EE/CprE/SE 492 Bi-WEEKLY REPORT 5

Mar 23, 2023 – Apr 20, 2023

Group number: 40

Project title: Interactive learning platform to engage large size classroom

Client &/Advisor: Md Maruf Ahamed (Client and Advisor)

Team Members/Role:

Tyler Miller: Backend
Alex Swenson: Backend
Jaden Ciesielski: Frontend
Brandon Burt: Frontend
Adam Walters: Frontend
Guan Lin: Frontend

Bi-Weekly Summary

We finalized our join code protocol to allow users to join courses. We had a massive overhaul on the front-end to make things look nicer as well as handle errors such as an invalid login displaying a message now. We also implemented edit functionality for messages and polls. We demonstrated our application to our client in one of his SE 185 classes where we created a course for him and then had all of his students sign up, join the course via join code and then use the application during class. The demo was successful and we identified a few defects to fix before our next demo which will be in one of his larger classrooms.

o Past 2 week accomplishments

- Worked on Functional Requirements on report (Brandon)
 - Wrote functional requirements for our final report
 - Specified originally agreed upon criteria to have complete
- Worked on Non-Functional Requirements on report (Brandon)
 - Wrote non functional requirements for our final report
 - Specified goals and project outcomes

Worked on frontend testing section on report (Brandon)

- Specified E2E test cases made for frontend
- Specified approach to testing frontend and outcomes
- Specified results of tests and what it helped assure.

Adapted Poll PopUp (Jaden)

- Used the basic template created
- Added new components for poll answers, spinner, etc.
- Added feature of multiple choice vs select with animations

Updated Add Course PopUp (Jaden)

- Used template created
- Added instant refresh so course shows up when successfully added

Added Profile Page (Jaden)

- Created page to display user information
- Added API to edit username

Class Demo 1 (Tyler, Adam, Guan, Brandon)

- Ran a demo in our clients SE 185 class
- Demo was successful and we identified a few minor fixes before our deadline

Vanity URL (Tyler)

- Acquired the domain cyclass.ece.iastate.edu
- Traffic to cyclass.ece.iastate.edu is redirected to the sdmay23-40.ece.iastate.edu

Security Section of Report (Tyler)

 Created the security section of our report detailing how we handled our physical and cyber security for CyClass

Testing Validation and Report (Tyler)

- Finalized our backend testing and wrote up a report of our findings and how our testing of the backend works
- Added the backend testing section to our final report

Worked on backend runbook (Tyler)

- Finished Documentation for our websockets and apis
 - OpenAPI spec and README
- Started working on Appendix A detailing how our backend works and how to set it up locally

• Finished PATCH endpoints (Alex)

Finished PATCH endpoints to update data in tables

Updates to existing PATCH endpoints (Alex)

Found & fixed bugs in previous endpoints

Updated CSV to Pull Extra Parameters(Guan)

 Made UserAPI pull firstname and lastname to correspond with canvas better

Added Hover Components to some buttons(Guan)

• Hover features for close poll, view participation, and new lecture

Worked on my section of report and poster(Guan)

- Started writing my part of the final report
- Started working on making poster for our application

Implemented Toast System (Adam)

- Added a "toast" notification system that allows any component in the frontend to add notifications to the user's interface
- Predominantly, this will be used for displaying issues/errors

Cleaned up Onboarding Process (Adam)

 Cleaned up and streamlined the process of a user logging in, taking them straight to the home page and auto-logging-in after signup

Fixed Sync Issue After Course Joining (Adam)

 Users could join courses, but it didn't immediately show the course as joined afterward; fixed that

Improved Course View Lecture Posts (Adam)

- Made the time display more useful for lecture posts in the course view
- Fixed improper sorting of lectures

Overhauled Live Lecture Interface (Adam)

- Significantly reworked the interface so that it better reflects the current feature set and updates correctly
- Made the style match the styling across the app

Fixed Poll Form Creation (Adam)

 Fixed a couple issues with the poll form, including blank answer lines and close-date generation

Implemented Poll Auto-Closing (Adam)

 Reworked the poll streaming and classes to intelligently watch the close time, update a live timer, and prevent responses after the close time passes

o **Pending issues**

See biweekly meeting for defects we need to fix

Individual contributions

<u>NAME</u>	Individual Contributions (Quick list of contributions. This should be short.)	Hours these Past 2 weeks	HOURS cumulative
Tyler Miller	I worked heavily on our final report documents which required creating a lot of documentation. I additionally worked with ETG to obtain a vanity url so that our users don't have to remember sdmay23-40. Our domain is now cyclass.ece.iastate.edu	12	89
Brandon Burt	I worked on our final report documentation, and testing section of the report. Took part in demoing applications in a classroom environment. Working jointly to fix bugs discovered after our classroom demonstration.	8	76
Adam Walters	Did significant bug fixing and clean up on the frontend. This included: implementing a "toast" system, cleaning up onboarding process, fixing course-join sync issues, improving lecture posts, overhauling live lecture interface, fixing poll creation, and implementing auto-closing polls.	24	90
Alex Swenson	Worked on finishing/polishing PATCH endpoints. Started work on storing filename to database in media services/endpoints	8	70
Jaden Ciesielski	Updated the poll popup and added a course popup to use the template, plus some additional types. Added the Profile Page as well as the API to allow the user to edit their username. Created final slide deck outline, partially filling in frontend slides.	8	72
Guan Lin	Updated CSV to pull first name and last names as they correspond with canvas better. Added hover components to buttons.	10	61

Worked on the final report and started the	
poster.	

o Plans for the upcoming weeks

Frontend:

- Add course creation button on course page
- Add lazy-message loading in live lecture
- Fix defects identified from our in class Demo

Backend:

- Create documents and updated diagrams detailing the infrastructure of the backend
- Add filename to our attachments
- o Fix defects identified from our in class Demo

Team:

- Finalize all code before large class Demo
- Work on combining our report pieces

Summary of bi-weekly advisor meeting

- We showed off the raise hand feature
- Showed off message and poll editing
- Showed off poll results download
- Had demo with client in his lecture and identified defects
 - Streaming issue in classes
 - Make poll prompt multi-line
 - Limit usernames to enforce no @iastate.edu
 - Poll participation is requiring a refresh when it shouldn't
 - o Raise hand needs refresh when it shouldn't
 - User profile should include first and last name if exists
 - Need way to create course from front-end
 - Need way to edit user info like passwords