

EE/CprE/SE 492 Bi-Weekly Report 3

Report Period: 2/18/2023 – 3/3/2023

Team Name: sdmay23-42

Project Title: Canvas LTI Student Climate Dashboard (Mark II)

Client: Henry Duwe

Advisor: Nick Fila

Team Members:

- Josh Harvey: Team Manager, Resonance & Persona
- Howard Chi: UI
- Elias Simpson: Server, Docker, Kubernetes
- Hailee Leonard: UI/UX
- Colin Hasbrook: Database and Backend
- Jonathan Giblin: Canvas/Okta Integration, Infrastructure

Summary of Progress during this Reporting Period:

The objective of the last two weeks was to set up the past team's application, set up application infrastructure, get feedback on design sketches, and design changes for the Canvas API. We made great progress on all objectives in the last two weeks. We had good attendance and engagement in our weekly meetings and are communicating effectively with the Client and Advisor. Members have proposed screens for an improved user interface and received feedback on further improvements. Pulled data from Canvas and further investigated design changes that address goals of mark II that build off the past team's work. Team members are continuing in their current roles and objectives. We made great progress in the last two weeks and are excited to build up from here.

- Josh Harvey: Better understanding of past team's implementation of resonance, achievement, sentiment, and engagement components. Better understanding of the Python programming language.
- Howard Chi: Figma planning.
- Elias Simpson: All deployments are status green. For engagement scorer, the Dockerfile was missing, so though the script was calling build for the image, there was nothing getting built. For the endpoint-envoy, the script was building the image, but it wasn't pushing it to the repository. Therefore, Kubernetes wouldn't find it when it tried deploying. Have begun working on network errors occurring on website's page load. These include CORS exceptions due to missing headers in internal requests, a database connection error on our server related to user permissions and roles from the SQL connection service, and a 401 from the service handling our Canvas API. Progress has been made in identifying and working with these issues through the Kubernetes cli.
- Hailee Leonard: Looking into old team's UI and backend communication and how to improve that for better load time, make screen sketches, research UI libraries for implementation.
- Colin Hasbrook: We are now able to pull all of the numeric values that will be required for the resonance scores. This includes the class number, student numbers and names, assignment due dates, and assignment grades. All of these can be filtered in a variety of ways. I was able to find a way different than the previous team that requires less calls and gets the data in an easy-to-use way.
- Jonathan Giblin: Helped Elias get all pods deployed and start to work on the network errors. Better understanding of previous teams CI/CD pipeline and Jenkins, which they used for CI/CD.

Pending Issues:

- Josh Harvey: Understanding complexity of past team's resonance, engagement, sentiment, and engagement components. Implement desired changes in accordance with past teams' implementation and personal constraints.
- Howard Chi: UI implementation.
- Elias Simpson: The database connection and the authorization with the Canvas-API-Service are top priorities for getting the page to load. I have concerns about a number of URLs, parameters, and tokens which are hard coded into the application. It appears it was designed to work only in a specific state, and we're left trying to figure out what that state is and how to rebuild the application to be more flexible, dynamic, maintainable, and reliable.
- Hailee Leonard: UI implementation.
- Colin Hasbrook: Currently having an issue reading the sentiment scores from the quizzes. Need to figure out how to get students answers from the assignment. I can get the overall grade from an assignment but am trying to figure out how to get responses from within an assignment itself.
- Jonathan Giblin: There are still some issues with getting the previous application working which I will be continuing to help Elias with so that we are able to have a usable starting point. CI/CD also needs to be restored to the project so development can be more streamlined.

Plans for Upcoming Reporting Period:

- Josh Harvey: Propose design changes that will allow for dynamic definition of resonance, engagement, sentiment, and engagement.
- Howard Chi: Meet with Henry, start coding UI, hopefully meet with Colin.
- Elias Simpson: Work on authorization with Canvas-API-Service to get it running on page load. We have a temporary workaround for the CORS errors. The database connection is a concern, but ideally the page will still be able to load the graph without it.
- Hailee Leonard: Meet with Henry, start coding UI.
- Colin Hasbrook: Get the sentiment scores and test from student quizzes and make this data readable and exportable for the frontend.
- Jonathan Giblin: Finish getting the CI/CD up and running through Jenkins, continue to help with infrastructure and getting the previous team's application in a working state.

Individual Contributions:

Name	Tasks Worked	Total Time Week (Hours)	Total Time During 492
Josh	Files and content identification related to resonance components. Learned more about Python. Managing weekly reporting assignment and meetings	10	26.5
Colin	Pulling data using canvas API. Pulling sentiment scores from quizzes by students	15	28
Elias	Kubernetes deployment, CORS, DB access	10	25
Howard	Created Figma pages meeting wanted criteria	6	15
Hailee	Looked into past team's UI and backend communication and how to improve that for better load time, make screen sketches, research UI libraries for implementation	7	20
Jonathan	Meetings, Infrastructure, CI/CD	9	18

