

Project RED Pony

Presentation Handbook

Daniel Kim
Daniel Olivera
Jared Coleman
Mario Lopez
Viet Le

Table of Contents

Vision Document	2
Project plan	16
UML	27
Flowchart	29
Use-cases	37
Test-cases	73
User Manual	92
UI Layout	99

Vision Document

1. Introduction

The goal of Project: Red Pony is to develop a framework, called The Astral Framework, that allows users to share files and limit their access by geolocation and time. Project: Red Pony will also involve the development of an application, called Phylo, to demonstrate the framework. Project: Red Pony is a code-name for the project as a whole.

1.1 Purpose

The purpose of this document is to collect, analyze, and define high-level needs and features of the Project: Red Pony. It focuses on the capabilities needed by stakeholders and target users, and the reasons behind these needs. The details of how the Project: Red Pony fulfills these needs are detailed in the use-case and supplementary specifications.

1.2 Scope

This document refers only to Project: Red Pony itself and is not associated with any other programs, projects, services, or applications.

1.3 Definitions, Acronyms, and Abbreviations

Definitions:

- Geolocation : Geographical location of a given object.

1.4 Overview

This topics covered in this document include positioning, stakeholder and user descriptions, product overview, product features, constraints, quality range, precedence and priority, other product requirements, and documentation requirements.

2. Positioning

2.1 Business Opportunity

The Astral Framework allows for physical access restrictions on digital files. Secondary restrictions such as user identity, time constraints, and quantity limitations can be enforced by applications that use the framework. The idea behind these features is to, as much as possible, tie file sharing to the real physical world.

2.2 Problem Statement

Currently there is very little support for sharing files at specific locations and even less for using location to limit their access. Because humans live in a three-dimensional physical world, social media services are extremely limited by their lack of a physical aspect. A successful solution will provide a social file-sharing network that connects physical and virtual environments.

2.3 Product Position Statement

For the social media user who has ever noticed the pitfalls in uploading files to a purely virtual environment, Red Pony enforces strict location and other access restrictions. Unlike other social networks and file-sharing services, Red Pony gives a physical aspect to files uploaded to a digital world.

3. Stakeholder and User Descriptions

The key stakeholder involved in this project is Professor Anthony Giacalone. This product will be used to assess how well we are able to apply the computer science and software engineering skills gained from our education at California State University, Long Beach. Other stakeholders include the software development team that will use their knowledge gained throughout their engineering careers to develop a well functioning application and the customer base that have downloaded this application for its services.

3.1 Market Demographics

No member of our team is part of any organization and we do not have any reputation in the Mobile Application Market. Our goal is to create an application using a variety of software development tools. Our product will be free so that customers can download it from their mobile device application store and begin using it immediately.

3.2 Stakeholder Summary

Name : Software Developer

Represents : The primary leader in the creation of the software project

Role: Responsible for the design and implementation of the overall system.

Name : Professor

Represents : The primary evaluator of the software project

Role: Responsible for the final evaluation of the software project and implementation of our educational skill set.

3.3 User Summary

Name: Mobile Device User

Description: The end user who will use the system to share and access files. The user's individual purpose for sharing and accessing files is irrelevant to the kind of user they are.

Stakeholder: Represented by the software developers

3.4 User Environment

Project: Red Pony will be usable by people of any age who are capable of using a mobile device. Environmental constraints force users to have an internet connection when running the application. Our software requires that the user possess either an iPhone or Android-compatible device.

3.5 Stakeholder Profiles

3.5.1 Software Developer

Representatives	Daniel Olivera, Mario Lopez, Viet Le, Jared Coleman, Daniel Kim
Description	These are the software developers: the people in charge of creating and deploying Project: Red Pony
Type	Student
Responsibilities	To develop Project: Red Pony
Success Criteria	Success is achieved when the deployed project is able to accurately provide all of the necessary features for Project: Red Pony

Involvement	The software developers are involved in the creating and deploying Project: Red Pony
Deliverables	None
Comments / Issues	None

3.5.2 Professor

Representative	Anthony Giacalone
Description	The person in charge of the final evaluation of the software project
Type	Professor
Responsibilities	To evaluate the end project.
Success Criteria	Success is achieved when Project: Red Pony accurately depicts the features as necessary for the creation of project.
Involvement	The professor is in charge of keeping the students on task.
Deliverables	None
Comments / Issues	None

3.5.3 Users

Representative	Any user
-----------------------	----------

Description	The person who depends on the service to accomplish tasks
Type	User
Responsibilities	To use the product as intended to be used
Success Criteria	Success is achieved when Project: Red Pony if users can easily use all features described in this document.
Involvement	The user uses the app and potentially provides feedback for its improvement.
Deliverables	None
Comments / Issues	None

3.6 User Profiles

3.6.1 Mobile Device Users

Representative	Users interested in using an application to share and access files that are available based on their geographical location.
Description	This is a user that may use the application for both casual and business purposes.
Type	Mobile Device User
Responsibilities	To maintain an updated version of iOS or Android Operating System
Success Criteria	Success is achieved if users are able to easily use all features described in this document.
Involvement	None.

Deliverables	None.
Comments / Issues	None.

3.7 Key Stakeholder or User Needs

Need	Priority	Concerns	Current Solution	Proposed Solutions
Share files	High	Allow users to share files at any given geolocation	See proposed	To provide an interface that allows a user to share a file at their current location and set its access restrictions.
Access files	High	Allow users to access files at any given location, provided they are authorized to do so	See proposed	To provide an interface that allows a user to access files at a given location. Access should be granted if and only if the user meets all access criteria for a given file.
User friendly interface	High	Simple and intuitive layout for users to navigate within the game	See proposed	Aim to create icons and navigation tools easy to find and recognizable. Organize application options in an intuitive and aesthetically pleasing way.

3.8 Alternatives and Competition

To better enforce security, the application proposed in Project: Red Pony will only be available on the most popular mobile phone operating systems, iOS and Android. There will be no alternatives. Currently, there is very little competition to this exact kind of application. There are, however, many simpler file-sharing services available. These services, while more viable for some users, will not be considered true competition because they do not offer the kind of access restrictions Project: Red Pony plans to offer.

3.8.1 Dropbox

As one of the first social file-sharing applications, dropbox remains extremely popular to this day. While dropbox is quite useful, and does offer many of the access restrictions posed in Project: Red Pony, it falls short in providing no access restriction based on location. Other similar social file-sharing services include Google Drive, Microsoft OneDrive, Sync, and many more.

3.8.2 WeTransfer

The WeTransfer service is useful in securely and somewhat anonymously transferring large files. Just as in previously discussed alternatives however, there is not access restriction based on location.

3.8.3 Snapchat

Snapchat is a social media application for sending messages and photos that “disappear” within a time constraint. While this service encapsulates a huge market of users our approach, while it may have overlapping features, is more focused on file transfer in many formats. This would include geolocation implementations which would give our software value beyond a social media platform.

4. Product Overview

4.1 Product Perspective

Project: Red Pony aims to create a product that is independent and self-sustained.

4.2 Summary of Capabilities

Customer Benefit	Supporting Features
File Security	Strong enforcement of file access restrictions and various cybersecurity measures, including encryption.
Free	The application will be completely free for all users.
File Sharing	Players will be able to share files quickly and easily.

4.3 Assumptions and Dependencies

iOS users should have a device supporting iOS 9.3 or higher while Android users' phones should be updated to work with a API 21 or later.

4.4 Licensing and Installation

The product will be available for installation on the apple app store and google play store. Product will be licensed under the Google Play Store License which considers a user to be licensed if the user is a recorded purchaser of the software application on Android. On iOS phones, our applications will be under the Licensed Application End User License Agreement which every user will have to accept prior to the usage of Project: Red Pony.

5. Product Features

Project: Red Pony will include multiple features that allows files to be uploaded smoothly that will contribute to a positive user experience.

5.1 Fully functional application

A working application that allows users to upload and download files.

5.2 Limiting Access

The files will allows users to restrict files through various means including but not limited to geolocation, user identity, time, and quantity.

5.3 User Friendly Interface

A user friendly interface that allows users to efficiently and smoothly navigate the application in order to complete their intended task.

5.4 Personal user accounts and log-in capability

User accounts allow for easier file-sharing for users, stricter access limitations, and provide accountability.

5.5 Third party login capability

Users will be able to log in using third party login software in order to allow for easier account creation. (ex. Sign in using google)

6. Constraints

6.1 Usability

Product should feature organized navigation tools, an intuitive interface, and an aesthetically pleasing design while providing all application features described in this document.

6.2 User encountered circumstances

The sharing of corrupted, illegal, or otherwise malicious material can affect the experience of other users.

6.3 Performance

Performance of an internet-connected application such as the one proposed in Project: Red Pony is highly dependant on server uptimes and networking limitations (signal strength, bandwidth, latency, etc.)

6.4 Bug report system

Bugs can be reported as issues on GitHub directly to the developers through the customer support email.

7. Quality Ranges

First and foremost, shared files should only be accessible by authorized users. The service should also be able to support many users uploading and accessing files simultaneously. Application responsiveness should always be high and availability delays should be kept to a minimum.

8. Precedence and Priority

Priority 1 (High)	5.1, 5.2, 5.4
Priority 2 (Moderate)	5.3
Priority 3 (Low)	5.5

9. Other Product Requirements

9.1 Applicable Standards

Project: Red Pony is an application that uses the internet and is installable by both iOS and Android users.

9.2 System Requirements

Android Users' devices must be updated to an API level equal to or higher than 21 while iOS device users should have a device supporting a version of iOS 9.3 or higher.

9.3 Performance Requirements

Mobile devices must have enough storage and available system memory to run the application without any performance issues. User must allow the mobile device to detect their current location while supporting a stable internet connection.

9.4 Environmental Requirements

Users must be able to connect to the internet and have location services enabled.

10 Feature Attributes

10.1 Status

Proposed	<ul style="list-style-type: none">• Phone number authentication• Flagging• Security Via:<ul style="list-style-type: none">○ Third-Party login○ File access restriction through:○ Geolocation○ Tokens○ Time/Quantity limits○ Altitude• Dynamic file locations• Creation of file threads• Location-based notification• Real time database connection• Built in database of physical locations
Approved	<ul style="list-style-type: none">• Phone number authentication

	<ul style="list-style-type: none"> • Flagging • Security Via: <ul style="list-style-type: none"> ○ Third-Party login • File access restriction through: <ul style="list-style-type: none"> ○ Geolocation ○ Tokens ○ Time/Quantity limits ○ Altitude • Dynamic file locations • Creation of file threads • Location-based notification
Incorporated	<ul style="list-style-type: none"> • Flagging • File access restriction through: <ul style="list-style-type: none"> ○ Geolocation ○ Time/Quantity limits • Creation of file threads • Location-based notification

10.2 Benefit

Critical	Users must be able to create an account that has the capability of sharing and accessing files in order for the application to function as intended. Users should be able to restrict the files based on varying criteria.
Important	Having an application that is visually appealing and easy to use is important because the application requires the users to navigate it constantly in order to complete their intended tasks.
Useful	Third party account creation is not a necessity but a quality of life feature.

10.3 Effort

This project requires the developers to research, program, and field test the created application. Success will require months of proper planning and integration.

10.4 Risk

Risks involve the management of time, specific project due dates, and secure handling of user files including storage and deletion. Any delay in the software process might further delay other necessary processes, propagating to affect later project due dates. The risk of time management is categorized as a high risk as well as the security of user file manipulation.

10.5 Stability

Certain features of the application may change depending on the team's understanding of the importance of certain components. For example, "accounts and log-in" may gain a higher priority amongst the list of components that will be present in the final application, changing the overall build and sequence of activity.

10.6 Target Release

The target release date for the initial version of our product is set to be early May. The main goal by then is to have an accurate representation of the arranged components. Excess time and resources will be allocated to other features.

10.7 Assigned To

Name : Daniel Kim

Position : Leader/ UI Lead

Responsibility: Communicate with the project overseer and provide direction to team members while managing the development of the User Interface.

Name: Viet Le

Position: Security and Privacy

Responsibility: Oversees and implements security measures to ensure user confidentiality, data integrity, and service availability.

