Status Report 2

Group *3*: *Huy, Paul, Awais, Blake*
April 7, 2024

1 Introduction

1.1 Highlights

- What was the plan for this iteration?
- Highlight what the team accomplished.

For this iteration, we split into frontend and backend development teams. Huy and Paul were on the backend team. Awais and Blake were on the frontend team. The backend team focused on implementing the Google user authentication process, designing the database schema, setting up the server, defining the APIs for the client to communicate with the server, and also for the server to manipulate the database based on the requests from the client. The frontend team focused on transitioning to using React.js so that our backend and frontend systems could be integrated smoothly. By the end of the sprint, the backend has been thoroughly fleshed out and is almost fully functional. The frontend implementation process was more complicated than expected and is still being worked on, but React is now being used throughout our website and final UI/UX design changes are being made.

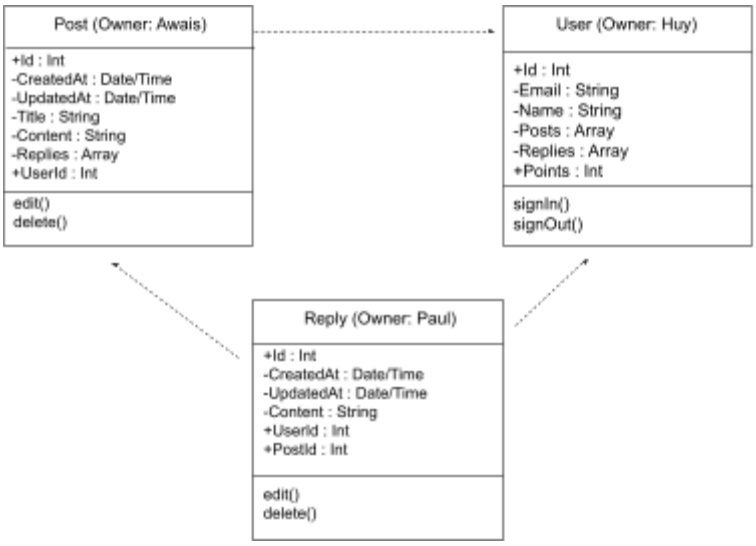
1.2 Changes

- Summarize any major changes since Status Report 1.
- Include each change's date, motivation, description, and implications.
- If there were none, note that there were no changes.

- We shifted our HTML/CSS development to the React framework for front end development. We believe this is the best decision for future integration of the front and backend of our website.
- We developed backend functionality so new users can connect to the database and send posts that are stored in the backend.

