

REU: Project Development Platform

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Motivation

- The development of Artificial intelligence (AI) tools has created new challenges for instructors.
- Revu is designed to encourage students to build a deeper understanding of their projects through consistent interaction.

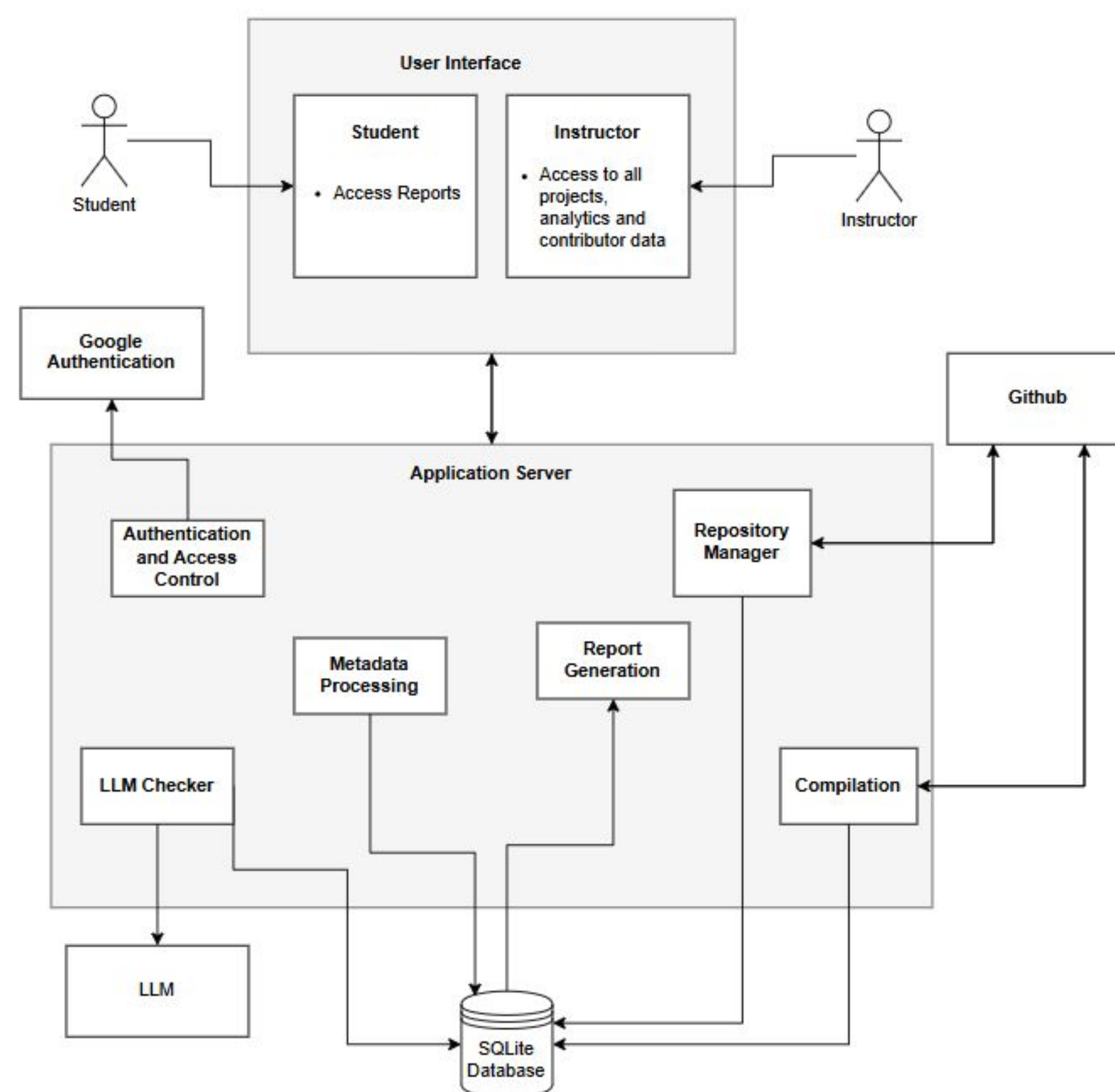
Goals

- Automate evaluation of students coding activity through version control integration
- Provide instructors with real-time insights into student engagement by quantifying student interaction with github.
- Simplify the grading process by generating summarized reports of student's work.
- Maintain secure, controlled access to generated resources and submissions.

