**FamilyShare: Project Proposal**

Prepared by Scott Nicholes

*Version 2 – October 13, 2018*

**Contact Information**

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**Abstract**

Through the FamilyShare mobile application, family members can share the work of their ancestors with one another. The application makes the experience of sharing and doing the work for ancestors an experience that binds families together.

**Background**

This project originated from the problem of sharing temple work with others. I currently have the names of many ancestors waiting for their temple work to be done. Another family member of mine shared with me the idea of creating a central repository for family members to share the temple work they have found. In this way, it would be more convenient for members of the family who don’t have ancestors to do work for to accept work prepared by others. Having a central repository of ancestors would also help everyone’s work to be done faster. Instead of one family member having many names to do, all the family members would have access.

Beyond organizing Temple work in families, it is my hope that the FamilyShare app will help bring living family members closer together. Elder Dale E. Renlund enumerated some blessings of family history work, “…Increased joy through an increased ability to feel the love of the Lord; Increased family blessings, no matter our current, past, or future family situation or how imperfect our family tree may be; Increased love and appreciation for ancestors and living relatives, so we no longer feel alone…” (“Family History and Temple Work: Sealing and Healing”, April 2018 General Conference). I felt these blessings as my Aunt shared with me an ancestor who she found. She put her trust and confidence in me that I would do the work. I felt increased love, Joy and a connection not only to the ancestor who I performed the work for, but to my Aunt and my wife’s side of the family, from which my Aunt came from. It is my hope that by making the FamilyShare mobile application, I will help many in our family experience this same blessing. I imagine great blessings being poured out upon the families and groups that decide to engage in this family sharing method of performing temple work.

The current system of sharing the temple work for ancestors operates by way of email and the FamilySearch website. When a family member wants to share the temple work of ancestors, the family member logs on to FamilySearch.org, selects the ancestors and clicks a button to send an email inviting another person to accept the ancestors’ temple work. The other person then views the email and accepts the work. The benefit of this system is that names are shared only between two people. Because of the one-on-one nature of this system, whoever receives the temple work feels a greater urgency to get it done, rather than having the temple work waiting in someone else’s repository. This benefit also presents the drawback that only the person you share the names with can accept the names. The FamilyShare application will make it possible for any family member to see all the names that another family member has left available to be taken to the temple.

A year ago, I created a system that shared ancestors with family members. I created a chrome extension that scraped the name and family search id of an ancestor and then posted that information to an online Trello board. The Trello board acted as a central hub for family members. When a family member wanted to go to the Temple, that family member logged on to Trello and viewed the ancestors placed in an “Available” list. They would drag ancestors they would like to do work for into the “Requested” list. When that would happen, whoever made the ancestor available was notified via cell phone or email that a family member wanted to do a name. The family member who received the notification logged in to FamilySearch and shared the name with the other family member.

The FamilyShare app will help families perform the temple work for their ancestors faster and create opportunities for families to become more closely knit together by providing an open repository for families to share and accept temple work.

**Description**

FamilyShare is a mobile application that allows temple work to be shared between family or other group members. The application will be developed for the iPhone. It will be an application that will be available through the app store eventually. For the scope of this senior project, I will control the distribution to my family members. The application will be used by multiple users on multiple smartphone devices in various locations of the earth. A central server will facilitate the exchange of data between devices. The FamilySearch API will be used to make calls to their servers to actually make the changes to reservation data.

The target audiences for this application will include:

* Members of the Church of Jesus Christ of Latter-Day Saints
* Families
* Church Groups

The age of a target user would range from a teenager (12-13 years old) to a grandparent (70+ years old).

A sample workflow:

Sue and her husband are on their way out of the house to go to the Temple

tonight. Sue would like to perform work for ancestors from her family, but she does not have any names from her family on her reserved list. So, Sue opens the FamilyShare app and is presented with a list of ancestors that her family has shared

with each other. Sue chooses the top male and female ancestor and then

presses a button to take these ancestors to the Temple. The app generates a code Temple Workers can use to print the ancestors’ temple work. Sue and her

husband then drive to the Temple ready to perform their ancestors work.

**Significance**

This app represents a major effort in creating a large-scale mobile application including:

* Creating a mobile application GUI
* Creating methods for inserting records in a database
* Using the FamilySearch API to manipulate records
* Using or creating a server
* Using a full stack mobile workflow

Aside from technical topics that make this project significant, the project will have an impact on families engaged in family history work. Also, this project will help build my resume by providing experience in developing a major mobile application. Based on the above reasons, this project will be valuable and require a full semester’s work load.

