GCISL Full Stack Application

Project Description and Clarification

Washington State University Granger Cobb Institute of Senior Living

GCISL Team

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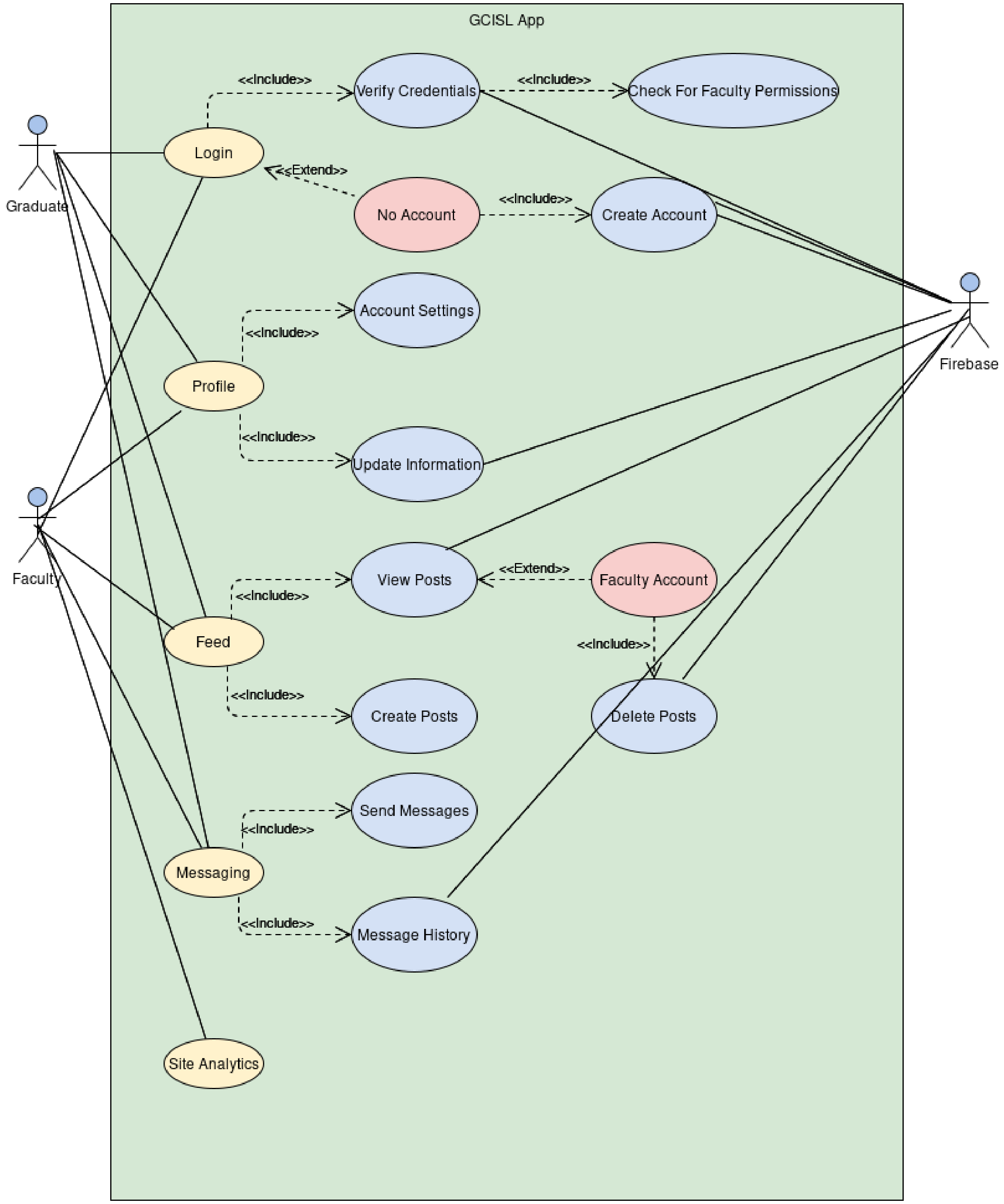
I. Introduction

Our project provided by Granger Cobb Institute for Senior Living (GCISL) has asked for the team to make a web and mobile application. This application will allow faculty, students, and alumni to stay in touch with each other. Users of this application will be able to post job updates, current and past, see other users job updates, and message with any user in the system.

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. System Requirements Specification

II.1. Use Cases



If applicable, provide some major use-cases that illustrate scenarios for using your product[1]. Use cases tell a story about how an end user interacts with the system under a specific set of circumstances. You may illustrate the use-cases with UML diagrams.