Name: Mario Lopez

Position: Database Management

Responsibility: Database design, implementation, and administrative responsibilities.

Name: Jared Coleman

Position: System Design

Responsibility: Management of the overall build and compatibility of components.

Name: Daniel Olivera

Position: Testing and Quality Assurance

Responsibility: Verification of overall test case succession rates and bug tracking.

Name: Anthony Giacalone

Position: Project Overseer

Responsibility: Supervise the progress of the project throughout the semester.

Project Plan

Project: Red Pony Plan

Introduction

Project Scope

Project: Red Pony will consist of a framework (The Astral Framework) and a file-sharing social network application (Phylo) that uses the framework to show its applicability. The Astral Framework aims to give physical-world restrictions, like time and place, to files uploaded in a digital environment. Phylo will use the framework and show its applicability.

Framework Inputs

The framework requires the following inputs:

- For retrieving:
 - Location: User's current location
 - Time: Current time at user's location
 - ID: User ID
- For uploading:
 - Location: location restriction of file
 - Radius: radius for file accessibility
 - Time: time restriction for file
 - Data: Data to be stored

Application Inputs

To use the application, the user must provide various inputs:

- In order to access this application:
 - Create an account providing a username, email, and a password
 - Use a third party account to log in
- In order to use this application:
 - Users must give the app permission to use location services
 - To upload files users must also give the app permission to access files and photos stored on the phone.
 - Users can optionally give permission to use the camera.
 - Users can optionally allow push notifications

Framework Functionalities

In order for the framework will be responsible for:

- File Management

- Manage database of all files
- Account Management
 - Manage database of all users and their information

Application Functionalities

- Location Services
 - Constantly track user location
 - Send location to server for file retrieval
- File Sharing
 - Allow the user to upload files
 - Allow user to view nearby files
 - Allow user to create rooms
 - Allow user to join rooms
 - Upload and download files to rooms
 - Comment section in rooms
- User Interface
 - Provide an interface for account creation/login
 - Provide an interface for file sharing
 - Uploading a new file
 - Setting restrictions
 - Downloading available files
 - View available files on a map
 - Provide an interface for user settings

Major Software Functions

- *File and Account Management*
 - MongoDB: User accounts and uploaded files will be stored and managed with MongoDB, a noSQL cloud-hosted database as a service tool.
- *Hosting*
 - Google Cloud: Application backend will be hosted on Google Cloud.
- *User Interface*
 - Ionic: A free, open-source, and cross-platform framework for developing mobile applications with web technologies like AngularJS, Javascript, Typescript, and HTML5.
- *Location Services*
 - Ionic-Native Geolocation: Ionic comes with a plugin for geolocation that provides latitude, longitude, altitude (and its accuracy), heading, and speed.

Performance/Behavior Issues

Performance will be directly related to internet connection.

Android Users' devices must be updated to an API level equal to or higher than 21 while iOS device users should have a device supporting a version of iOS 9.3 or higher.

Management and Technical Constraints

Deadlines

Fall 2017:

- Date - 10/2/2017
 - Project Plan
- Date - 10/9/2017
 - UML Diagram
- Date - 10/16/2017
 - Flowchart
- Date - 11/13/2017
 - Use Cases
- Date - 11/13/2017
 - Test Plan
- Date - 11/27/2017
 - User Interface Layout
- Date - 12/4/2017
 - User Manual
- Date - 12/4/2017
 - Presentation and Application Tutorial

Spring 2018:

- Date - 2/19/2018
 - Geolocation services
- Date - 2/26/2018
 - File Sharing
- Date - 3/5/2018
 - User Accounts
- Date - 3/19/2018
 - Finished framework
- Date - 4/16/2018
 - User Interface
- Date - 4/30/2018
 - Finished application
- Date - 5/7/2018

- Presentation

The design and implementation will be completed according to the prototyping model in *Fig 1*.

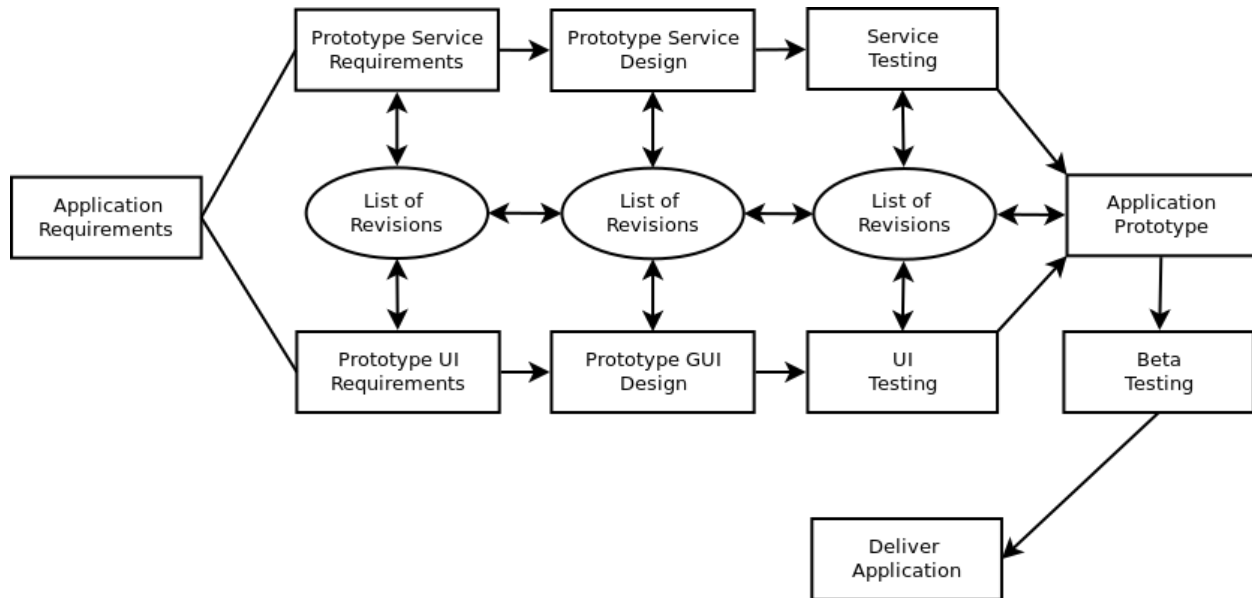


Fig 1: prototype model

Project Estimates

Project Resources

The team in charge of creating this application is comprised of 5 computer science students. Each student will be required to assume multiple roles:

Required Staff

- UI Designer
- Security and Privacy Assurers
- Programmer/Coder
- Graphic Designer
- Quality Assurance Management
- Software Testing
- System Designer
- Documenter
- Database Administrator

Risk Management

Project Risks

- Late software delivery
- Inexperience with development tools
- Technology will not meet expectations
- Deviation from software engineering standards
- Poor comments in code

Risk Table

Risks	Probability	Impact
Late software delivery	70%	1
Inexperience with development tools	70%	2
Technology will not meet expectations	20%	2
Deviation from software engineering standards	15%	3
Poor comments in code	10%	4

Overview of Risk Mitigation, Monitoring, and Management (RMMM)

Risk will be mitigated through thorough testing and documentation. If any risk is found, a strong method will be determined to find the best course of action to take if the risk occurs. The Requirements Specification and the System Specification will be analyzed to find any risk that may happen as a cause of this software. We will create predetermined paths and directions to follow when attempting to manage a risk.

Project Schedule

Project Task Set

Process Model

The design and implementation will be completed according the prototyping model in *Fig 1*.

Framework Activities

- Planning and Design
- Risk Analysis
- Programming
- Testing
- Client Feedback

Task Set

- Framework construction
- User Interface Construction

- Testing
- User manual construction
- Application construction

List of Deliverables (In order of Importance from the Top)

Documentation

Project Plan
Flowchart and UML Diagram
Use Cases
Test Plan
User manual and User Interface Layout

Code

Framework
User Interface
Online account profiles
Application

Functional Decomposition

Framework

- Account creation
- File uploading
- File downloading
- File querying
- User querying

User interface

- Account creation interface
- File query interface
- Map interface

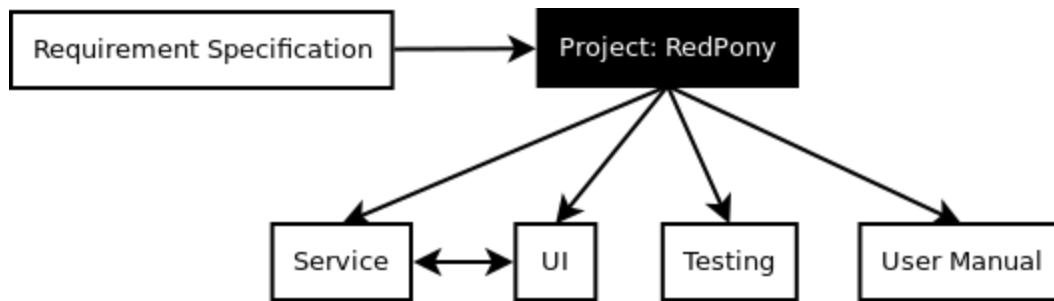
Testing Task Breakdown

- Test file querying
- Test account creation
- UI user-friendliness
- UI aesthetic (smoothness of transitions, appealing design, etc.)

User Manual Task Breakdown

- Interface manual construction
- OS requirements construction
- FAQ construction
- Manual construction

Task Network

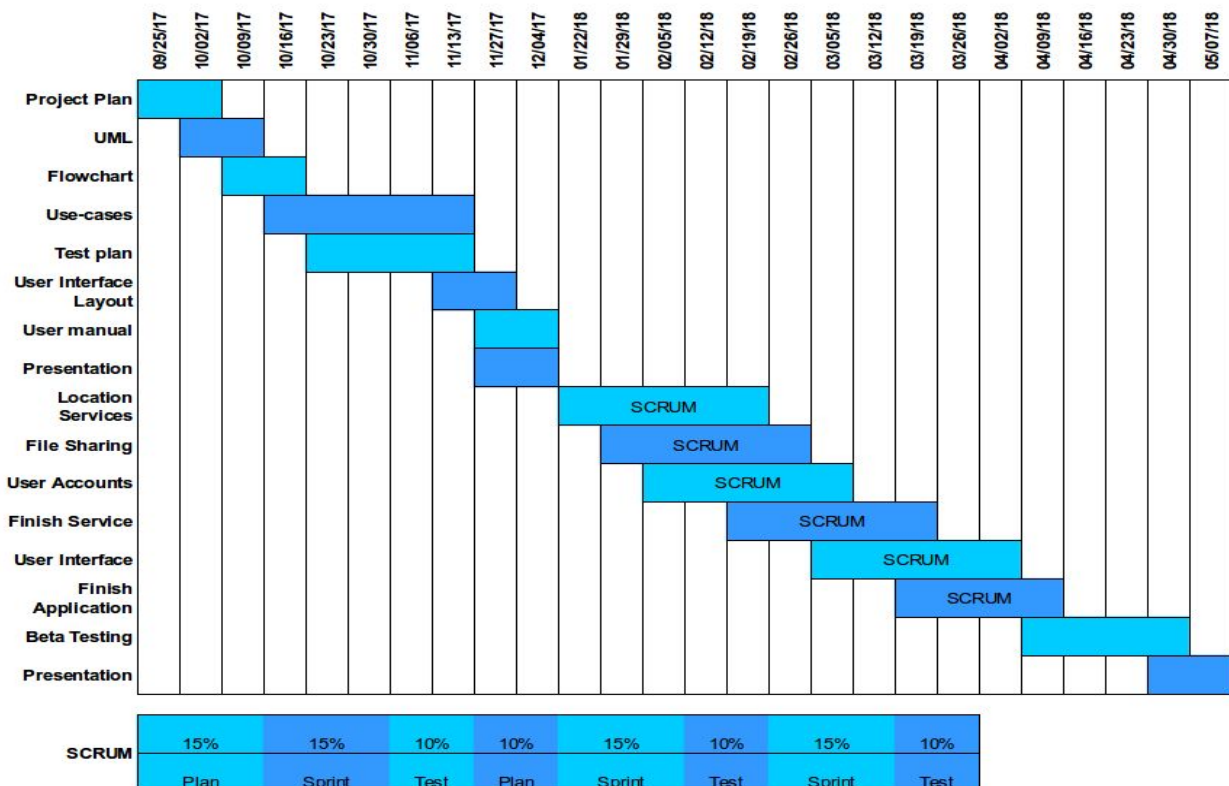


Software Methodology

Scrum

- Plan: agree on goals for sprint
 - Weekly meetings
- Sprint: Coding sprint with well defined goals and requirements
- Test: Test code from sprinting phase and use results for next plan/sprint phase

Timeline Chart (Estimate)



Team Structure

The Project: Red Pony team will use the Egoless Democratic Model for team structuring:

- The Egoless Democratic Model states that every goal is set by a consensus between team members. Every member's input will be taken to account for every major decision and group leadership will rotate depending on the specific skill set of individual group members.