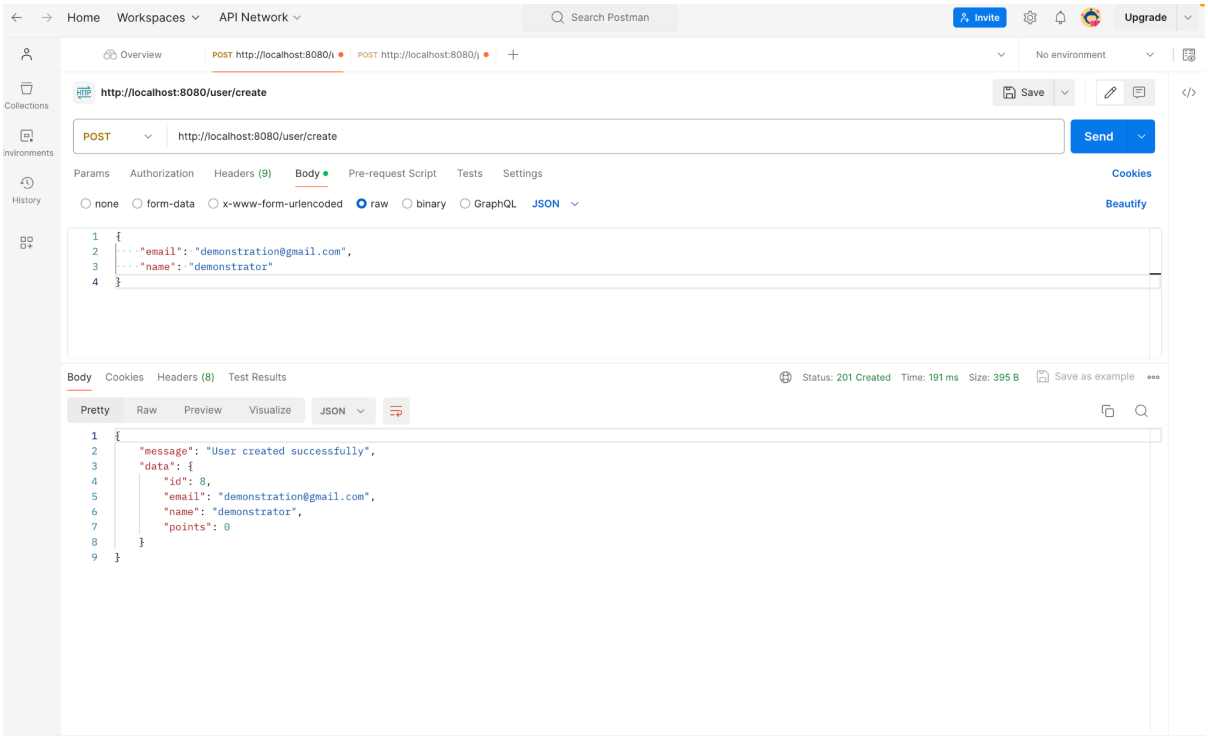
2 UML: Class Diagram

Draw a class diagram that *only* includes the important classes your group mainly worked on during this iteration. Identify a single owner on the team for each class, even if multiple team members contribute.

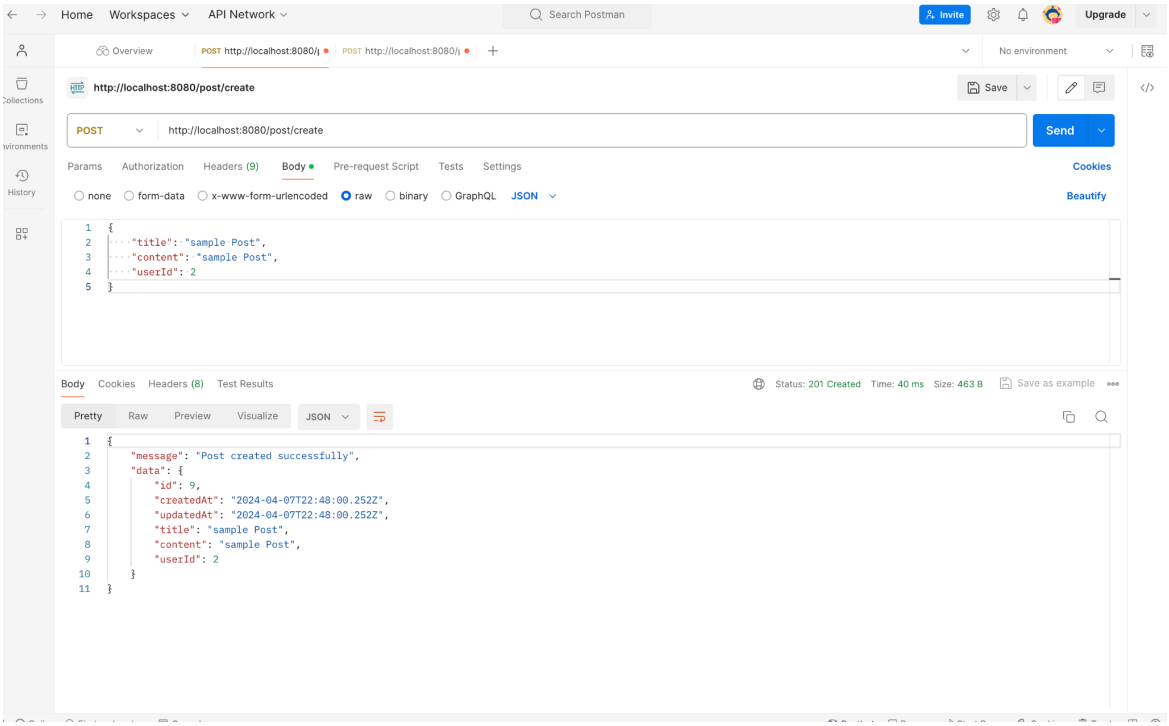


3 Current Status

- Add screenshots of the parts that are working
- Map the screenshots to the class diagram. In other words, which class does the feature you show in the screenshot belong to? Multiple classes may belong to a single feature. Clearly describe what those are.



