: UI

Tutor home page.

Figure: UI

Prediction

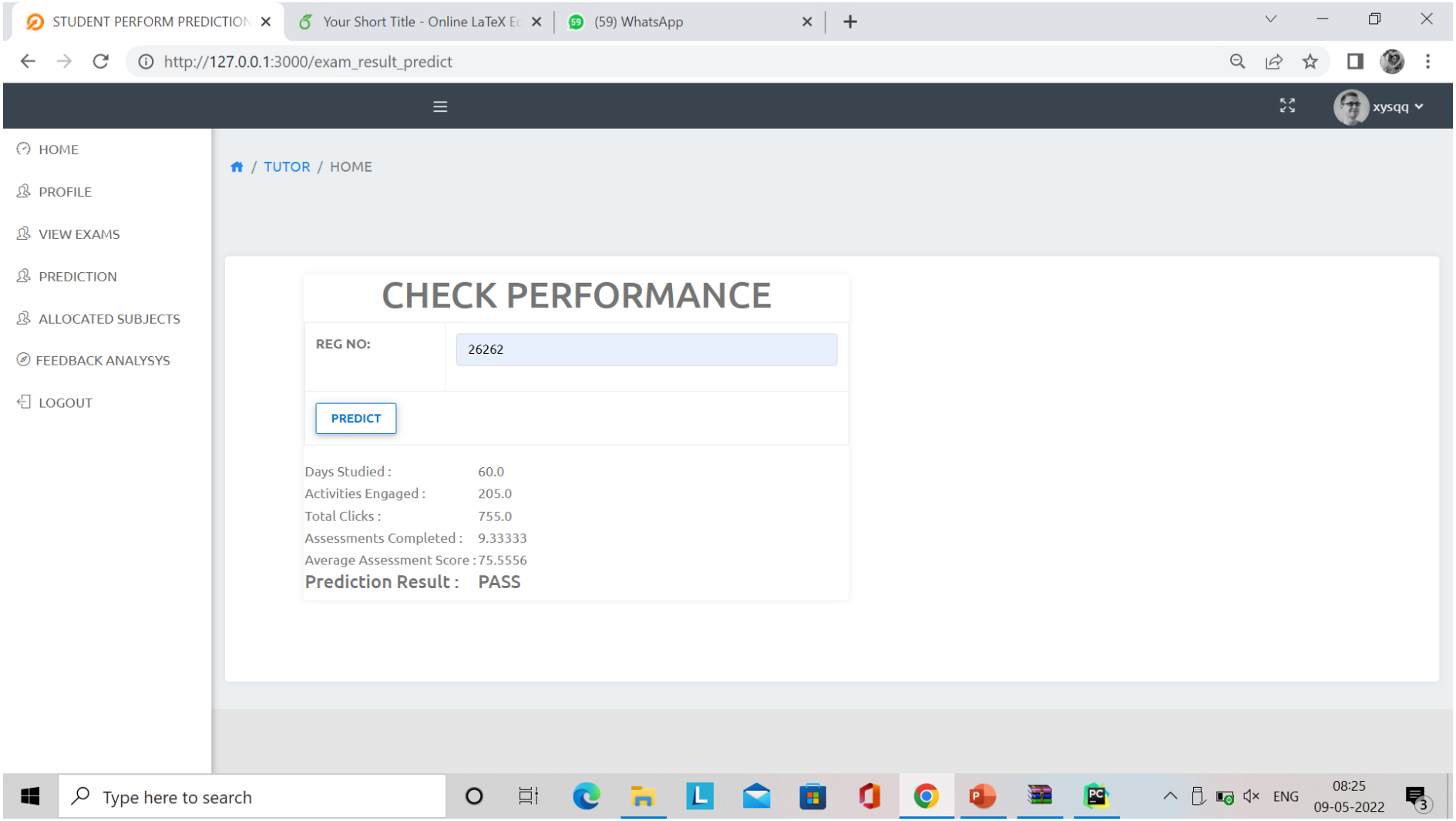