Role Definitions

Daniel Olivera

Software Tester:

Runs and validates the test cases to ensure functionality.

Quality Assurance Management:

Confirms the application works as described and is functionally complete.

Programmer/Coder:

Helps in the development of the application through coding

Documentation:

Updates documentation throughout the life of the project.

Daniel Kim

User Interface Designer:

Oversees the creation of the UI. In charge of design and implementation.

Programmer/Coder:

Helps in the development of the application through coding.

Documentation:

Updates documentation throughout the life of the project.

Jared Coleman

System Designer:

Creates the backend of the platform on which the application will run. Ensures all parts of the framework and application backend work as a single system.

Programmer/Coder:

Helps in the development of the application through coding

Documentation:

Updates documentation throughout the life of the project.

Mario Lopez

Database Management:

Creates and Maintains the database used to store user's files and makes sure it integrates seamlessly with the application.

Programmer/Coder:

Helps in the development of the application through coding

Documentation:

Updates documentation throughout the life of the project.

Viet Le

Security and Privacy Administrator:

Handles all the security and privacy concerns with the framework and application.

Ensures encryption protocols are up to industry standards.

Programmer/Coder:

Helps in the development of the application through coding

Documentation:

Updates documentation throughout the life of the project.

Management Reporting and Communication

Mechanisms for Progress Reporting

Progress reporting will be done through the use of GitHub and its notification system along with the use of Slack and its tools.

Mechanisms for Intra/Inter Team Communication

Team members will meet up twice a week following class lectures to ask any questions and discuss the project amongst each other. Extra meetings will be conducted depending on the importance of the task the team is currently handling at the moment. Outside of face-to-face meetings, team members will use the Slack software tool to communicate to each other about anything pertaining to the project.

Tracking and Control Mechanisms

Quality Assurance and Control

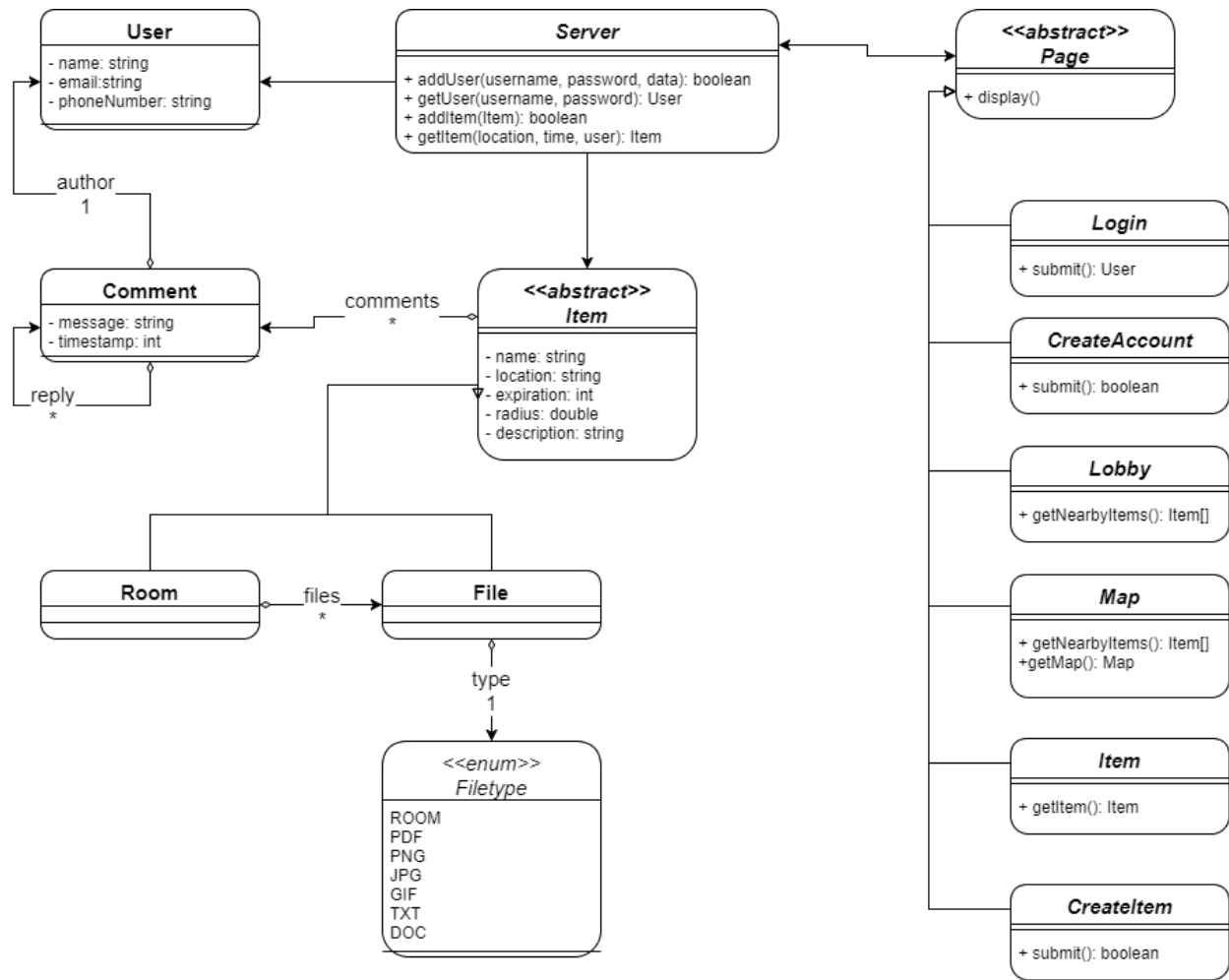
Team members will continuously monitor each other's work to ensure that the product does not deviate far from the original design specifications. Any deviations that occur and are spotted will be brought to the attention of the involved team members. Additionally, testing will be done throughout the development stage to recognize any defects in the design or implementation.

Change Management and Control

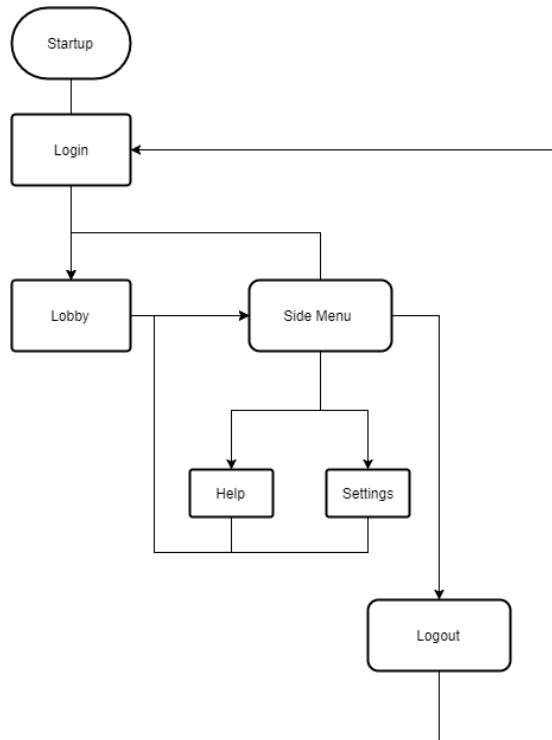
Management will be controlled through the use of GitHub and its version control management system. Each branch to be merged into the origin repository will have to be confirmed by multiple or all teammates depending on the importance of the item and its

impact on the software. Team members will fetch and merge in the changes from another user's repository to thoroughly test the implementation before the addition into the server's main branch. The goal is to minimize unnecessary backtracking so that our product can be developed in a timely manner.

UML

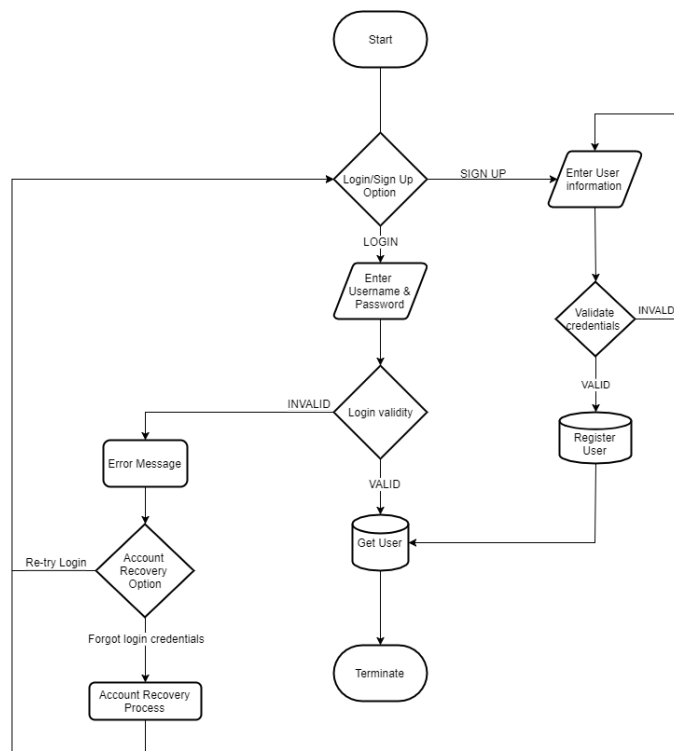


Flowchart



Menu

On start up of the mobile application the user will be prompted to log in. After successfully logging in the user will enter the lobby where they will have a sidebar button (Hamburger button) which will have the options to log out, navigate to the Help page or Settings page. If the user selects to sign out they will be sent back to the login page.