This is the User Account feature to add a new user to the database, it belongs to the User class



This is the Post feature to create a new post in the database, it belongs to the Post class.

4 Project Management

Continue to maintain the Change Log. Add any new changes to the project, tracking the date and description of each change. Use the table below:

Date	Description
Date the change was made	A summary about the change made to the system
03/23/2024	Switched to Postgresql for database management Set up schema for the database
03/25/2024	React and Tailwind based setup for new UI
03/26/2024	Define APIs for creating users and posts
03/29/2024	Changed UI layout to dashboard-style
03/30/2024	Set up user authentication flow
04/01/2024	Define APIs for creating replies and getting all posts/replies by a user

5 Review and Retrospective

• What went well?

We achieved a lot of progress on the backend. We set up the authentication process, designed the database schema, had the server running, defined the APIs for the client to communicate with the server and also for the server to manipulate the database based on the requests from the client.

• What didn't go well?

We had some communication and planning issues with how the backend and frontend will come together. The current version of these two systems does not match so we had to rebuild the frontend with React. Thus, we still have a very basic UI set up right now.

• For the goals that were not met, what were the issues?

The previous version of our frontend was built with pure HTML/CSS. That could not connect with the backend which was written in Typescript. So we decided to switch to React and had to rebuild the UI again. Since we are new to React, it took a while for us to learn and adapt to it, and we also met a lot of errors along the way.

• How do you plan to overcome the issues?

We are trying to schedule more meetings to build the UI faster and more efficiently since we work best together. Additionally, since the backend is already close to finishing, the backend team is switching to help the frontend team build the UI and adapt to React.

• What do you plan to do differently in the next iteration?

We plan to improve cross-team communication by setting up more meetings with everyone involved so we are on the same page about the development process and the expectations. We also plan to have frequent checkups and status updates among the team members so that everyone can have a clear understanding of the progress and what needs to be done.

6 Team Management

• What were the team roles for this iteration?

Product Owner: Awais Abid
Sprint Master: Blake Craig
Developer: Huy Nguyen
Developer: Paul Skok

• What did each team member contribute?
Awais & Blake: Worked on front-end development. Began transitioning the previous HTML+CSS-based structure to technologies more suited to safer, real-time posting (Next, Tailwind, React). Researched and Learned the setup for new UI technologies and the functionalities required and relevant to the app, and researched the industry practices for efficient and secure posting interfaces, as well as the tested features users most demand. Finalized UI design choices for Campushood (dashboard-style, navbar structure, rankings bar)

Huy & Paul: Worked on backend development. Set up the database connection and designed the schema. Set up the folders and files structure for the repository. Wrote APIs for the client to communicate with the server and server to database - Current Operations: Create a new user/post/reply, get all the posts and replies by a user.

• What were the challenges regarding team management, e.g., regular meetings, etc.?
There were challenges in communication among team members due to turbulent schedules and the variations in technologies being learned and used by each member for their particular task, and how those technologies work together.
• What are the plans to overcome the challenges?
We have decided to conduct more unified sprints. The communication gap between technologies is resolving automatically since we have decided which technologies to proceed with and finalized major back-end choices, so that the integration, going forward, of all the pieces is smooth
• If you were the third party who knows very well about your team, what suggestions would you give to your team?
The team would be advised to make decisions about all the technologies to be used in the app as a unit, even if some members are not directly involved with that part of the app, so that no members are unaware of how the various pieces of the app will come together eventually and development mishaps or reiterations can be prevented.

7 Goals for the Next Iteration

• Write the next iteration’s product log.
- Post-by-post points tracking system
- Social app sharing capability
- Post-edit and deletion capability

• Write the next iteration’s sprint log.
- Complete UI transition to new technologies selected
- Connect backend to front-end posting functionality
- Add rankings list to home left bar display
- Create collapsing replies box

• Other than the issues discussed in Section 5, i.eReview and Retrospective, what potential challenges do you see in the next iteration?
We could have challenges with getting all the necessary features successfully transitioned to the new UI since we don't have extensive knowledge of the technologies, which could result in delays in development.

• Briefly explain how your team would overcome each challenge.
Since we already encountered this issue with the technology shift, we have decided to merge our development sessions and therefore ensure direct communication when each developmental choice is being made.