

# **GCISL Full Stack Application**

## **Project Description and Clarification**

### **Washington State University Granger Cobb Institute of Senior Living**



## **GCISL Team**

Musa Husseini, Tom Arad, Nathan Bunge

# **TABLE OF CONTENTS**

<b>I. Introduction</b>	<b>3</b>
<b>II. Background and Related Work</b>	<b>3</b>
<b>III. Project Overview</b>	<b>4</b>
<b>IV. Client and Stakeholder Identification and Preferences</b>	<b>4</b>
<b>V. Glossary</b>	<b>4</b>
<b>VI. References</b>	<b>4</b>

## **I. Introduction**

This document will provide a description of the project provided by Granger Cobb Institute for Senior Living (GCISL). The document will keep track of all plans from the beginning to the end on the team's progress on the GCISL project. It will keep track of the project overview, background and related work, and client and stakeholder identification.

The GCISL team has been assigned to make a web application and a mobile application that allows alumni to share their career tracks with other alumni, faculty, and students. Each user will be able to post their job history and chat with other users. The project overview section will go into more detail.

The motivation behind this project was the Granger Cobb Institute for Senior Living is a new institution in the school of hospitality looking for a way to stay connected with alumni in the field. They have data of students who have graduated from the hospitality program in the past eleven years and plan to share this application with them so faculty and alumni can reconnect. The GCISL team will provide the faculty with an application that can help connect the school with alumni.

## **II. Background and Related Work**

The Granger Cobb Institute for Senior Living was founded in 2019, with its main goal aiming to provide a better way for senior residents to socialize and be more active. Due to the industry's growing nature the institute is expecting to have a major increase in their program enrollment. As such GCISL is looking for an app which will allow them to track up to date information as well as communicate with their students and alumni. Since the institute is relatively new they do not have any pre existing software applications that could be improved upon or used as a case study for this project. As such most of our learning and resources will come from other applications which implement similar ideas to the ones we have to provide.

Some of our inspiration will derive from successful designs from applications like Facebook, WhatsApp, Discord, and LinkedIn which have key features that our app is aiming to include. They all have the ability to create accounts, post updates, and send messages. As a team, we have past experience working with Flutter and Firebase, so those frameworks would be potential candidates for this project. There is a lot of documentation, pre existing tutorials, and open source projects that we could use as references. These can easily be found on youtube and other online platforms such as github.

## **III. Project Overview**

The goal of the project will be to provide a platform that will allow GCISL graduates and current GCISL facility to stay in touch. This only works when the alumni and faculty are able to use the application easily, which is why our sponsor has expressed the importance of ease of

use for our application. We will aim to make the application as simple as possible, while still satisfying all the objectives outlined by our client.

Since our sponsor wants as many graduates to use the application as possible, she has also requested that we create both a web and mobile application. This will make it as accessible as possible, since users will have the option to use whatever device is easiest for them. This also opens possibilities for mobile notifications for updates and messaging.

We aim to develop the website first using Flutter. This will allow us to build a prototype at high speeds to get feedback from the client. Then, once we have more of the specifics of the sites flushed out, we can very easily port the application to a mobile version using Flutter's multi-platform capabilities.

The first major component of the website that we will need to implement will be creating users and roles. As of now, there will be graduate and faculty roles. Both need to be able to easily create an account using a form, which they can then use whenever they want. Graduates specifically will need a way to easily update their profile, so that faculty can keep track of their career and life status.

Another major component will be posting to the site. Current faculty members will need to be able to post updates about the program, and everyone will need to be able to view them. Not only will this allow graduates to keep up to date with the program, but it will allow faculty members to easily coordinate major events and announcements.

The last feature that our sponsor has highlighted is the ability to message others in the application. Graduates could use the messaging feature to get advice from other graduates and facilities, and current faculty members could use the messaging to coordinate with each other and stay in touch with previous graduates.

Once the website has been created, we will have to find a good domain to host the site on. Our sponsor has suggested using a domain from WSU, which may lower overall costs. Our team will need to communicate with WSU site hosting services to discuss options for hosting the website.

After initial development of the prototype website, we will demo the prototype to our sponsor to get feedback for any changes or additional features that they want to be added. The mobile version of the application will then be addressed. Again, developing the site in Flutter will streamline this process because it allows for multi-platform applications using a single codebase.

The user base for the site will start out small, but would be expected to grow alongside the growth of the Granger program. This makes us lean toward using Firebase as a backend, as it is free to develop and deploy for a small user base, and payments increase as your user base expands. This will need to be discussed further with the client, but it would allow us to develop, demo, and deploy the application for free, and our client would not have to spend any money until the user base is in the hundreds or thousands.

#### **IV. Client and Stakeholder Identification and Preferences**

Our client is Washington State University Granger Cobb Institute of Senior Living and our client will be Darcie Bagott. Mrs. Bagott expects there to be a web and mobile application that can be used by faculty, students, and alumni. She needs there to be a way for users to communicate with each other and post job updates. She also prefers for this application to focus on it being easy to communicate with other users. It was mentioned a lot of their work is based on socializing and communication, so this needs to be a focus when designing the application.

Stakeholders in this project will be the users of the application. The department is relatively new so as of now there are only a few people working in the department, and only Mrs. Bagott is interested in being a part of the application. The needs of our stakeholders will be a functional application that they find user friendly in not only functionality but also interface design.

## **V. Glossary**

**Flutter:** An open source user interface development kit

**Firebase:** A hosting service for applications

**Figma:** A web application used for interface design

**GCISL:** Granger Cobb Institute of Senior Living

**Front End:** The part of the application the user will be seeing and interacting with

**Back End:** The part of the application that runs the logic and processing

**Database:** The part of the application that stores all data

**Full Stack Application:** An application that has front end, back end, and a database working together

## **VI. References**

Google. (n.d.). *Firebase documentation*. Google. Retrieved September 20, 2022, from <https://firebase.google.com/docs>

*Flutter documentation*. Flutter. (n.d.). Retrieved September 20, 2022, from <https://docs.flutter.dev/>