

# Chi Alpha: Christian Fellowship

## Full-stack Mobile Application

*Project Requirements and Specifications*

**Chi Alpha WSU**



**Web Ready**

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## I. Introduction

The intent of this project is to create a resource in the form of a mobile application for Chi Alpha WSU. The mobile app will allow the organization to make announcements, advertise events, a medium for individuals to make donations, and communicate with the organization. The mobile app is intended for the organization to increase their presence and access to and for current members of the fellowship. This document serves as an overview of the intended work for this project.

## II. System Requirements Specification

### II.1 Use Cases

**Story:** Hailey would like to add an announcement to the resource application. Hailey opens the app and logs into the application using an administrator login. The application now shows the ability to add new templated elements to the app, specifically a form to add a new announcement to the application dashboard. Hailey enters the new announcement information into the form and submits for publication. The new announcement is reflected on the announcement dashboard of the application.

**Source:** Vincent Yen

**Story:** A member of the fellowship would like to donate to the organization. The member selects “Giving” from the menu and is taken to the “Giving” page. The member enters their payment information into the third-party payment API and submits. The organization receives the payment that was given by the member.

**Source:** Vincent Yen

**Story:** A member of the fellowship would like to sign up for an ongoing fall retreat event with the organization. The member selects “Events” to view the event page and is able to view the different ongoing events. The member selects the fall retreat event from the event listings. The page displays the form for signing up for the fall retreat. The member enters and submits the pertinent information for the form. The organization receives the form with the needed information from the member and is aware that the member’s interest in the event.

**Source:** Vincent Yen

### II.2. Functional Requirements

#### II.2.1 Announcement Display

The application should allow adding and displaying announcements from the organization.

**Source:** Hailey Galletly. **Priority:** 0

#### II.2.2 Event Display

The application should allow adding and displaying events for signing up and viewing.

**Source:** Hailey Galletly. **Priority:** 0

### **II.2.3 Donation Medium**

The application should allow a medium for donations from any individual who wishes to give.

**Source:** Hailey Galletly. **Priority:** 0

### **II.2.4 Organizational Information**

The application should show information about the organization and its staff members.

**Source:** Hailey Galletly. **Priority:** 0

### **II.2.5 User Login**

The application should allow the user to login. **Source:** Hailey Galletly. **Priority:** 1

### **II.2.6 Peer-to-peer communication**

The application should allow other users to communicate with each other that are using the application. **Source:** Hailey Galletly. **Priority:** 1

### **II.2.7 Database and API middleware**

An API should provide a medium between the application and the database which stores user information and media. **Source:** Vincent Yen. **Priority:** 1

### **II.2.8 User Permissions**

The application should differentiate general users from admin users and limit certain access permissions to only the admin. **Source:** Vincent Yen. **Priority:** 1

## **II.3 Non-Functional Requirements**

### **II.3.1 Standards**

The mobile application should adhere to federal standards of accessibility. **Source:** Project Advisor. **Priority:** 1

### **II.3.2 User Experience**

The application should be intuitive for both general users and the administrators. **Source:** Hailey Galletly. **Priority:** 1

### **II.3.3 Application Flexibility**

The application should be easily maintained by administrators who have little to no technical experience with mobile applications. **Source:** Hailey Galletly. **Priority:** 1

### **II.3.4 Screen Size Scaling**

All elements that are meant to be displayed on the screen should be visible on any mobile device. **Source:** Vincent Yen. **Priority:** 1

### II.3.5 Processing Performance

Increasing amounts of content in the application should not hinder the performance of the loading and runtimes of the application. **Source:** Vincent Yen. **Priority:** 1

### II.3.6 Network Performance

Increasing traffic on the application should not hinder the performance of the application. **Source:** Vincent Yen. **Priority:** 2

## III. System Evolution

The nature of this project is such that once it is built it should not have to be updated since the design requires that it allows for the media administrator(s) to add content without the need for a technical mobile developer to make updates to the code base. Given this nature, the mobile application provided for the media administrator(s) must be intuitive for any general user and should anticipate as many user experience issues that these stakeholders might experience with this product. The major risk of this project is that the platform runs into operational errors or new requirements surface when using the final product that was not revealed in the building process that requires updates from a technical mobile developer.

Furthermore, it is possible that if the APIs integrated with the application undergoes an update that is incompatible with the product it may render the website or simply the APIs unusable. These updates may also occur during the development process which may render the current progress of the development null, requiring an overhaul of the work already done.

## IV. Glossary

API: Stands for application programming interface. A third-party application that may be used in conjunction with another application for its specific services [1].

## V. References

- [1] *Application Programming Interface (API)*. Accessed: Sep 18, 2022. [Online]. Available: <https://www.ibm.com/cloud/learn/api>