- As a graduate, you can fill out a form to create an account (Accounts)
- As a graduate, you can choose to receive updates from the program (Accounts)
- As a graduate, you can update your profile so that faculty can know your career status (Accounts)
- As a graduate, you can message other graduates so you can stay in touch with alumni (Messaging)
- As a graduate, you can message current faculty so you can stay in touch with the program (Messaging)
- As a current faculty member, you can fill out a form to register as faculty. (Accounts)
- As a current faculty member, you can send/post updates so that graduates can be up to date on the program (Posting)
- As a current faculty member, you can message past graduates so you can stay in touch with alumni and get their feedback (Messaging)
- As a current faculty member, you can message other faculty members so you can coordinate program events (Messaging)
- As a current faculty member, you can view past graduate profiles so you track their career status (Accounts)
- As a current faculty member, you can view a summary of the graduates' data so that you can make better decisions on the current program (Analytics)

II.2. Functional Requirements

II.2.1. Accounts

List your requirements for this project module here. Each listed requirement MAY INCLUDE the following items:

Account creation: The system must allow faculty and graduates to create accounts. They must also be able to update their account at any time.

Source: Darcie Bagott - Applies to both current faculty and past graduates

Priority: Level 0: Essential and required functionality

Signing In: The system must allow faculty and graduates to create accounts and sign in. They must also be able to update their account at any time.

Source: Darcie Bagott - Applies to both current faculty and past graduates

Priority: Level 0: Essential and required functionality

[Notification Settings]: The system must allow faculty and graduates to choose their notification settings for their account

Source: Darcie Bagott - Applies to both current faculty and past graduates

Priority: Level 1: Desirable functionality

II.2.2. Posting

[Posting Updates]: The system must allow the faculty and graduates to post updates to the site.

Source: Darcie Bagott - Applies to both current faculty and past graduates

Priority: Level 0: Essential and required functionality

[Posting Announcements]: The system must allow the faculty to post announcements to the site that notify everyone.

Source: Darcie Bagott - Applies to both current faculty and past graduates

Priority: Level 0: Essential and required functionality

II.2.3. Messaging

[Messaging]: The system must allow the faculty and graduates to message each other through the app or website.

Source: Darcie Bagott - Applies to both current faculty and past graduates

Priority: Level 0: Essential and required functionality

II.2.4. Analytics

[Analytics]: The system must allow the faculty to view a summary of data of past graduates

Source: Darcie Bagott - Applies to current faculty

Priority: Level 0: Essential and required functionality

II.3. Non-Functional Requirements

Ease of Use:

Creating an account should be as simple and easy as possible. This will help encourage as many people to use the app as possible.

Scalability:

At first, the system only needs to handle a small number of users. However, as the institute grows, the systems will need to handle a large number of traffic to accommodate for the increased number of graduates and faculty.

WSU Integration:

If possible, the system should be integrated into a WSU domain. This will save costs on custom domains, and may make it easier to access for users.

Maintainability:

This software will be maintained by other developers in the future. The software needs to be well maintained and easy for any new developers to understand and pick up

Compatibility:

Since the product is expected to be a web and mobile application, the software needs to be able to run smoothly on different browsers, operating systems, and devices

III. System Evolution

As time passes software evolution will be required for this project in order for it to stay stable. Since this project is going to be developed from scratch, there will be room for improvement in the future. One major part of our system that will be needing upgrading will be the server as traffic increases. As for now since it is a new application, we anticipate low traffic, hence we will only be needing a low priced package to host. If the application grows in size and traffic, so will the server.

Another part of our system that may need to change in the future could be the front end and back end. As technology quickly evolves our system will have to also. As for now we are using Flutter and Firebase to work with. It will help create a good baseline deliverable quickly, but if this application grows in size the system will need to be updated.

The client also mentioned who after we are done developing the application that they will hire someone to maintain the software. It will be important that we leave our application well documented and open ended so as we pass on this project to other developers they can continue adding and improving the existing code base.

IV. Glossary

UML Use Case Diagram - A visual representation of a system along with its main actors, roles, actions, artifacts, or classes.

Main Actors - A human person or another external system which interacts with the system being modeled

Operating System - A software that provides basic functionality for a computer.

Web Domain - The name of the website.

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

V. References

“Functional vs Non Functional Requirements.” GeeksforGeeks, April 29, 2020. https://www.geeksforgeeks.org/functional-vs-non-functional-requirements/.

“Microsoft.” Microsoft Support. Accessed September 28, 2022. https://support.microsoft.com/en-us/office/create-a-uml-class-diagram-de6be927-8a7b-4a79-ae63-90da8f1a8a6b.

Offutt, Jeff. Overview of software maintenance and Evolution. Accessed September 28, 2022. https://cs.gmu.edu/~offutt/classes/437/maintessays/maintEvolutionOverview.html.