Figure: UI

Prediction

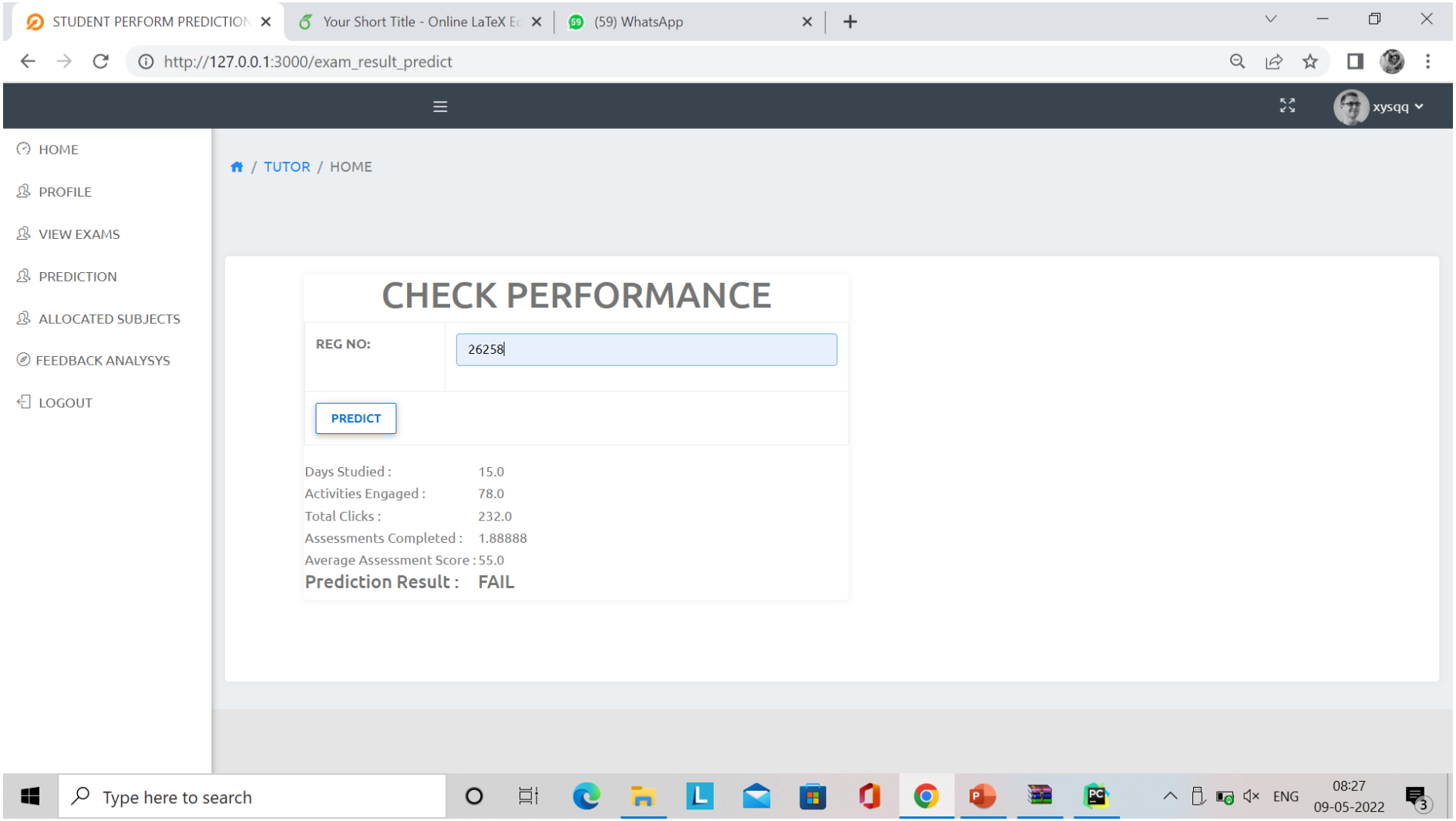


Figure: UI

Feedback