Login

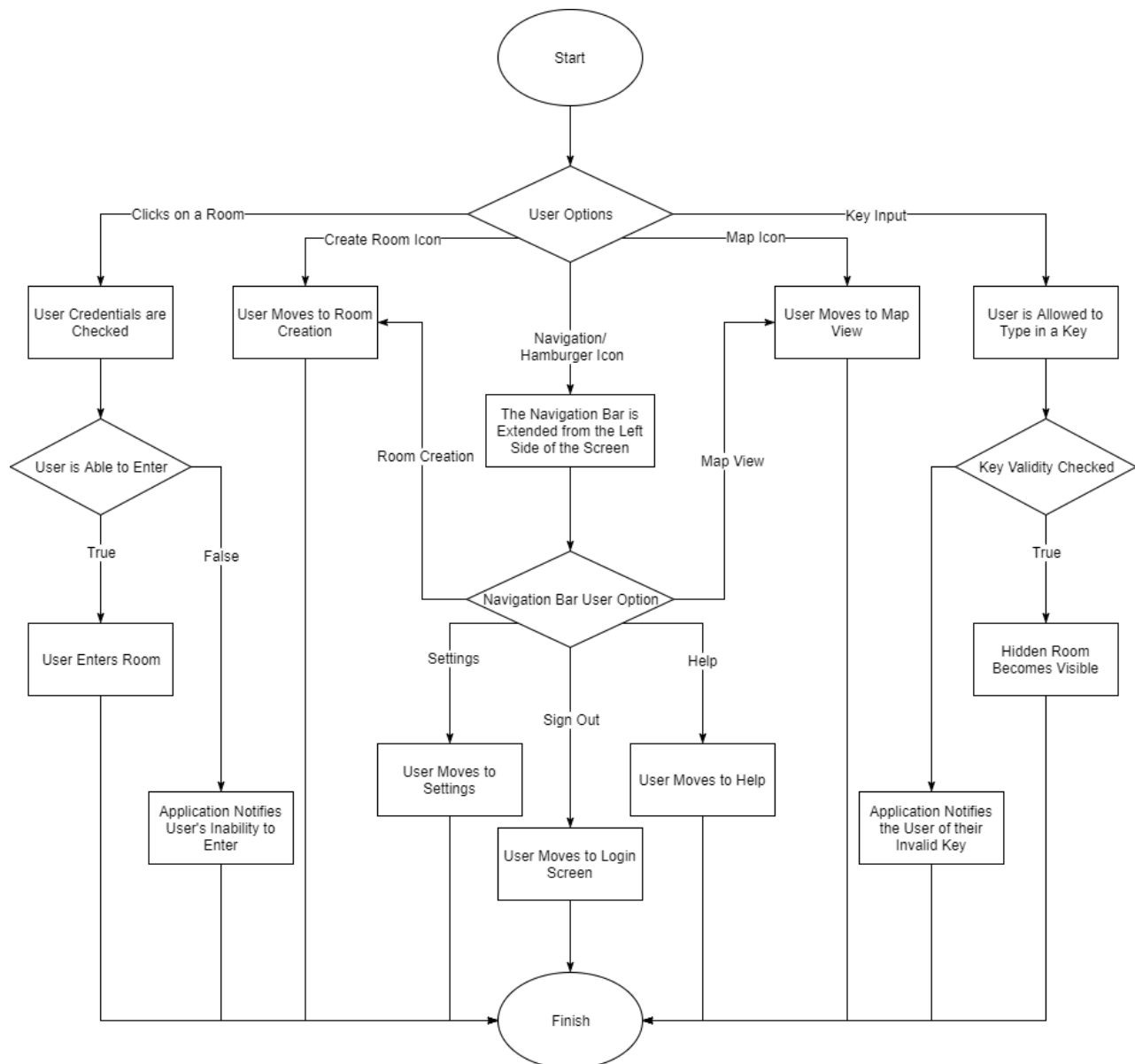
At the start of the LOGIN flowchart we have the initial Login or sign up prompt (login will be the default here). If a new user wishes to sign up that user would select Sign Up instead. After a user is successfully signed up they will be granted access to the application.

Sign Up: Here the user enters the information prompted using the syntax that is required. A user will be blocked at this stage until the proper syntax is met and the credentials are validated.

Login: Here an existing user enters the credentials to log in. If the credentials are VALID they are then verified and the user is logged in. If the credentials are INVALID a descriptive error message is displayed and the user is then able to re-try login in and has the option to recover their account and then will be prompted to log in again.

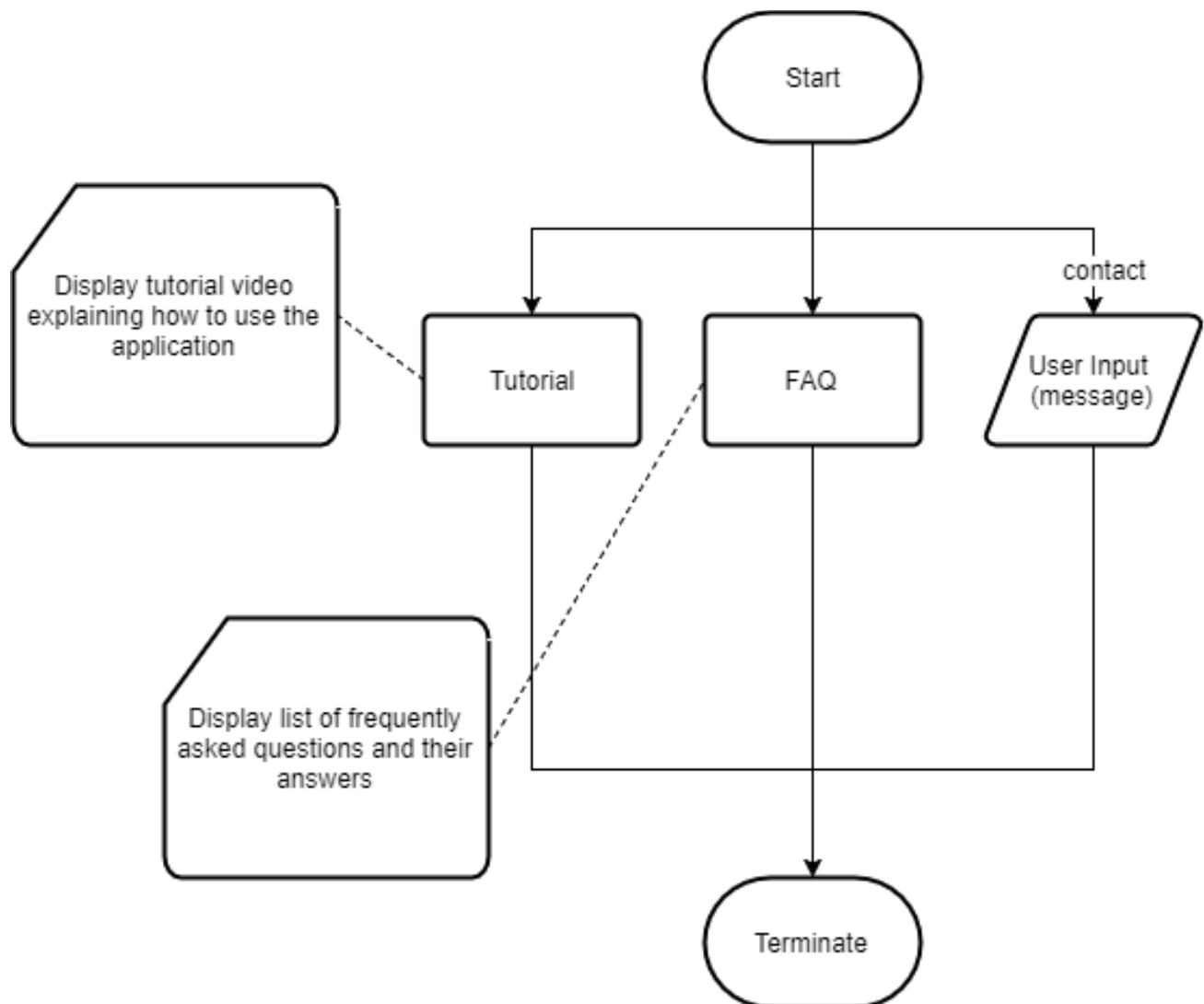
Lobby

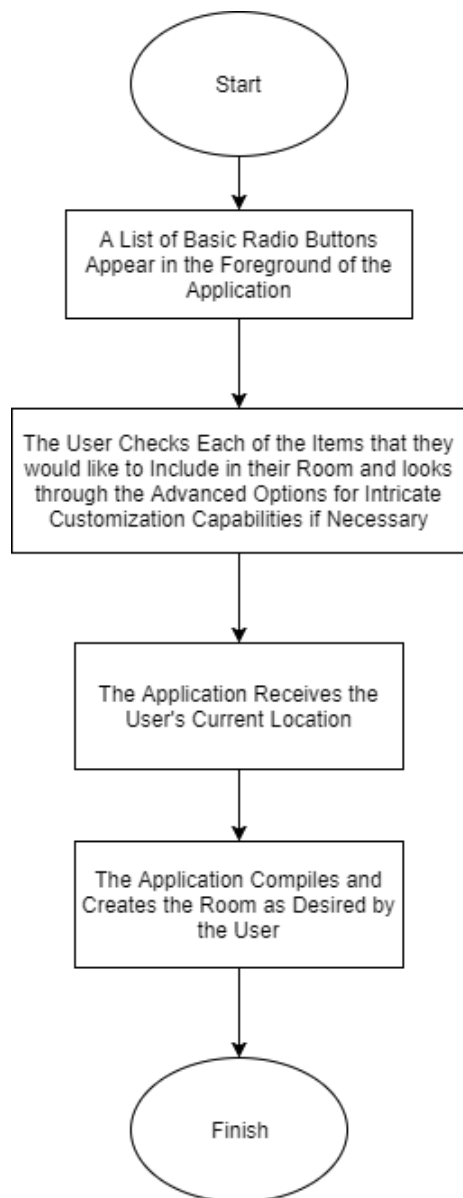
The lobby is the main space for user interaction where they will be able to find what they need to such as the ability to Join Rooms or Create them as they please along with many other features.



HELP

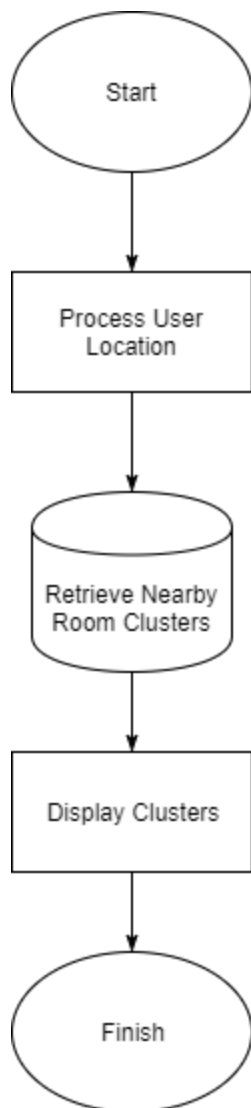
Help screen that provides a tutorial, faq, and a form for contact.





Room Creation

Each and every user has the ability to create a room where the only difference is the amount of items in which each room is capable of storing based on the users account status.

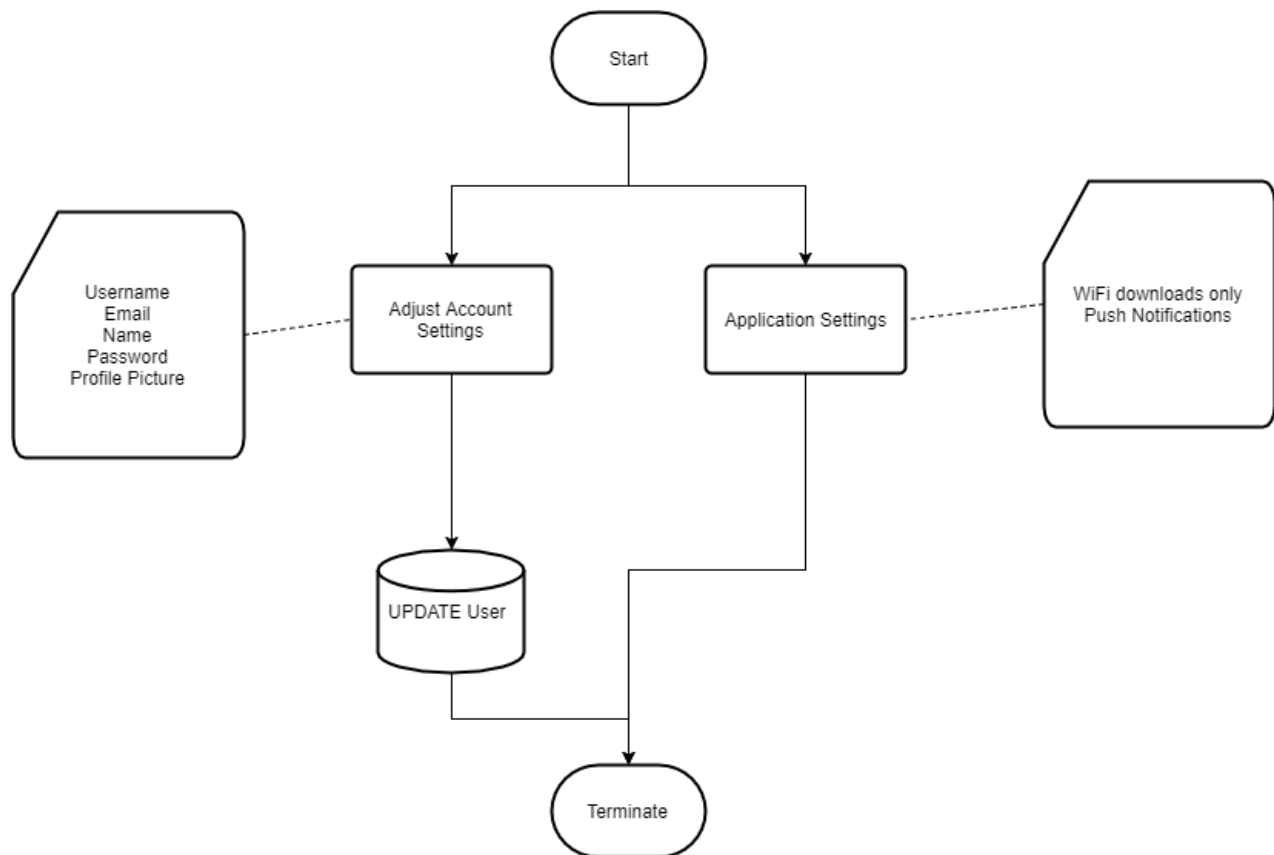


Display Map

In the display map option, users are able to see a list of room clusters in which if they click will send them to a lobby environment with those rooms in which they can interact with in a limited way.