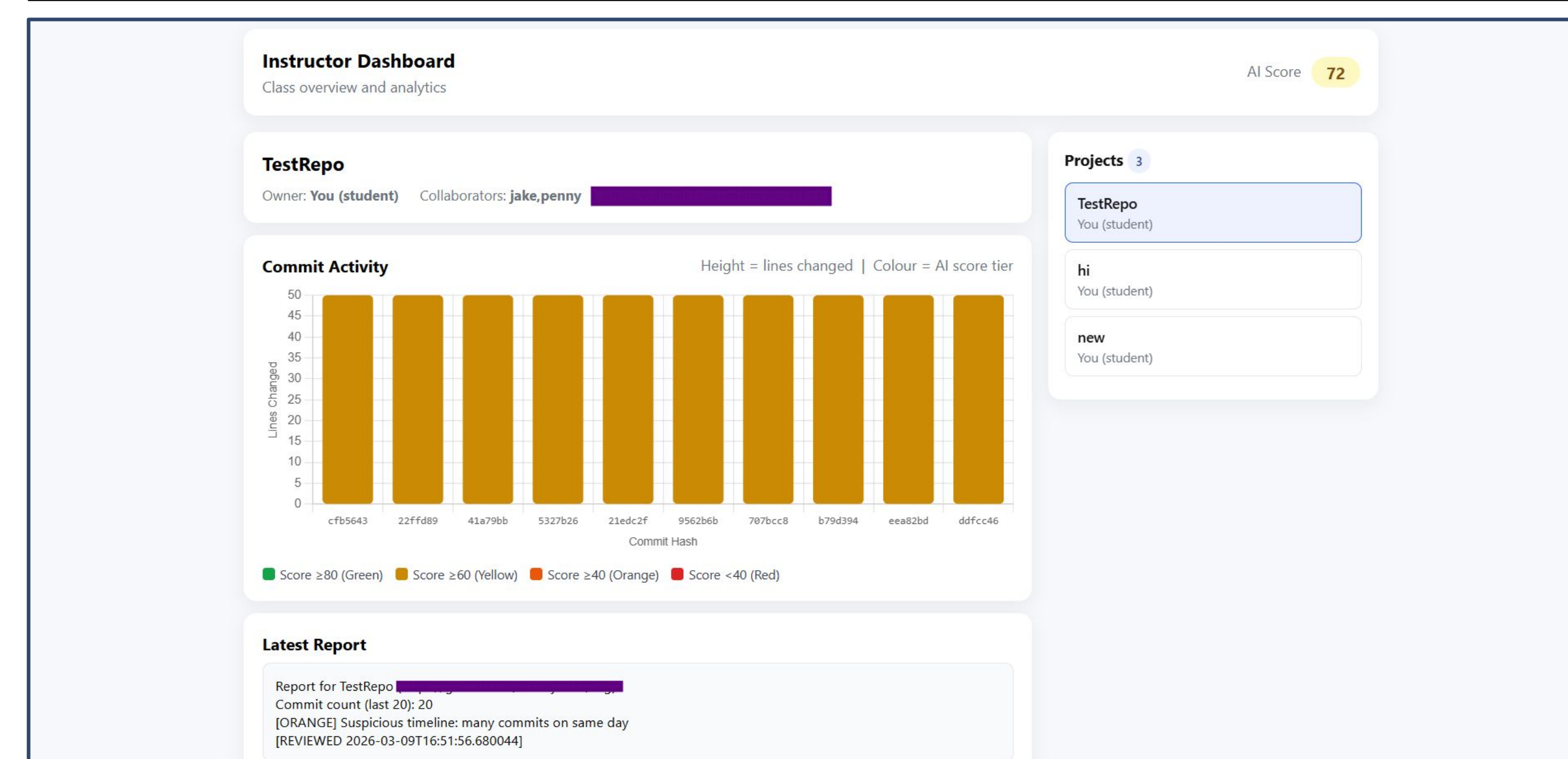
Features

- Instructor dashboard for monitoring student compliance
- GitHub repository integration for automatic submission information retrieval
- Submission metrics for each student based on commit history
- Detailed compilation logs for each commit
- LLM evaluation summary of the code and comments generated
- Reports generated for each repository