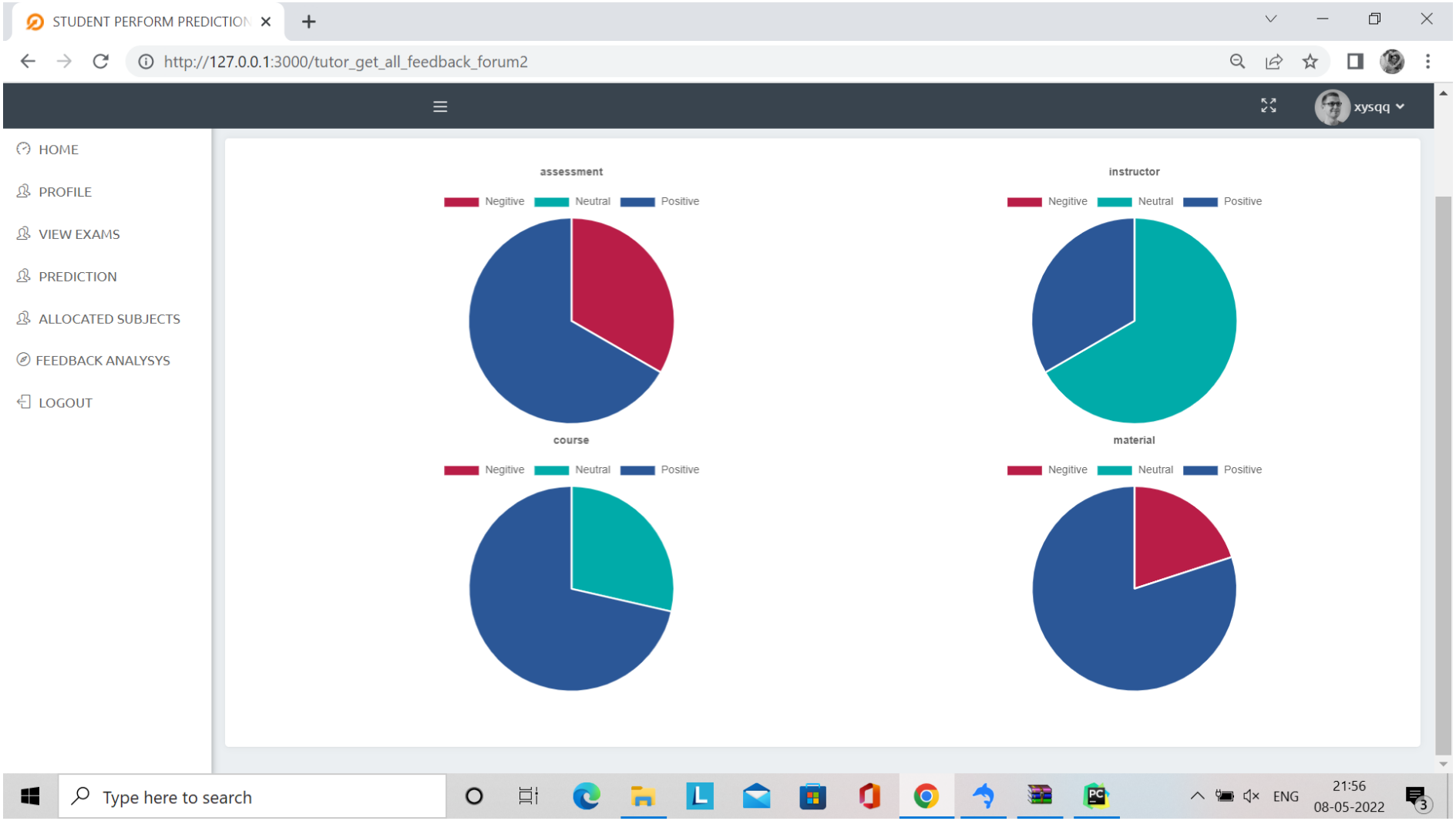


Figure: UI

Register

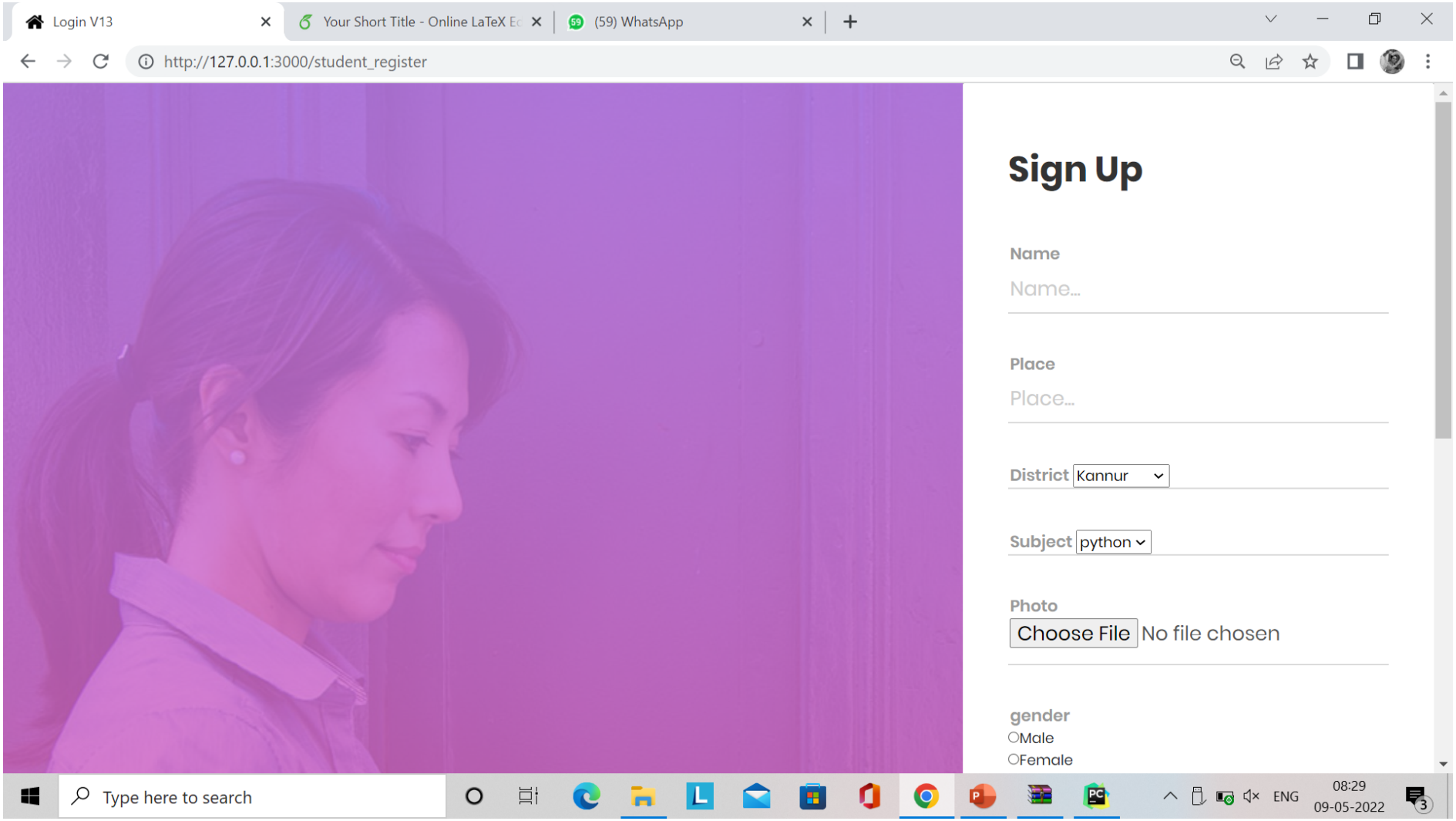