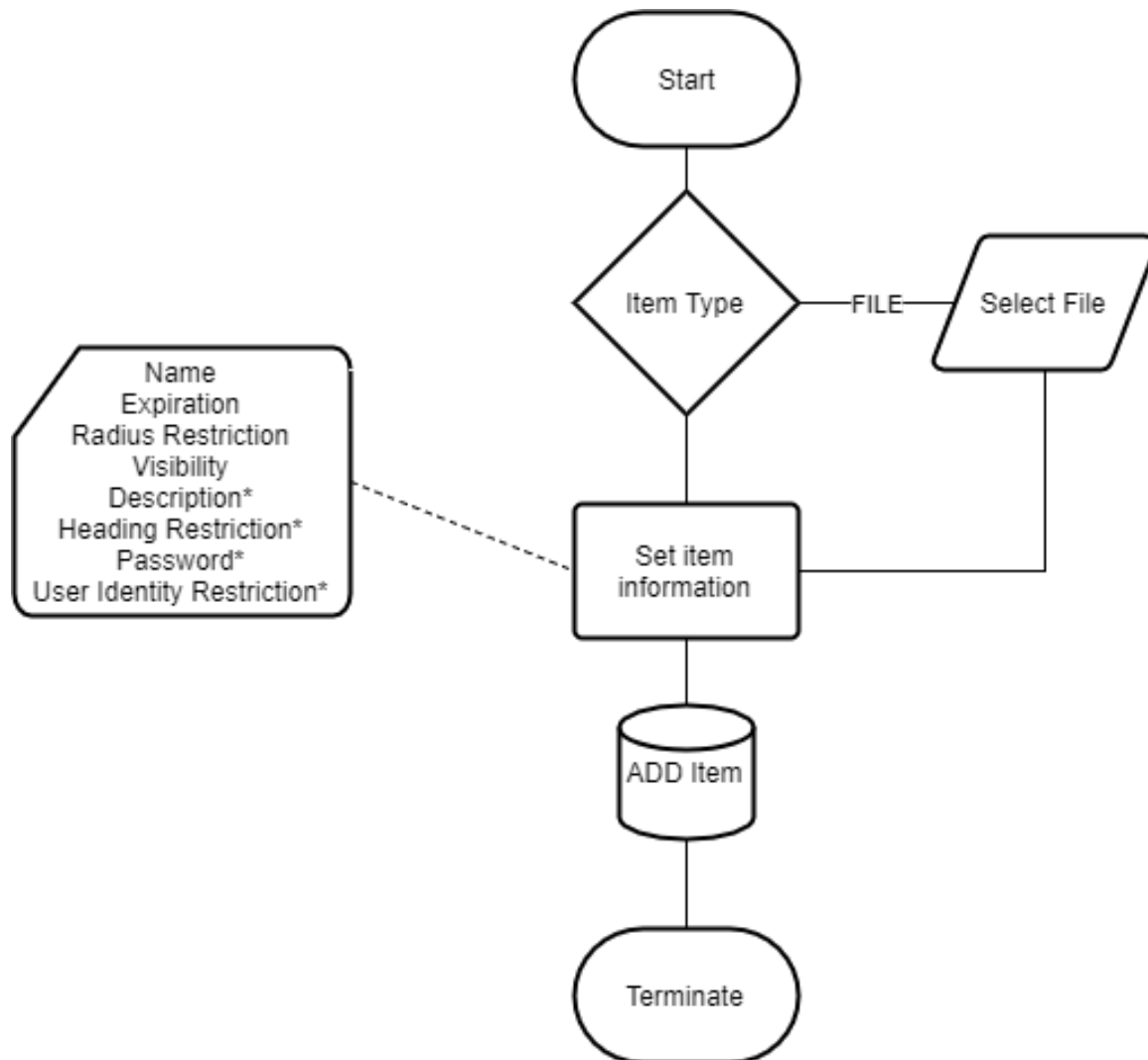
Settings

This is where the user will be able to toggle specific settings to provide a method to enhance their user experience throughout the application



Add Item

Interface for user to add an item (room or file) to the database. User must set item name, expiration, radius restriction, visibility and may optionally set a description, heading restriction, password and user identity restrictions



Use-cases

USE CASE	User Login	
Goal in Context	The user is able to successfully log in to the application	
Scope & Level	System, User	
Preconditions	The user has already created an account	
Success End Condition	User is able to log in and retrieve all saved data	
Failed End Condition	User is unable to log in	
Primary Actors	User	
Secondary Actors	Smart Phone	
Trigger	Open application	
DESCRIPTION	Step	Action
	1	User opens the application
	2	User enters username and password
	3	User clicks submit
	4	Server verifies user credentials
	5	Open Lobby

EXTENSIONS	Step	Branching Action
	3a	If username and fields are not filled in, display an error
	4a	If there is no internet connection, display an error
	4b	If user credentials are not validated
SUB-EXTENSIONS	Step	Branching Action
	3a.1	Go to step 2
	4a.1	Go to step 2
	4b.1	Go to Create Account
Due Date	11/13/2017	
Superordinates	None	
Subordinates	Lobby	
AUTHOR	Daniel Kim / Mario Lopez / Jared Coleman	
Create date	10/30/2017	

USE CASE	Create Account	
Goal in Context	The user is able to successfully create, verify, and log in with an account	
Scope & Level	System, User	
Preconditions	None	
Success End Condition	User is able to create an account and log in with it	
Failed End Condition	User is unable to create an account	
Primary Actors	User	
Secondary Actors	Smart Phone	
Trigger	User clicks on Create Account button in User Login page	
DESCRIPTION	Step	Action
	1	User enters username and password
	2	User clicks submit
	3	Server verifies and saves user credentials
	4	Server sends verification message
	5	User verifies account

	5	Open Lobby
EXTENSIONS	Step	Branching Action
	2a	If username and fields are not filled in, display an error
	3a	If there is no internet connection, display an error
	3b	If user credentials are not validated, Display an error
	4a	Display button for user to send verification message again
SUB-EXTENSIONS	Step	Branching Action
	3a.1	Go to step 1
	4a.1	Go to step 1
	4b.1	Go to step 1
Due Date	11/13/2017	
Superordinates	User Login	
Subordinates	Lobby	
AUTHOR	Daniel Kim / Mario Lopez / Jared Coleman	
Create date	10/30/2017	

USE CASE	Lobby	
Goal in Context	The user is able to view all nearby and available documents and rooms	
Scope & Level	System, User	
Preconditions	The user has logged in with a valid account	
Success End Condition	User is able to visualize and interact with all nearby and available documents	
Failed End Condition	User is unable to visualize and/or interact with all nearby and available documents	
Primary Actors	User	
Secondary Actors	Smart Phone	
Trigger	User logs in, or clicks on lobby in the hamburger menu	
DESCRIPTION	Step	Action
	1	User enters page
	2	Server calculates and returns all available documents
	3	Application displays all available documents
	4	User can scroll through all available documents
EXTENSIONS	Step	Branching Action

	2a	If there are no available documents/rooms, display a message
	2b	If there is no internet connection or location services, display an error
Due Date	11/13/2017	
Superordinates	User Login/Create Account	
Subordinates	Map, Document, Room	
AUTHOR	Daniel Kim / Mario Lopez / Jared Coleman	
Create date	10/30/2017	

USE CASE	Document	
Goal in Context	Provide an interface for a selected, available document	
Scope & Level	System, User	
Preconditions	None	
Success End Condition	The user able to visualize and interact with an available document	
Failed End Condition	The user is unable to visualize and/or interact with available documents The user is able to visualize and/or interact with documents that should not be available	
Primary Actors	User	
Secondary Actors	Smart Phone	
Trigger	User selects a document in Lobby or Map pages	
DESCRIPTION	Step	Action
	1	Get document information from server
	2	Display document information and comment information
	3	Constantly verify that document is still available
EXTENSIONS	Step	Branching Action
	1a	If server cannot find document, display an error

	1b	If there is no internet connection, display an error
	2a	If user selects comment section, go to comment use-case
	2b	If user selects rating section, go to rate use-case
	3a	If document becomes unavailable go to Lobby page
Due Date	11/13/2017	
Superordinates	Lobby, Map	
Subordinates	Comment, Rate	
AUTHOR	Daniel Kim / Mario Lopez / Jared Coleman	
Create date	10/30/2017	

USE CASE	Comment	
Goal in Context	Provide an interface for a user to comment on an item	
Scope & Level	System, User	
Preconditions	None	
Success End Condition	The user is unable to post a comment	
Failed End Condition	The user is able to post a comment	
Primary Actors	User	
Secondary Actors	Smart Phone	
Trigger	Open application	
DESCRIPTION	Step	Action
	1	User clicks on a comment box or reply button
	2	The user fills out the text box
	3	User clicks submit
	4	Server stores comment
	5	Refresh page to display new comment

EXTENSIONS	Step	Branching Action
	3a	If text box isn't not filled in, display an error
	4a	If there is no internet connection, display an error
Due Date	11/13/2017	
Superordinates	Document	
Subordinates	None	
AUTHOR	Daniel Kim / Mario Lopez / Jared Coleman	
Create date	11/01/2017	

USE CASE	Download	
Goal in Context	Allow the user to download a file from the server and a designated location	
Scope & Level	System, User	
Preconditions	Arrive at the location for the specified file and attempt to download a file	
Success End Condition	Be able to download the file and store it in the phone's external storage	
Failed End Condition	The user is not able to download the file	
Primary Actors	User	
Secondary Actors	Smart Phone	
Trigger	Download the file from a room	
DESCRIPTION	Step	Action
	1	User selects a document inside of a room from the lobby
	2	User chooses to download the document
	3	The application begins to download the document
	4	The document is placed in the user's File Downloads folder
EXTENSIONS	Step	Branching Action

	3a	The document does begin to download due to connection errors
Due Date	11/13/2017	
Superordinates	Lobby, Room	
Subordinates	None	
AUTHOR	Daniel Kim / Mario Lopez / Jared Coleman	
Create date	10/30/2017	

USE CASE	Upload a File	
Goal in Context	Allow the user to upload a file based on their location	
Scope & Level	System, User	
Preconditions	User has to be in the application's lobby	
Success End Condition	User is able to upload the selected file to the location they currently are at	
Failed End Condition	User is unable to upload the file	
Primary Actors	User	
Secondary Actors	Smart Phone	
Trigger	User presses on the icon located on the application's app bar to upload a file	
DESCRIPTION	Step	Action
	1	User is asked if the application is able to read the files located on their phones
	2	User grants access to the application's read permission
	3	The application moves to the user's folders or gallery
	4	The user chooses a file from their folders or gallery to upload
	5	The user is taken back to the application

	6	The user confirms their selection
	7	The file is uploaded to the database
EXTENSIONS	Step	Branching Action
	2a	User does not grant access to the application's read permission
	2b	The application displays an error message that it is unable to upload the file to the server
	4a	The user cancels the action to choose a file
	4b	Go to Lobby Use Case
	6a	The user chooses to deny their selection
	6b	The application removes the chosen file and allows the user to choose to go back to their gallery/folders
Due Date	11/13/2017	
Superordinates	Lobby	
Subordinates	None	
AUTHOR	Daniel Kim / Mario Lopez / Jared Coleman	
Create date	10/30/2017	

