EE/CprE/SE 491 BI - WEEKLY REPORT #2

September 26

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

- **Weekly Summary**

This week we continued work on the discord bot, particularly continuing work with Alogolia and Selenium. Taking time on the implementation of these two aspects of our bot is important considering how frequent their usage will be with the discord bot and how other tools/processes we plan to implement will build off of their success.

- **Past week accomplishments**

Kyle Rooney
This week I dove into different solutions as to how we can store student questions. I looked into databases, various data structures, and external solutions. I ended up coming up with a solution that used a dictionary based off of student ID's, a customized unique identifier, and the question message ID. This solution was not persistent and would have taken a lot more implementation to keep functional. Patrick ended up coming up with a much better solution that is now being implemented.

Kristen Nathan
This week I worked to continue implementing the replit integration. I worked on finding a way to clear all cookies automatically in python every time the bot logs into Replit. We met as a team to discuss bugs to fix. We also prepared a presentation for class and delivered it to the class.

Cole Mullenbach
Started the testing on the threads. Got some of them to work however I need to push the code still. I have also started looking at how we can test responses from the bot for questions.

Patrick Demers
When pulling results back from Algolia, they may be a poor match for the question. I configured the API call to return information about the result's match quality. To start with, it is configured to

filter results that don't have at least two words matching. This will prevent very poor results from being returned, but we may need to improve the filtering logic to be more advanced if poor results are still slipping through.

Additionally, I configured the bot to grab the question automatically during an interaction. It looks at the embed of the original message and extracts the title from it. This removes the need for a table storing questions/interactions.

Sophie Waterman Hines
My work with the bot this week involved continuing work on Replit integration. I ran into some issues when translating our code in the Selenium IDE into the python discord bot code, particularly with some errors in site login. I am working on resolving this issue/figuring out why these errors are happening. I predict it involves issues with prior login attempts (storage and cookies) so hopefully implementing the fix to these issues will happen shortly.

- **Pending issues**

  No major issues at the moment

- **Individual contributions**

NAME	Individual Contributions (Quick list of contributions. This should be short.)	Hours this week	HOURS cumulative
Cole Mullenbach	Worked on testing	4	14
Kristen Nathan	Worked on implementing the replit automation.	10	20
Kyle Rooney	Worked on figuring out how to store questions.	6	24
Patrick Demers	Filter results returned from Algolia, persist questions.	12	24
Sophie Waterman Hines	Continued work on replit login automation and integration with the discord bot.	8	18

- **Plans for the upcoming week**
  - Sophie Waterman Hines: Finish fixing errors and finish the python automated login.

- ○ Patrick Demers: Pass the assignment to Algolia to allow assignment-specific answers and determine how to restrict bot responses from being viewed by all students.
  - ○ Kristen Nathan: Work with Sophie to finish Python automated login.
  - ○ Kyle Rooney: Work on more bug fixes in the communication, as well start writing tests.
  - ○ Cole Mullenbach: Finish testing on threads

- **<u>Summary of weekly advisor meeting</u>**

  No meeting with advisor this week.