EE/CprE/SE 491 BI - WEEKLY REPORT #3

October 11th

Group number: sddec23-15

Project title: Discord Bot Integration for Replit Teams for Education

Client &/Advisor: Joseph Zambreno

Team Members/Role: Cole Mullenbach, Kristen Nathan, Kyle Rooney, Patrick Demers, Sophie Waterman Hines

- **Bi-Weekly Summary**

This sprint the team accomplished setting up our testing environment, writing tests, and logged into repl.it using selenium successfully. The test environment turned out to be a much longer process than we had intended it to be. With all of the dependencies with docker and external libraries it turned out to be a challenge. We also learned that the choice to use Pycord really limited our testing options. Additionally, the team made good progress on linking student accounts with their repl.it accounts. Soon enough we shall be able to pull in compiled student code and use it in the bot's responses.

- **Past week accomplishments**

Kyle Rooney

Worked on setting up the correct file structure for testing. I ended up having more trouble than expected with this so ultimately met up with Patrick. We restructured the repository and we got unit tests working after discovering that integrated testing was not going to work smoothly. After that, I restructured the bot's code to make it more modular and easier to test. I ended up making a few more modifications and added more tests. I put a PR up on 10/10/23 that included my changes.

Kristen Nathan

Coordinated with Sophie to make big developments on automatically logging into Replit. Troubleshooting login errors that come with a Gmail account including a text verification. We had to create a new account not connected to Google for the login process to avoid this. Met with a team to do a first-glance demo of the bot logging into Replit automatically.

Cole Mullenbach

Starting to look into how we can make the bot responses only be seen by certain people or just the person that is typing to the bot. This is already slightly done with threads but by doing this we can make certain messages only be seen by the user that is typing to the bot. This can also make it easier to delete messages that are not needed as there are messages that can appear for the user until dismissed or until left alone for too long to avoid clutter.

Patrick Demers

Worked with Kyle to begin adding unit tests to the repository. Since the bot is running in Docker, we decided to Dockerize the tests as well. Developers can use "make" to run the bot and "make test" to test the bot. This makes things much easier than the previous long commands needed for running the bot.

Additionally, improved the Algolia result filtering mechanism to filter based on the assignment the student is asking about. For example, if the bot is answering a question for PP-01.01, it won't return a result that has been tagged as specifically for PP-01.03.

Sophie Waterman Hines

This week I worked with Kristen on the repl.it automation using the Selenium firefox webdriver. We made great progress and even completed the login function this week. It required reconfiguring the docker environment to support packages needed by selenium and also needed multiple reworks (due to realization of variable loading times on the website).

I also began work on the code compilation element, but have not made significant progress on it yet.

- **Pending issues**

- **Individual contributions**

NAME	Individual Contributions (Quick list of contributions. This should be short.)	Hours this week	HOURS cumulative
Cole Mullenbach	Worked on testing	15	29
Kristen Nathan	Work on Replit automation.	5	25
Kyle Rooney	Worked on writing tests	11	35
Patrick Demers	Configure make, setup tests, filter Algolia results by assignment	12	36
Sophie Waterman Hines	Completed login function for the webdriver on the discord bot.	11	29

- **Plans for the upcoming week**
  - Sophie Waterman Hines: Work on code compilation from repl.it and Selenium site navigation.
  - Patrick Demers: Improve test coverage and develop an interface for Dr. Zambreno to CRUD questions.
  - Kristen Nathan: Continue developing Replit integration, specifically compiling student code.
  - Kyle Rooney: Continue working on testing and help develop an interface for Dr. Zambreno.
  - Cole Mullenbach: Start working with messages that can be dismissed and messages only seen by the user talking to the bot.

- **Summary of weekly advisor meeting**

  No meeting with the advisor this week.