System Architecture

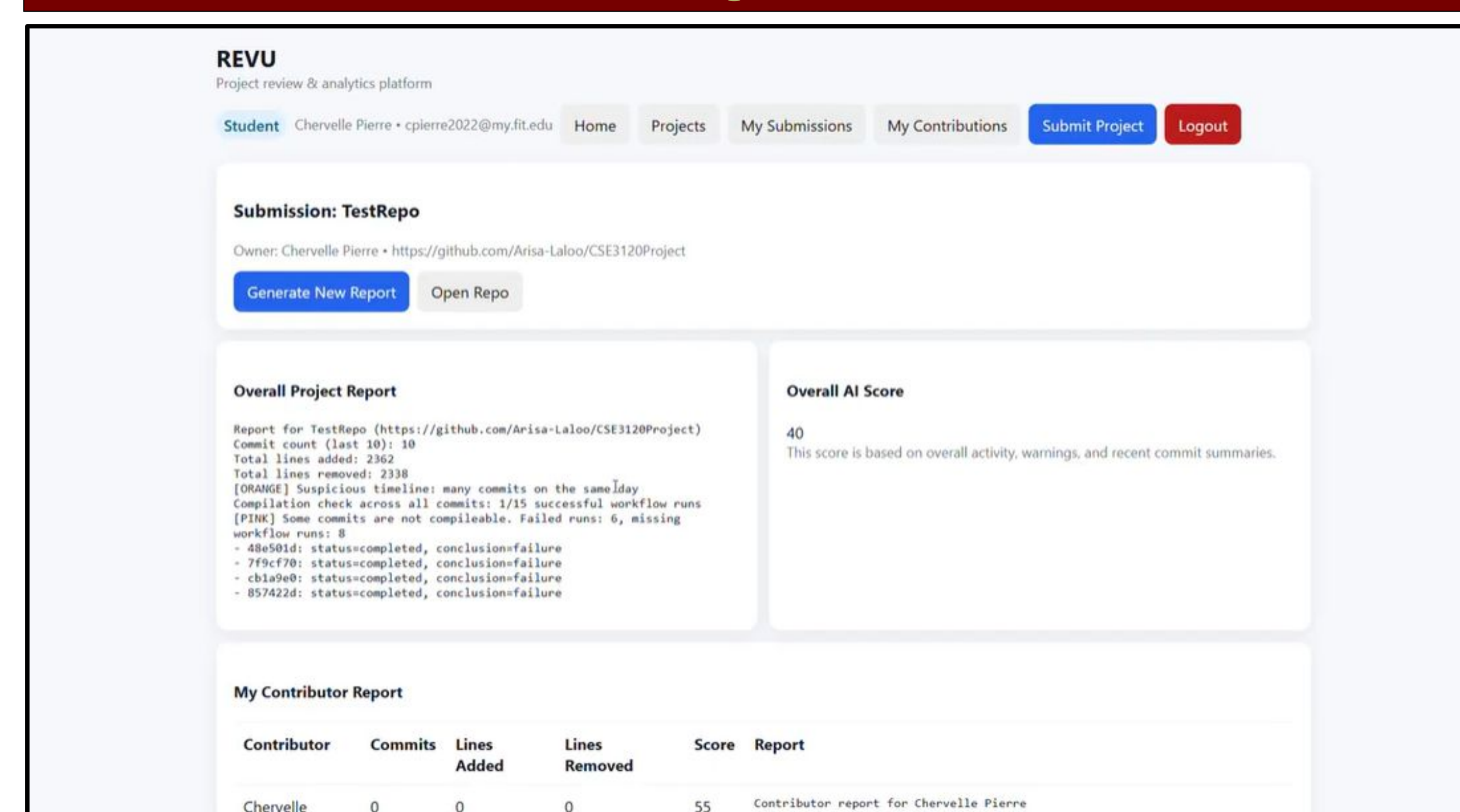


Instructor Dashboard



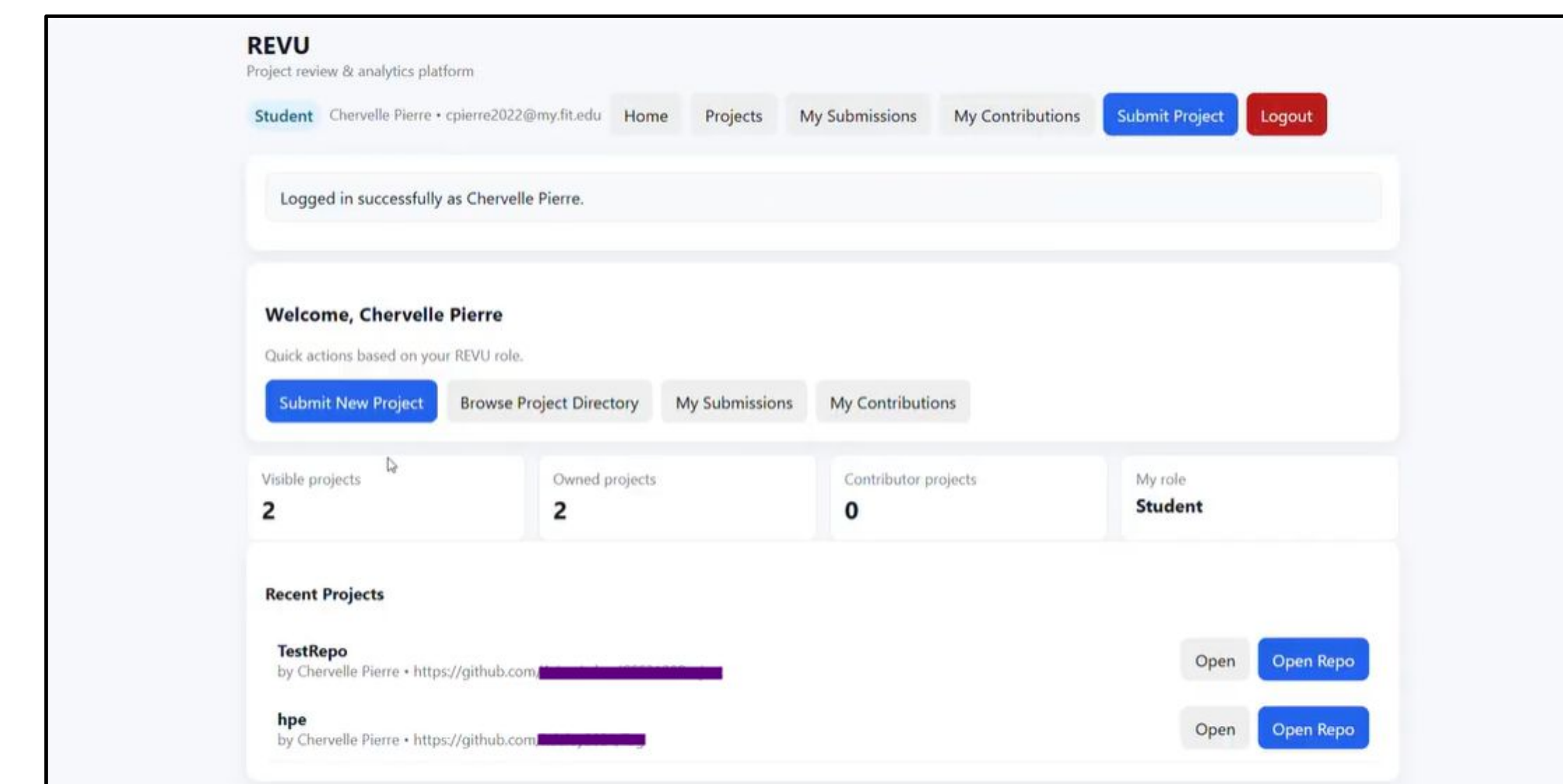
Flags suspicious behaviors in a project's history.

Submission Report Generation



Why it's Important: Streamlines reviewing process through the use of AI and Github Workflows.