Figure: UI

Student home

Figure: UI

Feedback

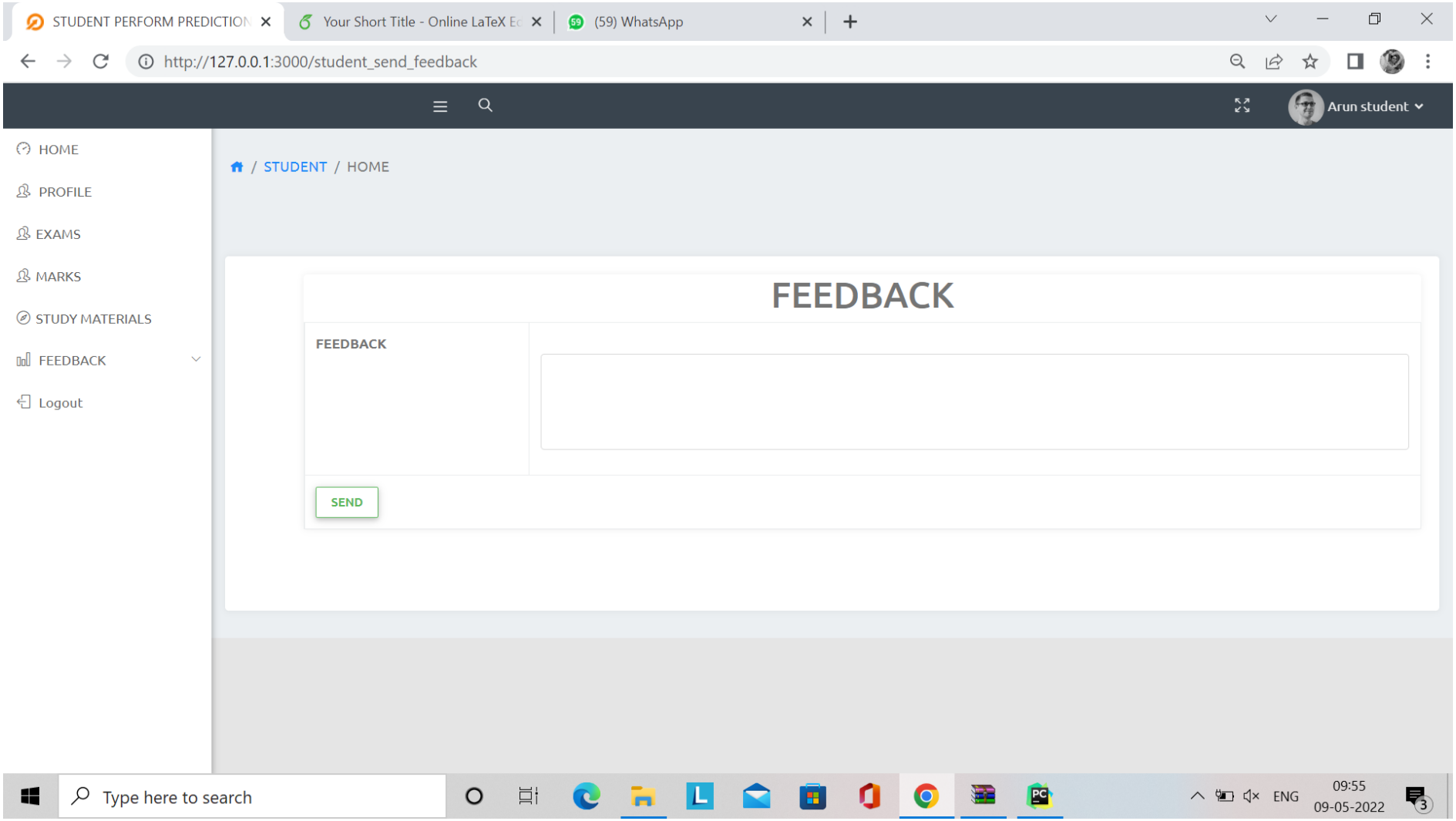


Figure: UI

Future Scope

- Implementing feedback analysis of discussion forum.

Thanks

THANK YOU