EE/CprE/SE 491 WEEKLY REPORT #1

Jan 24 – Feb 5

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

Our overall objective for the week was to get to know our fellow group members and advisor. We had a great introductory meeting with Dr. Zambreno and got a good base understanding of the project. We were also able to get to know each other better through in class assignments and creating a team discord. We also set up weekly meeting times with our team as well as with Dr. Zambreno.

• Past week accomplishments

- Kyle Rooney: Worked on researching basic discord bot functionalities.
- Kristen Nathan: Researched how to start implementing a discord bot and connect it to the discord APIs. Began developing ideas for how the bots' answers will be formatted and their overall design.
- Cole Mullenbach: Worked on looking at other discord bots coded in python to get a good idea of what exactly we will be doing and how to do it.
- Patrick Demers:
 - This week, Patrick investigated the general format of error messages in the C programming language and how they can be parsed. In general, the format of an error message is "[file_name]:[line]:[col] [error]\n[snippet of impacted code]". The [error] portion is of primary concern when inspecting the compiler output.

Each error message uses specific language that can be parsed using regex. Using regex groups, the specific details of the error can be extracted to create a custom "user friendly" interpretation of the error message. This will be useful because a portion of the project is returning helpful error messages when compiling a user's code fails.

- Sophie Waterman Hines: Researched basic discord bot capabilities as well as Repl.it as a platform. Began to examine and learn about currently running discord bots and how they work.
- Pending issues

• Although the project is still in early stages, one foreseeable challenge is interacting with Repl.it as it does not offer an API. The proposed method at this point is using a web scraping tool or accessing file exports through Repl.it.

NAME	Individual Contributions (Quick list of contributions. This should be short.)	<u>Hours this</u> week	HOURS cumulative
Cole Mullenbach	Met with Dr. Zambreno and looked at other discord bots that do similar things	2	2
Kristen Nathan	Met with Dr. Zambreno as a team. Did research and design brainstorming.	2	2
Kyle Rooney	Sent an initial email to Dr. Zambreno. Researched basic discord bot functionalities.	2	2
Patrick Demers	Communicated with Dr. Zambreno, set up a recurring calendar meeting, and other administrative tasks. Investigated C error message format and how to parse.	4	4
Sophie Waterman Hines	Met with Dr. Zambreno with the team and began researching past discord bots and web scraping.	2	2

• Individual contributions

• Plans for the upcoming week

- Sophie Waterman Hines: Investigate and research Discord bot hosting methods and examine code examples.
- Patrick Demers: Continue investigating how error messages can be easily parsed.
- Kristen Nathan: Continue researching the implementation for a discord bot and get feedback from beginner coders to find out what they would find useful or want in this bot.
- Cole Mullenbach: Look at similar discord bots and get a good basis down for what can be done.
- Summary of weekly advisor meeting

Met with Dr. Zambreno to discuss the discord bot. He gave us a better understanding of our overall responsibilities and requirements. We discussed how often we should meet and the expectations for those meetings. Starting the process of getting access to the discord server the bot will be in to better understand the questions students have asked in the past. We assigned a team member the role of communications. They will be responsible for reaching out to Dr. Zambreno in the future.