Student Dashboard

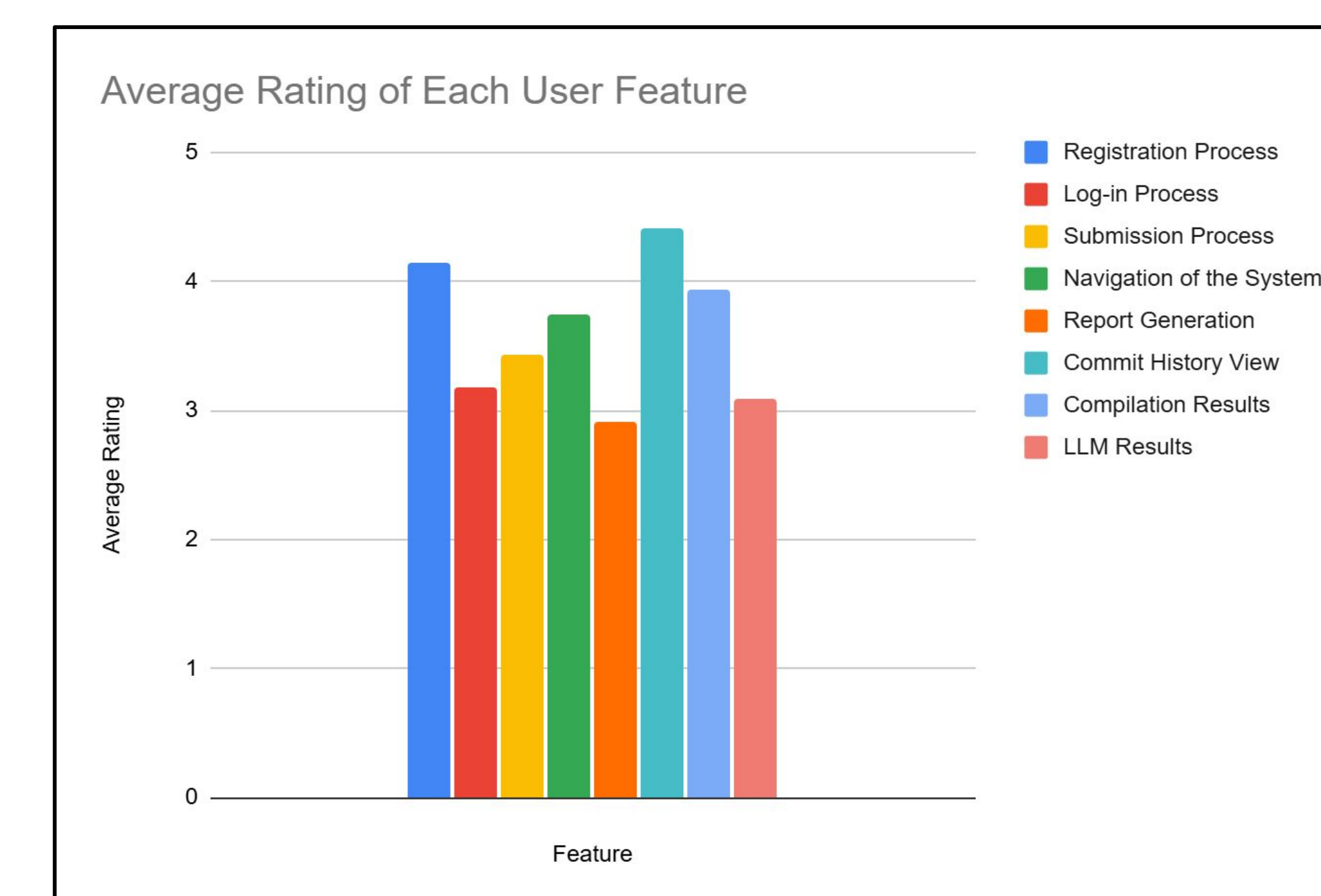


All-in-one hub for reviewing, submitting, and validating assignments.

Software Tools



Evaluation



Future Improvements

- Implementation to facilitate testing student's code submissions
- Florida Tech CAS Authentication

Acknowledgement

Thank you to Dr. Chan for his continued support throughout this design project.