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## EE/CprE/SE 491 WEEKLY REPORT #8

Apr 3 – Apr 9

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

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- **Weekly Summary**

This week we were able to work together and really focus on implementing more critical features of our bot. We were able to show a little demo to Dr. Zambreno of a working bot and some key functionalities of what will be in our final product. The team has also gotten to the point where we have Docker set up and running on our machines. The group is at the point now where we are still doing research on small features, but have gotten to the point where we are starting to implement features that we have been researching thus far in the semester.

- **Past week accomplishments**

### **Kyle Rooney**

This week I worked with Cole to help him set up Docker as well as refine some of the code within the ticketing system. We worked to fix some of the bugs that arose when creating new threads. I was also able to discover that Dr. Zambreno has done a very good job of giving his students/staff proper roles and did some research of roles/guilds to see if they can help for our given project.

### **Kristen Nathan**

This week I made a discord bot account on Replit to begin the Replit integration process. Started doing development towards Replit integration and getting authorization and keys. Met with the team and did weekly assignments.

### **Cole Mullenbach**

This week I went through the code to refine the way that the buttons work and make it so we are not able to accidentally create more than one thread per problem. Kyle and I also went through the code and fixed multiple smaller problems and discussed how we would implement a ticketing system any more than just using threads. We also looked into moving a thread back into a different channel so that everyone would be able to see the assistance given by the instructor to a student.

### Patrick Demers

This week, I created a Postgres database which can be used to store persistent information for the bot, such as Discord ID to Replit username mappings. Upon initial creation, the database runs a setup script which creates the appropriate tables. We may need to investigate how to update the database schema on an already existing database.

Additionally, I adjusted the CI/CD pipeline so there are two separate bots running: one for the main branch and one for the development branch. The team's deployment and release tagging strategy can be adjusted in the future if needs change. I also set up a Grafana Docker image which allows administrators of the application to view and query the application's logs.

### Sophie Waterman Hines

This week I began working on the command to link the user Replit account and Discord account in the postgres DB. The command to take the user inputted ID is created, but unfortunately I had issues with my own DB while creating the command, but since then I have resolved the issue. Next week I hope to begin work on testing the command with the database and looking into confirming the user ID linking on Replit.

- **Pending issues**

1. Patrick is unable to VPN into campus as the VPN Client repeatedly connects and disconnects. A help desk ticket has been opened with ITS.
2. Still a bug in the ticketing system that allows you to create an infinite number of threads.

- **Individual contributions**

<b><u>NAME</u></b>	<b><u>Individual Contributions</u></b> (Quick list of contributions. This should be short.)	<b><u>Hours this week</u></b>	<b><u>HOURS cumulative</u></b>
Cole Mullenbach	Refining the thread and ticketing process	8	37
Kristen Nathan	Continue progress on the Replit integration.	4	21
Kyle Rooney	Fixed issues with threading and continued installment of a ticketing system	4	38
Patrick Demers	Create database, create QA environment, and setup	8	63

	Grafana.		
Sophie Waterman Hines	Create user ID linking command	3	22

- **Plans for the upcoming week**

- Sophie Waterman Hines: Continue work on user ID linking and work on confirming IDs with Replit.
- Patrick Demers: Compile the team's research and come up with a gameplan on the best way to answer student driven questions.
- Kristen Nathan: Move forward with Replit integration and finish getting authorization.
- Kyle Rooney: Research roles and see if we can implement them within our bot to simplify some hardcoding.
- Cole Mullenbach: My goal for the week is to start finding a way and implementing moving messages from the thread to the channel

- **Summary of weekly advisor meeting**

This week we met with our advisor to give an update on bot progress and receive feedback on the current direction we are taking. The meeting was very positive, and gave us some confirmation that our bot demo is on the right track. We also discussed the current CPR E 161 discord server, as we were planning to analyze student questions to further define how our bot would be able to help them. Since there are not as many questions being asked in the server as there was last semester, we are still waiting for further user participation while also examining past questions.