**New Computer Science Concepts**

This project provides learning frontiers I have yet to explore. Some are brand-new, while others are developments of current knowledge. Selections are:

* Accessing a remote database from a mobile application
* Further mastery of the ViewController and iOS lifecycle
* Developing a server from which many devices may access
* Saving and retrieving PDF data from a database
* Writing a specification that can be added upon
* Interviewing members of a target audience to elicit requirements
* Deploying a mobile application on the iOS App Store to select users

**Interestingness**

I love family history work. For a long time, I have been searching and doing temple work for my ancestors. I have seen how family history work has blessed my own and my family’s life. Even as I have begun to work on this project, I have seen its potential. My family eagerly awaits the app’s completion and their ability to use it. I and my family members believe that this project will really help us all to feel the blessings of family history work in our lives. These reasons are the main motivating factors for me to complete this project.

**Tasks and Schedule**

**Vision**

An application that can share and receive temple work is created. Through this application, families are helped in coordinating and performing the work of salvation for their ancestors.

**Goals**

* Decide the method of how ancestor’s temple work will be shared and received
* Decide upon a solution for the server
* Develop the GUI for sharing and receiving ancestor’s temple work
* Send an ancestor’s temple work to the database
* Receive an ancestor’s temple work from the database
* Develop the server program(s) to receive and share names
* Put together all components
* Test application with users from the target audience

**Tasks**

**Research and decide the method of how to share and receive temple work for ancestors**

**Deadline:** Wednesday, October 3rd

**Estimated Hours Required:** 5

**Decide what server solution I should use**

**Deadline:** Friday, October 5th

**Estimated Hours Required:** 5

**Create a visual Specification for the Sharing feature of the application**

**Deadline:** Friday, October 12th

**Estimated Hours Required:** 9

**Redesign visual aspects of existing application to fit new method**

**Deadline:** Wednesday, October 17th

**Estimated Hours Required:** 9

**Set up the database and run simple save/retrieve tests**

**Deadline:** Friday, October 19th

**Estimated Hours Required:** 4

**Save an ancestor’s temple work to the database**

**Deadline:** Friday, October 26th

**Estimated Hours Required:** 9

**Receive an ancestor’s temple work from the database**

**Deadline:** Tuesday, October 30th

**Estimated Hours Required:** 5

**Make Software Specification**

**Deadline:** Saturday, November 3rd

**Estimated Hours Required:** 18

**Make GUI for sharing an ancestor’s temple work**

**Deadline:** Friday, November 9th

**Estimated Hours Required:** 9

**Make GUI for receiving an ancestor’s temple work**

**Deadline:** Wednesday, November 14th

**Estimated Hours Required:** 5

**Test and debug sharing and receiving an ancestor’s temple work (server-side)**

**Deadline:** Saturday, November 17th

**Estimated Hours Required:** 5

**Test and debug sharing and receiving an ancestor’s temple work (application-side)**

**Deadline:** Wednesday, November 14th

**Estimated Hours Required:** 5

**Debug application as a whole**

**Deadline:** Friday, November 23rd

**Estimated Hours Required:** 12

**Research how to share application with select users**

**Deadline:** Friday, November 30th

**Estimated Hours Required:** 9

**Release testing version to select users and collect usability data**

**Deadline:** Friday, December 7th

**Estimated Hours Required:** 9

**Revise program, addressing issues of usability study**

**Deadline:** Friday, December 14th

**Estimated Hours Required:** 11

**Deliver final product**

**Deadline:** Friday, December 21st

**Estimated Hours Required:** 5

**Total Estimated Hours of Project: 134**

**Resources**

The main resources for this project are:

* Macintosh Computer
* XCode IDE
* Swift Programming Language
* Firebase or other online server hosting service
* FamilySearch API
* At least 2 iPhones
* At least 2 members of the target audience
* A camera (for taking pictures of temple cards)
* Apple App Store
* USB Cable (for debugging and installation)

Of note is the FamilySearch API. Currently, I am discussing with teachers about the feasibility of using the FamilySearch API for this project. It is my goal to use the API if it is the most streamlined and best solution for sharing and receiving ancestor’s temple work. However, I may use another method, such as saving pictures of temple cards to a database.