USE CASE	Navigation Bar	
Goal in Context	To be able to use the navigation button on the navigation bar	
Scope & Level	System, User	
Preconditions	User is in the lobby screen	
Success End Condition	User is able to successfully navigate through the application	
Failed End Condition	User is unable to navigate the application when an option is pressed	
Primary Actors	User	
Secondary Actors	Smart Phone	
Trigger	User slides their finger from the left edge of the screen to the right or they press the hamburger icon	
DESCRIPTION	Step	Action
	1	User selects to move to an activity in the application whether it is Settings, Help, or Map View
	2	User is taken to the chosen activity
EXTENSIONS	Step	Branching Action
	2a	Move to chosen activity section: Map View, Settings, Or Help

Due Date	11/13/2017
Superordinates	Lobby
Subordinates	Settings, Help
AUTHOR	Daniel Kim / Mario Lopez / Jared Coleman
Create date	10/30/2017

USE CASE	Settings	
Goal in Context	Successfully change application settings	
Scope & Level	System, User	
Preconditions	User moves to the Settings activity	
Success End Condition	User is able to successfully modify the application's settings	
Failed End Condition	User is unable to modify settings	
Primary Actors	User	
Secondary Actors	Smart Phone	
Trigger	User clicks on certain application settings criteria	
DESCRIPTION	Step	Action
	1	User chooses to update their username
	2	User chooses to update their password
	3	User chooses to update their email
	4	User chooses to update their name
	5	User chooses to upload a new profile picture

	6	User chooses to update their download settings
	7	User chooses to update their push notifications settings
EXTENSIONS	Step	Branching Action
	1a	Username is available and changed
	2a	The updated password passes the integrity check and is successfully updated in the database
	3a	Verification email is sent to the user and is successfully verified
	3b	The email is successfully updated
	4a	Name is successfully updated
	5a	The application asks for permission if it does not have Read permissions
	5b	User gets sent to their gallery to choose a picture
	5c	User chooses a picture
	5d	The profile picture is updated.
	6a	Download settings get updated
	7a	Push notifications settings updated
SUB-EXTENSIONS	Step	Branching Action

	1a.1	User name is not available and a message is displayed to the user of its unavailability
	2a.1	The updated password fails the integrity check and a message is displayed to the user
	3a.1	The email does not get verified and the email stays the same
Due Date	11/13/2017	
Superordinates	Navigation Bar	
Subordinates	None	
AUTHOR	Mario Lopez / Jared Coleman / Daniel Kim	
Create date	10/30/2017	

USE CASE	Help	
Goal in Context	Be able to access the help interface	
Scope & Level	System, User	
Preconditions	User chooses to arrive at the help activity through the navigation bar	
Success End Condition	User is able to find the necessary help	
Failed End Condition	User is unable to find help	
Primary Actors	User	
Secondary Actors	Smart Phone	
Trigger	User chooses the necessary help options	
DESCRIPTION	Step	Action
	1	User chooses a tutorial video
	2	User clicks on the FAQ list
	3	User chooses to send a message
EXTENSIONS	Step	Branching Action
	1a	A video begins to play that demonstrates how to use the application

	2a	FAQ list expands and the user is able to see all of the necessary help
	3a	The edit text box allows the user to send a message
	3b	User presses send
	3c	Message get sent to the development team
Due Date	11/13/2017	
Superordinates	Navigation Bar	
Subordinates	None	
AUTHOR	Mario Lopez / Daniel Kim / Jared Lopez	
Create date	10/30/2017	

USE CASE	Room	
Goal in Context	Provide an interface to view and interact with documents in a given room	
Scope & Level	System, User	
Preconditions	The room should be available to the user (the user meets all requirements to enter room)	
Success End Condition	Users are able to visualize and interact with documents in an available room	
Failed End Condition	Users are unable to visualize and/or interact with documents in an available room Users are able to visualize and/or interact with documents in a room that should not be available to them	
Primary Actors	User	
Secondary Actors	Smart Phone	
Trigger	User clicks on a room in the lobby	
DESCRIPTION	Step	Action
	1	Query Server for all documents in a room
	2	Display all documents in the room
EXTENSIONS	Step	Branching Action
	1a	If there is no internet connection, display an error

Due Date	11/13/2017
Superordinates	Lobby
Subordinates	Documents
AUTHOR	Daniel Kim / Mario Lopez / Jared Coleman
Create date	11/1/2017

USE CASE	Map View	
Goal in Context	User is able to go to the application's map view and view the file clusters available in a location	
Scope & Level	System, User	
Preconditions	User must have an account within the application and has tapped on the Map View Icon	
Success End Condition	Users are able to view and understand the information displayed in the map	
Failed End Condition	Users are unable to view the information displayed in the map	
Primary Actors	User	
Secondary Actors	Smart Phone	
Trigger	User taps on the Map View Icon	
DESCRIPTION	Step	Action
	1	User Arrives in Map View Activity
	2	User Clicks on an Item located on the map and the application reacts based on the item clicked
Due Date	11/13/2017	
Superordinates	Lobby	

Subordinates	None
AUTHOR	Daniel Kim / Mario Lopez / Jared Coleman
Create date	11/1/2017

USE CASE	Rate File	
Goal in Context	The user is able to give a rating to a particular file	
Scope & Level	System, User	
Preconditions	User navigates to the rating interface	
Success End Condition	User rates a file	
Failed End Condition	User is unable to rate a file	
Primary Actors	User	
Secondary Actors	Smart Phone	
Trigger	User locates the rating arrows of the file and presses on either one	
DESCRIPTION	Step	Action
	1	Up arrow is pressed
	2	Down arrow is pressed
EXTENSIONS	Step	Branching Action
	1a	The total rating counter is increased by one
	2a	The total rating counter is decreased by one

Due Date	11/13/2017
Superordinates	Document
Subordinates	None
AUTHOR	Daniel Kim / Mario Lopez / Jared Coleman
Create date	11/1/2017

USE CASE	Website Login	
Goal in Context	To allow the user to access their personal resources online	
Scope & Level	System, User	
Preconditions	The user must have an account already to be able to login to the website	
Success End Condition	The user is able to arrive and interact with their personalized web page	
Failed End Condition	The user is unable to login although their account is already created	
Primary Actors	User	
Secondary Actors	Computer	
Trigger	The user clicks on the login button to access their user page	
DESCRIPTION	Step	Action
	1	Type the URL associated to the application to arrive at the proper webpage
	2	The user clicks on the Login/Sign Up button located on the header of the webpage
	3	The user arrives at the Login page and types their username and password
	4	The webpage accepts the username and password and sends the user to their associated user page

EXTENSIONS	Step	Branching Action
	3a	The user clicks on the facebook or google buttons to alternatively login with their facebook or google accounts
	3b	Move to step 4
	4a	The user is unable to access their web page because of a mismatch or an account that is not created
	4b	The webpage tells the user that the email and password combination is not found or that the account does not exist
Due Date	11/13/2017	
Superordinates	None	
Subordinates	Download File, Upload File	
AUTHOR	Daniel Kim / Mario Lopez / Jared Coleman	
Create date	11/01/2017	

USE CASE	Webpage Account Creation	
Goal in Context	To allow the user to create an account associated with the application	
Scope & Level	System, User	
Preconditions	The user clicks on the create account button located on the login/sign up page	
Success End Condition	The user is able to successfully create an account	
Failed End Condition	The user is unable to successfully create an account although he has passed every criteria	
Primary Actors	User	
Secondary Actors	Computer	
Trigger	The user clicks on the create an account button and chooses to create an account associated with the application	
DESCRIPTION	Step	Action
	1	The user clicks on the sign up button to create an account
	2	The user correctly inputs their information in the correct fields
	3	The user's information is verified and accepted
	4	The user's information is then added into the database
	5	The user is then moved into their appropriate user page

EXTENSIONS	Step	Branching Action
	3a	The user's information is invalid due to one or multiple reasons
	3b	The user is then notified about the invalidity of their information
Due Date	11/13/2017	
Superordinates	None	
Subordinates	Download File, Upload File	
AUTHOR	Daniel Kim / Mario Lopez / Jared Coleman	
Create date	11/01/2017	

USE CASE	Website File Downloading	
Goal in Context	The user is able to successfully download a file that has been put on hold from the application	
Scope & Level	System, User	
Preconditions	The user assigns a file to be on hold from their application	
Success End Condition	The user is able to successfully download the file that has been put on hold from their associated account in the application	
Failed End Condition	The user is unable to download the file that has been put on hold for any reason	
Primary Actors	User	
Secondary Actors	Computer	
Trigger	The user chooses to download a file that has been put on hold	
DESCRIPTION	Step	Action
	1	The user accesses their user page
	2	The user clicks on a file link
	3	The file begins to be automatically downloaded from the database to the computer
Due Date	11/13/2017	

Superordinates	Website Account Creation, Website Login
Subordinates	None
AUTHOR	Daniel Kim / Mario Lopez / Jared Coleman
Create date	11/01/2017

USE CASE	Website File Uploading	
Goal in Context	The user is able to successfully upload a file into the database to be accessed by their application at any moment	
Scope & Level	System, User	
Preconditions	The user already has an account associated with the application	
Success End Condition	The user is able to successfully upload a file located on their computer's hard drive to the database	
Failed End Condition	The user is unable to upload the specific file from their computer's hard drive to the database	
Primary Actors	User	
Secondary Actors	Computer	
Trigger	The user wishes to and chooses to share a file that is located on their computer's hard drive and not on their smart phone	
DESCRIPTION	Step	Action
	1	The user enters the user page if they are already logged in
	2	The user drags and drops a file to the web page
	3	The file gets added to the database
EXTENSIONS	Step	Branching Action

	2a	The user can also choose to click on the + icon located on the left hand side of the website
	2b	A window opens to allow the user to choose a file to upload to the database
Due Date	11/13/2017	
Superordinates	Website Account Creation, Website Login	
Subordinates	None	
AUTHOR	Daniel Kim / Mario Lopez / Jared Coleman	
Create date	11/01/2017	

Test-cases

Login Test Case

Test Case ID#: 01

System: Computer Software

Date : November 6, 2017

Created By: Daniel Kim / Jared Coleman / Mario Lopez

Goal:

- To find any bugs or problems that might hinder the user from logging into their account

Preconditions:

- The application has launched on the user's mobile device and the login screen appeared, the player must also have an internet connection

Description:

Step 1: User fills in the information needed on the login screen

- Success: The text boxes allow the user to fill in the necessary information
- Success: The text boxes display the user input correctly
- Failure: The text boxes do not allow for any user input
- Failure: The text boxes incorrectly display the user input

Step 2: The User's information is accepted and user information is retrieved from database

- Success: Based on the User's information, their information is either retrieved or not
- Failure: The User has input a valid username and password but the game does not allow them to move further

Post Condition:

- User is able to retrieve their information from the database and login to use the application

Creating an Account Test Case

Test Case ID#: 02

System: Computer Software

Date : November 6, 2017

Created By: Daniel Kim / Jared Coleman / Mario Lopez

Goal:

- To find any bugs or problems that might hinder the user from creating an account and therefore using the service and application

Preconditions:

- The application has launched on the user's mobile device and the user has clicked to create an account on the create account screen, the player must also have an internet connection

Description:

Step 1: User fills in the information needed on the account creation screen

- Success: The text boxes allow the user to fill in the necessary information
- Success: The text boxes display the user input correctly
- Failure: The text boxes do not allow for any user input
- Failure: The text boxes incorrectly display the user input

Step 2: The User's information is accepted and the information is uploaded to a database

- Success: Based on the User's information, their information is either accepted or denied
- Failure: The username already exists but the User isn't notified
- Failure: The User has input a valid username and password but the application does not allow he/she to move forward

Step 3: The User is sent to the login screen to now be able to join the game

- Success: After successfully creating an account, the User is moved to the login screen where they can login and use the application
- Failure: The User remains on the Create Account screen after successfully creating an account

Post Condition:

- User is able to upload their information onto a database and moves back to the login screen

