SE 492 Bi-Weekly Report 04

Start Date - End Date: Oct 11th - Oct 25th 2021

Group Number: 19

Project Title: Canvas LTI Student Climate Dashboard

Client: Henry Duwe

Advisor: Nick Fila

Bi-Weekly Summary:

The overall goal for this increment was to -- for all teams -- begin the migration from running microservices locally on their machine to running in our own private cloud, to begin the integration of our microservices, and to finish touching up the microservice MVP list. For the most part the team got done what we set out to do. All but one of the microservices were fully ported to the private cloud and tested to be running and there were some migration efforts that took longer than expected, reducing the amount of time we could spend on touching up the microservice MVP list. All in all though, we are still in a good position to be finishing up the project.

Past Week Accomplishments:

- 1. UI Team (Kira, Emma) -
- Cleanup and bug fixes for journey map
- Improved function structures to reduce redundancies
- Added form submission functionality
- Frontend dockerfile revised and added to docker repository
- Formatted the graph design page

2. Canvas API Team (Andrew, Emma) -

- fixed issue with bearer token.
- Worked on refactoring docker file
- Removing old dependencies and package management
- Attempted work on getting docker communicating with the front end.
- General pairing with a team to go over the project.
- installation and setup of Docker for windows machine

3. Data Analysis Team (Zach, Josh) -

- Implemented database on the virtual machine for non-sensitive (non-ferpa protected) information such as user filters, default settings, account information, etc.
- Implemented python sql connection to allow the data analysis modules to pull from the database
- Helped containerize and debug canvas api dockerfile.
- Wrote kubernetes deployment, and service file for canvas api.
- Polished off clustering microservice and created service for it (including api endpoint).
- Implemented the full data analysis pipeline master service.
- Created wrapped-up sentiment analysis service for customers to use on real-student data for feedback.
- Wrote k8s deployment and service files for frontend containers.

Pending Issues:

- Need to make significant progress in the next iteration to be able to keep from running into a time crunch to finish the project on time
- Need to work as a team to get that docker container up and running. It seems to be a VERY large blocker for our current progress as a team.

Individual Contribution:

<u>NAME</u>	Individual Contributions	Hours this Increment	HOURS Cumulative
Andrew Dort	 Refactoring of docker container Fixing auth issues with the API token Removing packages that were breaking the docker container Reformatting parts of our project structure which was also breaking out docker container Worked with Josh on trying to figure out how to hit the endpoints on the docker container (still WIP) 	10	60
Kira (Ashley) Pierce	 Worked on some bugs that were breaking 	17	57

	graph display Separated out some repeated code to functions to reduce redundancies Worked on button		
	click-cases for modifying graph		
Emma Paskey	 Created scrollable sidebar that is split in half for groups and students, separated main page into its core functionalities (graph, sidebar, graphing tool adjustments) 	20	89
Zachary Borchard	 Implemented Database on the virtual machine to store non-sensitive information about the canvas course Created mock tables to be able to pull data from to test front-end integration Created python-mysql database connection to allow our data analysis to access the database 	15	75
Joshua Slagle	 Helped containerize and debug canvas api dockerfile. Wrote kubernetes deployment. and service file for canvas api. Polished off clustering microservice and created service for it (including api endpoint). Implemented the full data analysis pipeline master service. Created wrapped-up sentiment analysis service for customers to use on real-student data for feedback. Wrote k8s deployment and service files for frontend containers. 	24	99

Comments and Extended Discussion:

Plans for the Upcoming Week:

Wrapper Tasks:

- Figure out why the endpoints can't be hit from the docker container
- Interact with the front-end
- Work side by side with the front end team to get the data they need.

Misc. tasks:

• Learn about docker compose and orchestrate containers

Frontend tasks:

- Integrate the graph with the front-end
- Communicate with the wrapper and data analysis services:
 - Send filter information and receive graph data
 - o Request class enrollments and populate list via enrollment ids
- Implement asynchronous requests in the front-end

Data Analysis Tasks:

- Fill in the stubbed methods for reaching the backend and canvas apis with the real thing.
- Implement the backend tables and method calls for the storing of user / professor data.
- Start fielding any change requests from the frontend as they integrate with the graph api.