MEMORANDUM

To: Katie Tanigawa
From: Phuong (Jennifer) Tang-Tran, Joshua Sivertson, Changsin Park
Re: Community Discussion Platform (CDP) Project Progress Report
Date: June 17, 2020

Summary

Katie, Team 10/10 is making outstanding progress with the Community Discussion Platform (CDP) project. As the current project is a continuation from the previous Capstone team, Team 10/10 has updated and produced new features such as advanced user roles, an enhanced user interface, and an improved rating system. The team is now working on a new comment-funnelling feature used to filter out certain comments for users to view. The team is more than confident that they will improve the current application and complete it by August 14th.

Background

Client

Nicolas LeBlanc is the client for the CDP project. He is the Executive Director for the non-profit organization, MyLivingCity, whose goal is to cause a sustainable shift in participating communities. Furthermore, Nicolas sponsored the same Capstone project last year, and he is now looking to improve upon the work done previously.

Situation

Currently, many people encounter barriers accessing on-site meetings or have not been traditionally involved with the planning process towards sustainable development in their community. The CDP project aims to empower every citizen to take action for change in their community through the online discussion platform. On the platform, citizens are able to post ideas and support others' ideas in hopes of improving their community. With this solution in place, it will provide opportunities for citizens to become the source of change for a sustainable community and fully involve the citizens in the planning process.

Project Parameters

The analysis phase of the project is complete, and it is now in the implementation phase. The project consists of updating the application, API, and user interface to ensure a preeminent discussion platform is created. The team will deliver an improved version of the application, updated technical documentation, and a new proposal document for the next development team. Since the database contains sensitive data, there is a risk of a security breach, but the team will ensure they are following best practices to avoid this issue. Furthermore, the project will only use of open-source software and libraries, so there will be no cost involved.

Discussion

Results/Successes

Since we've been working on this project, we have developed a keen understanding of React and Node.js technologies. We have learned best practices for web development as well as many tips and tricks used in order to make the web application run more smoothly.

We've learned a lot about project management from our classes with Ben Leather. Throughout this project, we've come to gain lots of experience in diagrams, flowcharts, work estimation, and task management. We've also come to gain experience in responding to unexpected circumstances through the situations created by COVID-19 and a missing team member.

The website is currently running on a React frontend, a Node server, and a PostgreSQL database, all being hosted together in Docker containers. Most of the progress made has been focused on the User Management and Idea, Proposal, and Collaborations section of the website. Users can now post ideas and comments and rate them according to their level of agreement.

Problems

When the project started, the database was stored on Amazon's Relational Database Service (RDS). However, the issue with RDS is that there is no easy way to query the database directly for development purposes, which was something that the team was unaware of when the project first started. The solution was for all team members to install their own databases in their own development environment, but this setup is not ideal for consistent testing between all team members and required extra development time to build.

Because of this, the start of the project had to be delayed in order to set up a proper development environment. The entire first sprint was dedicated to this task and may reduce the overall scope of the project.

In addition, due to another team losing two of its team members, one of our team members was reassigned to assist the other team. Being down a team member was a big adjustment to get used to and took some time to become accustomed to working with a group of three rather than four.

Logistics

The primary means of communication that the team uses are Slack and WhatsApp. A Slack channel has been created for discussions between team members outside of team meetings and development sessions. WhatsApp has been used mainly for communication with the project sponsor and his associates.

GitHub is employed to maintain control over software versioning. The repository is owned by one of our team members and has private visibility, with access restricted to the development team member's only. The team is hosting the software locally on their personal devices and for testing purposes the application is run on Docker.

The team meets three times a week for about 30 minutes on Mondays, Wednesdays, and Fridays to discuss the team members' progress and accomplishments. Due to regulations put in place in response to COVID-19, meetings take place in an online format using Zoom video chat services. Additionally, the team meets with the project sponsor on Friday afternoons to provide an update on the progress of the project.

Individual Roles and Group Dynamics
Team 10/10 is filled with incredibly talented people. The team has decided to distribute roles in a way which maximizes each strength:

- Phuong (Jennifer) Tang-Tran is the Project Manager and Technical Writer due to her strong leadership and communication skills. She is responsible for ensuring the team is on the right track, creating user interface mock-ups, and transcribing significant discussions.
- Joshua Sivertson acts as the Technical Lead with his extensive programming knowledge. He is the liaison between the client and the team.
- Changsin Park's role is Technical Support. He is contributing to the team with his front-end and back-end knowledge.

Because of each individual's passion and proven abilities, the team is able to share diverse perspectives and tackle more complex problems. The overall dynamic of the team has led to the current success of this project.

Data and Materials Collected
Nicolas has provided all of the information and resources required to complete this project. However, the previous Capstone team did not provide any documentation in regard to the code, so the team is relying heavily on documentation provided by the open-source software. With the documentation in place, the team was able to improve the current rating system into a five-star rating system.

Goals
Our immediate goal is to finish the implementation of the comment-funnelling feature by June 28th. We will tackle this problem by altering the backend to ensure the API will display the comment with the most interactions. Once we complete the comment-funnelling feature, our priorities will be adding additional features such as an expiration period for each idea. After we successfully finish the additional features, we will have a beta application ready for test users by August 9th.

Conclusion
The progress of the project is running smoothly despite the lack of physical interactions. Currently, our goal is to complete the implementation of the comment-funnelling feature. In the long term, we plan to fully develop the flow of ideas and comments in the discussion platform. We are thrilled with the current progress and will continue to strive for excellence towards the completion of the project by August 14th.