Lobby Test Case

Test Case ID#: 03

System: Computer Software

Date : November 6, 2017

Created By: Daniel Kim / Jared Coleman / Mario Lopez

Goal:

- To find any bugs or problems that might hinder the user from using the lobby page to view and interact with nearby and available items

Preconditions:

- The user has logged into a valid account

Description:

Step 1: The User moves into an area where an item is available

- Success: If the user meets requirements, the item is displayed
- Success: If the user does not meet requirements, the item is not displayed
- Failure: The user does not meet requirements and the item is displayed
- Failure: The user meets requirements and the item is not displayed

Step 2: The User interacts with available items

- Success: The user can scroll through available items
- Success: The user can click on items (see document and room test cases)
- Failure: The user cannot scroll through items
- Failure: The user cannot click on items

Step 3: The User moves away from an area where an item is available

- Success: The item is not longer displayed
- Failure: The item is still displayed

Post Condition:

- User is able to interact with nearby, available items

Document Test Case

Test Case ID#: 04

System: Computer Software

Date : November 6, 2017

Created By: Daniel Kim / Jared Coleman / Mario Lopez

Goal:

- To find any bugs or problems that might hinder the user from interacting with document items

Preconditions:

- The user has clicked on a nearby, available item (see lobby test case)

Description:

Step 1: The user clicks on a document

- Success: The document details are displayed
- Failure: The document details are not displayed

Step 2: The User scrolls through comments

- Success: Document comments are displayed and constantly refreshed
- Failure: Comments are not displayed and/or not refreshed

Step 3: The User moves away from an area where an item is available

- Success: The document is not longer displayed
- Failure: The document is still displayed

Post Condition:

- User is able to interact with document

Comment Test Case

Test Case ID#: 05

System: Computer Software

Date : November 6, 2017

Created By: Daniel Kim / Jared Coleman / Mario Lopez

Goal:

- To find any bugs or problems that might hinder the user from commenting on a nearby and available document

Preconditions:

- The user has clicked on a nearby, available item and scrolled into the comment section (see document test case)

Description:

Step 1: The user clicks on the comment box

- Success: The keyboard is displayed
- Success: User input is taken and submitted to the database
- Success: The comment section is refreshed to show the new comment
- Failure: The keyboard is not displayed and/or the user cannot input text
- Failure: The user input is not submitted to the database
- Failure: The comment section cannot be refreshed

Step 2: The user clicks to reply to a comment

- Success: The keyboard is displayed
- Success: User input is taken and submitted to the database
- Success: The comment section is refreshed to show the new reply to the comment
- Failure: The keyboard is not displayed and/or the user cannot input text
- Failure: The user input is not submitted to the database
- Failure: The comment section cannot be refreshed
- Failure: Reply is not displayed under correct comment

Step 3: The User moves away from an area where an item is available

- Success: The document is not longer displayed
- Failure: The document is still displayed

Post Condition:

- User is able to comment on a document

Download Test Case

Test Case ID#: 06

System: Computer Software

Date : November 11, 2017

Created By: Daniel Kim / Jared Coleman / Mario Lopez

Goal:

- To find any bugs or problems that might hinder the user from downloading a file

Preconditions:

- The user has arrived at the location of a specified file

Description:

Step 1: The user choses to download a specified file

- Success: The file begins to download from the server
- Failure: The file does not begin downloading

Step 2: The file is downloaded

- Success: The file is downloaded in its entirety
- Failure: The file is not downloaded as intended

Step 3: The file is saved to the user's Files folder

- Success: The file is successfully saved on the user's device
- Failure: The file fails to save

Post Condition:

- User is able to interact with a downloaded file

Upload Test Case

Test Case ID#: 07

System: Computer Software

Date : November 11, 2017

Created By: Daniel Kim / Jared Coleman / Mario Lopez

Goal:

- To find any bugs or problems that might hinder the user from Uploading a file

Preconditions:

- The user has arrived at the location where he wishes to upload his document

Description:

Step 1: User is asked to grant app permission to manage files stored on device

- Success: The prompt opens up requesting access to files
- Failure: The prompt to grant permission does not appear on the device

Step 2: The application opens up the user's file folder

- Success: The file folder is opened
- Failure: The file folder is not opened

Step 3: User chooses a file to upload

- Success: The file is successfully selected
- Failure: The intended file is not selected

Step 4: The file user confirms his selection

- Success: The user is able to successfully confirm his selected file
- Failure: The user is unable to confirm his selected file

Step 5: The selected file is uploaded to the server

- Success: The intended file is uploaded to the server in its entirety
- Failure: The file fails to upload to the server

Post Condition:

- The user's file is not uploaded to the server where other users can download said file

Navigation Bar Test Case

Test Case ID#: 08

System: Computer Software

Date : November 11, 2017

Created By: Daniel Kim / Jared Coleman / Mario Lopez

Goal:

- To find any bugs or problems that might hinder the user from using the navigation bar

Preconditions:

- The user has is in the lobby screen

Description:

Step 1: The User selects a new page to navigate to (Settings, Help, Map View)

- Success: The user receives visual feedback on his chosen selection
- Failure: The user is unable to tell if a selection has been made

Step 2: The User is taken to the selected page

- Success: The user navigates to the selected page
- Failure: The user is not able to navigate to the selected page

Post Condition:

- User is now at a new page than previously

Settings Test Case

Test Case ID#: 09

System: Computer Software

Date : November 13, 2017

Created By: Daniel Kim / Jared Coleman / Mario Lopez

Goal:

- To find any bugs or problems that might hinder the user from changing the settings of the application

Preconditions:

- The user moves to the settings activity from the navigation bar

Description:

Step 1: The user chooses to update their username

- Success: The username is successfully changed in the database
- Success: The application notifies the user that the current username is taken
- Success: The application notifies the user that the username does not meet a set of requirements
- Failure: The application does not change the username in the database
- Failure: The application fails to notify the user that the current username is taken and allows the change in the database
- Failure: The application allows a username that has not met certain requirements to be updated in the database

Step 2: The user chooses to update their password

- Success: The password is successfully updated and changed in the database
- Success: The application notifies the user that the current password does not meet a set of requirements
- Failure: The password that meets the requirements does not get updated
- Failure: The password which does not meet requirements gets updated

Step 3: The user chooses to update their email

- Success: The email is successfully updated in the database after a verification process
- Success: The user receives the verification process in their new email
- Success: The email does not get updated until the user finishes that verification process

- Failure: The email gets updated without the user having to go through a verification process
- Failure: The email does not meet requirements but gets updated anyway

Step 4: The user chooses to update their name

- Success: The user's name is successfully updated in the database
- Failure: The application does not allow the user to update their name
- Failure: The application allows the user to input a blank statement as their name and updates the database with the input

Step 5: The user chooses to upload a new profile picture

- Success: The application allows the user to select an image from their gallery and update their image
- Success: The database receives and stores their image
- Failure: The application does not switch to the gallery so that the user can choose an image
- Failure: The application does not allow the user to update their image
- Failure: The database does not update the user's image

Step 6: The user chooses to update their download settings

- Success: The settings update the application's process for a customized user experience
- Failure: The settings do not change whether the user begins to download through Wi-fi or their carrier.

Step 7: The user chooses to update their push notifications settings

- Success: The push notification settings get successfully updated depending on the choice selected
- Failure: Push notifications are sent regardless of the user settings

Post Condition:

- The application should be updated according to the user's settings choice

Help Test Case

Test Case ID#: 10

System: Computer Software

Date: November 13, 2017

Created By: Daniel Kim / Jared Coleman / Mario Lopez

Goal:

- To find any bugs or problems that might hinder the user from receiving advice from the Help activity

Preconditions:

- User chooses to arrive at the help activity through the navigation bar

Description:

Step 1: User chooses a tutorial video

- Success: The video automatically links to a video on Youtube for the respective tutorial video
- Failure: The video does not launch

Step 2: User clicks on the FAQ list

- Success: The appropriate question opens along with the solution
- Failure: The FAQ list does not appear
- Failure: The wrong question and solution appear

Step 3: User chooses to send a message

- Success: The question is sent to the developers for easy answering
- Failure: The question does not appear for developers to answer

Post Condition:

- The user is able to find the help necessary

Room Test Case

Test Case ID#: 11

System: Computer Software

Date: November 13, 2017

Created By: Daniel Kim / Jared Coleman / Mario Lopez

Goal:

- To find any bugs or problems that might hinder the user from interacting with a room

Preconditions:

- The room should be available to the user (the user meets all requirements to enter room)

Description:

Step 1: Query Server for all documents in a room

- Success: The documents are successfully queries based on the user selection
- Failure: The wrong set of documents appear

Step 2: Display all documents in the room

- Success: All of the queried documents appear in the room selected
- Failure: The room contains documents but none display

Post Condition:

- The user is able to find the help necessary

Map View Test Case

Test Case ID#: 12

System: Computer Software

Date : November 6, 2017

Created By: Daniel Kim / Jared Coleman / Mario Lopez

Goal:

- To find any bugs or problems that might hinder the user from correctly interacting with the Map View

Preconditions:

- The user has logged in with a valid account and clicks on the map view icon located in their lobby

Description:

Step 1: User Arrives in Map View Activity

- Success: Visual demonstration of the file/room clusters appear
- Failure: The map view does not load
- Failure: Incorrect queries or incorrect information of clusters

Step 2: User Clicks on an Item located on the map and the application reacts based on the item clicked

- Success: Opens an activity based on the cluster clicked
- Failure: Activity opens but it is empty
- Failure: Unable to click on the activity

Post Condition:

User is able to retrieve their information from the database and login to use the application

Rate Test Case

Test Case ID#: 13

System: Computer Software

Date : November 6, 2017

Created By: Daniel Kim / Jared Coleman / Mario Lopez

Goal:

- To find any bugs or problems that might hinder the user from rating a nearby and available document

Preconditions:

- The user has clicked on a nearby, available item and scrolled into the comment section (see document test case)

Description:

Step 1: The user clicks on the thumbs up on a comment

- Success: User input is taken and submitted to the database
- Success: The comment section is refreshed to show the new rating
- Failure: The user input is not submitted to the database
- Failure: The comment section cannot be refreshed

Step 2: The user clicks on the thumbs down on a comment

- Success: User input is taken and submitted to the database
- Success: The comment section is refreshed to show the new rating
- Failure: The user input is not submitted to the database
- Failure: The comment section cannot be refreshed

Step 3: The User moves away from an area where an item is available

- Success: The document is not longer displayed
- Failure: The document is still displayed

Post Condition:

- User is able to rate the document

Website Login

Test Case ID#:14

System: Computer Software

Date : November 27, 2017

Created By: Daniel Kim / Jared Coleman / Mario Lopez

Goal:

- To find any bugs or problems that might hinder the user from logging into the website associated with the application

Preconditions:

- The user has typed out the appropriate URL to reach the website

Description:

Step 1: Type the URL associated to the application to arrive at the proper webpage

- Success: The user is able to see the introduction page where they can sign in or sign up for an account
- Failure: The user is unable to arrive at the web page although they have typed in the proper URL
- Failure: The user is unable to see the option to login or sign up to the application

Step 2: The user clicks on the Login/Sign Up button located on the header of the webpage

- Success: The user gets sent to the page where they login or sign up to the application
- Failure: The button click takes them to the wrong web page
- Failure: The button does not allow them to navigate anywhere else

Step 3: The user arrives at the Login page and types their username and password

- Success: The user is able to type in their user information
- Failure: The user is unable to login nor are they able to sign up
- Failure: The user is unable to interact with the required fields

Step 4: The webpage accepts the username and password and sends the user to their associated user page

- Success: The user is sent to their user page where they can interact with their personalized files
- Failure: The user is sent to their user page but they do not see any of their files
- Failure: The user is unable to access their user page

Post Condition:

- The user is now able to interact with their user page

Website Account Creation

Test Case ID#: 15

System: Computer Software

Date : November 27, 2017

Created By: Daniel Kim / Jared Coleman / Mario Lopez

Goal:

- To find any bugs or problems that might hinder the user from creating an account

Preconditions:

- The user clicks on the login/sign up button and chooses to sign up in the subsequent web page

Description:

