Cobb Connect

Deployment and maintenance of alumni tracking system



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I. Introduction

The Granger Cobb Institute for Senior Living (GCISL) focuses on assisted living care for individuals over 55+. The Senior Living major has a rich body of alumni that the department wants to be able to keep in contact with post education. To fulfill this goal, GCISL requested an app from the WSU CS Capstone course. This occurred last year, and the students assigned to the task created a website called "Cobb Connect". Cobb Connect fit all the website requirements but was not thoroughly tested or moved to WSU servers. Our goal is to finish what the previous Capstone class started, and move Cobb Connect to a WSU server, and provide quality assurance and improvements for the website.

II. Background and Related Work

GCISL wants a way to easily connect alumni and gather data about their post graduation statistics. The easiest way to do this is with some sort of website that students can login to, and enter their data. Fullstack web development is a massive field as many small businesses don't need some large infrastructure for their services, and can have relatively simple back and front ends. While there are websites that exist that can gather information in a way that is similar to what GCISL works, like most social media sites, there isn't a website that gathers and displays it exactly how GCISL wants it. Specifically the heat map of where students are in the world along with their contact info was a must have for the project.

Our project is state of the art in the following ways. A key aspect of our project is portability, as we need the users to be able to transfer to WSU servers without any pain. To this end, we will wrap up the entire project in a docker container so that it can be easily deployed on any cluster. Docker, Kubernetes, and microservices in general are vital in modern computer science. Almost any large tech company offers some sort of web server hosting business that is often used to host kubernetes clusters, and thus our project keeps up with modern computation in terms of portability. The project itself uses a firebase database which is undeniably a cutting edge software due to its ability to synchronize databases crossplatform.

We know we are not redoing any work as GCISL has no service currently anywhere close to what we're implementing. They will go from having no method to track alumni to having a fullstack app that can easily disseminate and gather data on alumni. By looking at other social media and data gathering sites its clear that the specific implementation that GCISL wants does not exist, and that further reinforces the need for our project. A similar project to ours is something like the StudentTracker from studentclearinghouse (StudentTracker). This app falls short however in a couple key places. It does not have the social media aspect of Cobb Connect, and it also does not have the heat map of students. It's worth noting that since our project is more about maintaining and upgrading Cobb Connect rather than creating it, we don't need to justify the purpose in a traditional sense. We are merely the people upgrading a service whose justification has already been made when this app was created by the prior student group. Our job is much more custodial in nature as we are fitting a product and transferring it rather than directly creating one.

Our main function in this semester will be integration and deployment. The previous students who worked on this project created an well working prototype, but that deliverable needs to be tested and integrated onto WSU. Our purpose will be to help with this change, by enabling easy movement of the product via a docker container, and by providing help with beta testing. After beta testing occurs, we will also provide changes for the users to make the app more friendly.

III. Project Overview

This project is looking to create a platform for GCISL graduates, current GCISL staff, current GCISL students, and students from the School of Hospitality Business Management that are interested in the Senior Living Industry to be able to track and interact with one another. Our client wants this platform to be available as a web application and as a mobile application since many students are likely to use their phone more and it will be more accessible. The goal for our team is to take over this project from a previous team and build upon the foundation laid by the previous team and further enhance the platform. The previous team first developed the web application using Flutter and Firebase to get feedback from the client. After the web application is built to the standard the client wants, the previous team was planning on using Flutter's multi-platform capabilities to then make it very easy to build a mobile version. So far only the web application has been built and there is still more work to be done on it before starting on the mobile version. Reading the previous team's documentation and code will be important for our team in order to be able to continue to add on to the project. Finishing up the web application is going to be one of the first things that needs to be done and a main focus before our team can start on the mobile version.

This platform has multiple key components that the previous team has implemented. First the previous team has created different user and roles. As of right now they have graduates and faculty roles. If the user hasn't created an account, then it will give the user a form to register them to the platform. If the user is a faculty member, then they will be able to access data analytics and have a heatmap where they can view where other users are located. Another component the previous team implemented was the ability for users to message each other. This allows for faculty members to message each other and coordinate better and for graduate students to get advice from fellow graduates or faculty, and a way to keep in touch with each other. The final major component the previous team implemented was a textbox, image upload, and posting interface. Having the ability for faculty to post will allow everyone to be updated about the program and to coordinate with other members. In the final sprint report provided by the previous team, they have provided our team with future work to be picked up. The future work documented was the ability to have group messaging, user types, admin privileges such as deleting posts, and being able to comment and like posts. Our client has also mentioned the implementation of administrative power or features using the admin's email, having notifications being sent through the application, and adding students as a user to the application. The students that can join this app will be any student in the senior management major or minor or whoever takes the intro course for senior management. The client would also like the status of a student to change to an alumni once the student graduates.

The initial step for our team that the client wants done is to start migrating the website that the previous team hosted on a google server to a domain from WSU to host on. The client and our team will be coordinating with Tony Burt, Director of IT at the Voiland College of Engineering and Architecture (VCEA) to facilitate this transition. The next step for our team is to send out Google Forms to a select group of individuals identified by our client. These individuals will be asked to provide their valuable feedback and opinions on the current website. Their insights will be instrumental in identifying areas for improvement, potential changes, and additional features that can enhance the platform's usability and effectiveness.

Following the collection of feedback from our selected group, our client and project team will conduct a thorough review of the responses. This review process will help us identify common themes, key suggestions, and areas of priority. From the analysis, we will collaboratively establish a new set of project requirements and objectives for the current year, aligning the project with the evolving needs and expectations of our user community. The end

goal of our project is to be able to train the GCISL staff so they can learn how to use the application. The GCISL staff needs to be trained so they can train students on how to use the application.

IV. Client and Stakeholder Identification and Preferences

The primary client for this project is the industry sponsor Darcie Bagott and our mentor Ananth Jillepalli. The product that is being produced will have a specific group of stakeholders; WSU post-graduates who are hoping to connect with others that have graduated from WSU. The clients and stakeholders preference is that the product moves quickly and efficiently, and is able to present the correct and adequate data to the current user. GSCIL (Granger Cobb Institute for Senior Living) is hoping that the way data is presented on this website is improved and that this product will be more accessible to the public.

V. Glossary

Cobb Connect: A website developed by prior students for their capstone project

Cobb Connect : Also our group name

VI. References

"StudentTracker." National Student Clearinghouse, 15 Aug. 2023,

www.studentclearinghouse.org/colleges/studenttracker/.