Step 1: The user clicks on the sign up button to create an account

- Success: The appropriate editable text boxes should appear to allow them input the information
- Failure: The sign-up button does not function
- Failure: The editable text boxes cannot be edited

Step 2: The user correctly inputs their information in the correct fields

- Success: Each of the edit boxes should hold the user's information
- Failure: The edit boxes reset to an empty value after the user enters their information

Step 3: The user's information is verified and accepted

- Success: The user's unique information should then be sent to the database and stored as appropriate
- Failure: The database will not accept the user's information
- Failure: There is a network error and the database is unable to receive the information

Step 4: The user is then moved into their appropriate user page

- Success: The user arrives at the web page with their associated content
- Failure: The user's page is empty when it should have content
- Failure: The user arrives at a different web page

Post Condition:

- User is able to connect to the web page

Website File Downloading

Test Case ID#: 16

System: Computer Software

Date : November 27, 2017

Created By: Daniel Kim / Jared Coleman / Mario Lopez

Goal:

- To find any bugs or problems that might hinder the user from downloading a file from the web page

Preconditions:

- The user chooses a link located on their user page to download

Description:

Step 1: The user accesses their user page

- Success: The user is able to see a list of items to download if they had put it on hold from their application
- Failure: Although the user put items on hold from their application, they are unable to see any links in their user page

Step 2: The user clicks on a file link

- Success: The file link should be marked as clicked
- Success: The mouse cursor should turn into a pointing hand icon
- Failure: The user is unable to interact with the file link
- Failure: The clicked link crashes the website

Step 3: The file begins to be automatically downloaded from the database to the computer

- Success: The file then gets stored in the location preferred by the user
- Failure: The file gets stored in the wrong location
- Failure: The user is unable to download the file anymore from the database

Post Condition:

- User is able to download an item from their user page

Website File Uploading

Test Case ID#: 17

System: Computer Software

Date : November 27, 2017

Created By: Daniel Kim / Jared Coleman / Mario Lopez

Goal:

- To find any bugs or problems that might hinder the user from uploading a file to the web page

Preconditions:

- The user chooses to upload a file from the database to be accessed on their mobile application

Description:

Step 1: The user enters the user page if they are already logged in

- Success: The user is able to see their unique user page
- Failure: The user is unable to enter their user page
- Failure: The user enters a user page not belonging to them

Step 2: The user drags and drops a file to the web page

- Success: The web page automatically starts uploading the file to the database
- Success: The file becomes available for the user on their mobile device
- Failure: The web page does not recognize that the user has dragged a file and does nothing
- Failure: The web page is unable to upload the file to the database
- Failure: The user is unable to see the file in their mobile application

Step 3: The file gets added to the database

- Success: The file is safely stored in the database
- Failure: The file is stored maliciously in the database
- Failure: The file cannot be found in the database

Post Condition:

- User is able to upload items to the database

User Manual

1 Getting Started

1.1 Introduction

Project:Red Pony gives a physical aspect to files uploaded in the digital world by allowing users to upload and download files based on their current geographic location. Users can enforce secondary restrictions such as user identity, time constraints, and quantity limitations to the files allowing for a unique file sharing System.

1.2 Requirements

Android users must be updated to an API level equal or higher than 21 while iOS users should have a device that supports iOS 9.3 or higher.

1.3 Installation

To install the application, the user will need to download from the Google Play Store or from the Apple App Store.

1.4 Start-Up

On startup, the user will be prompted with three options: Create a New Account, Log-In, or Quit.

1.4.1 Creating a New Account

After selecting the Create a New Account Option, the Create a New Account Page will appear. It will prompt the user to enter the following fields: username, password, phone number, and email.

After filling in the appropriate field, a verification number will be sent to the user's phone. The user will be taken to a verification screen that will require the user to enter the number sent by text-message.

After correctly entering the verification number, the user will be taken to the default application page. If the user is unable to enter the verification code in the allotted time frame, the user must resend the verification number or restart the process.

1.4.2 Log-In

After the selecting the log-in option, the user will be prompted to enter his or her username and password. If the user enters the password incorrectly too many times, he or she will be asked to

use the account recovery option. If the password is entered correctly, he or she will be taken to the lobby, logged into his or her account.

If the user forgets his or her password, then the user can select account recovery option to recover his or her account.

The user can also choose to log in using a Google account. Select the Google icon and log-in. Afterwards, the user will be taken to the lobby.

The user will remain logged in unless he or she logs out.

1.4.3 Quit

After the user selects this option, the application will exit entirely.

2 Navigating the Application

2.1 Lobby

After logging in, the user will be taken to the lobby. It will display multiple rooms and folders near the current area. The lobby will be periodically updated to match the user's current real world location.

The lobby has a different interface depending on the view the user chooses - list and map view.

2.2 Map View

After clicking the map view icon, the map will be displayed. It will show the user's current location and the user's interaction radius. Files will appear inside the radius with the file icon and rooms will appear with room icon. If there are multiple files and/or rooms in a given area, they will appear with the cluster Icon.

The rest of the map (that is not in the user's interaction radius) will show files as a heat map. The more files in a given area, the more "heat" it will have. Users are unable to do anything with the files but will give the user a general sense of where files are located.

Clicking a file will display a pop-up with some options: Download, Remove, Comment, and Rate. Remove will only be displayed for the user who uploaded the file. The user will not be able to download, comment, or rate unless they are inside the interaction radius of the file.

Clicking a room will expand it and show a list of files. Clicking a file will display the file options.

Clicking a cluster will expand it and show the list of rooms and files inside it. Clicking a room will show the room options and clicking a file will show the file option.

To switch views, click the list view icon.

2.3 List View

The list view is the default view of the application.

After clicking the list view icon, a list of files and rooms that the user can interact with will be displayed. The user can click on a file to interact with. Upon clicking, the following options will be displayed: Download, Remove, Comment, and Rate. Remove will only be displayed for the user who uploaded the file.

The user will not be able to download, comment, or rate unless he or she is in the interaction radius.

Clicking on a room will expand it and show the list of files within that room. Clicking a file will display the file options.

To switch views, click the map view icon.

2.4 Rooms

Rooms are icons located on the map or list view. On map view, rooms appear using this icon. On list view, rooms, indicated by this icon, appear along with the list of accessible files.

Rooms act as folders where each room can hold multiple files.

2.5 Files

Files are icons located on the map or list view.

Users can download, remove, rate, and comment on a file. The user must be in the file's interaction radius to download, rate, and comment. The remove option will only appear for the original file uploader.

2.6 Navigation Bar

Click the navigation bar icon in the top left hand corner. It will expand and display a list of available options: Map / List View, Settings, Help, and Logout.

Map / List View will allow users to switch between the views of the application. List View is the default view.

Settings will display settings that the user will be able to change. The user will be able to change the notification here.

Help will display a FAQ that users can refer to if they need help navigating the application or understanding specific functions.

Log Out will log the user out of the application and take the user back to the login page.

To close the list of available options, click the navigation bar icon again.

2.6.1 Settings

Users can change the default settings here.

Notifications

The default setting for the application is no notifications. Users can choose to be notified if a file is nearby, a cluster of files is nearby, or if a file they have uploaded has been removed.

3 Downloading a File

Users can click on any file and the following list of options will appear: Download, Remove, Rate and Comment. Remove will only appear if the user uploaded that file.

Users can also click on a room to expand it and select a file to download from there instead.

If the user is in map view, the download button will be non-interactive until the user is in the file's interaction radius. If the user does not have enough space on his or her phone, an error message will pop up and ask the user to create a room.

If the user is in list view, only files that the user will be able to download will be visible.

Once the user selects the download option, the file will be downloaded to his or her phone.

3.1 Unable to Locate File

If the user does not have permission to view a file, the user will never see that file. In order to gain access, the user needs to contact the person who uploaded the original file.

4 Uploading a File

The upload file button is located in the lobby. The user needs to be at the location he or she wants the file to be at. Once there, he or she should click the upload file button and select the appropriate file. The user can also choose to upload a room to create a new room. If the user wishes to upload a file within a room, enter the room and hit the upload file option.

Next, the user will be asked to choose the constraints of the file: Time, Quantity, User Identity, and User Demographics.

4.0.1 Time

The user can set how long the file will be available to download. The available range is zero seconds to infinitely available.

4.0.2 Quantity

The user can set how many times the file can be downloaded. The available range is zero times to infinitely available.

4.0.3 User Identity

The user set who views the files based on user identity. The user will enter some usernames and only users from that specific list will be able to view those files.

4.0.4 User Demographics

The user can set who views the files based on user demographics set in the user's account. If the user chooses not to fill in the demographics part of his or her account, then he or she will not have access to the file.

The user can choose to upload anonymously. The user's username will be hidden from others.

After selecting the constraints of the file, the file will be uploaded at that location and will be available for other users to interact with.

5 Removing a File

Only the user who uploaded the file has the ability to remove it.

The user does not need to be in the location of the file to remove it.

To remove a file, locate the file. If the user is the owner, he or she will have the option to remove it. Click remove and a confirmation message will appear. Confirm and the file will be removed.

6 Commenting on a File

To leave a comment on a file, click on the file and from the list of options select comment. A text field will be created for the user to write a comment. Once finished, click submit and the comment will be visible to others.

The user can also choose to leave a comment anonymously. The user's username will be hidden from others.

7 Rating

Rating allows other users to see feedback on the file quickly rather than browsing the comments to find information.

7.1 Rating a File

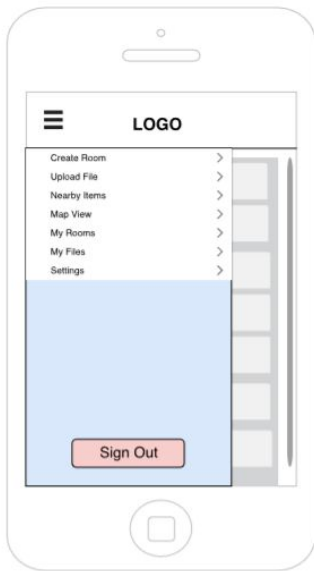
To rate a file, locate it and click it. From the list of options that appear, choose the rate a file option. A thumbs up indicates that the file has good content. A thumbs down indicates otherwise.

7.2 Removing Your Rating

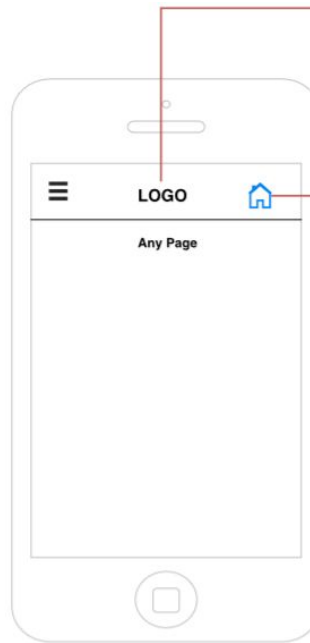
To remove a rating from a file that has been previously rated, click the thumbs up to remove a positive rating and the thumbs down to remove a negative rating.

To change a rating from a file that the user previously rated, click the desired rating and the rating will switch appropriately.

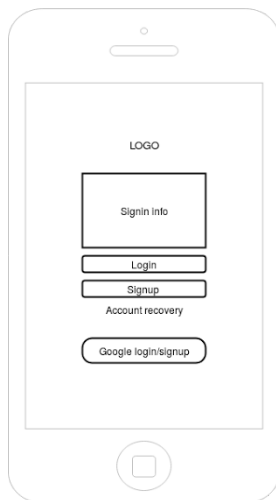
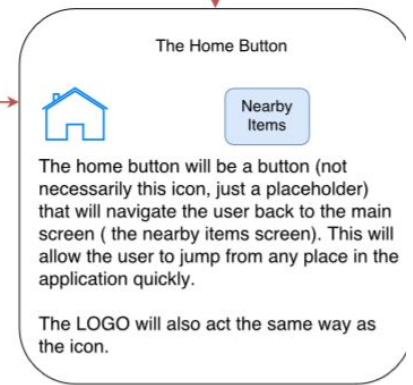
UI Layout



Side Menu



Home Button



Main login



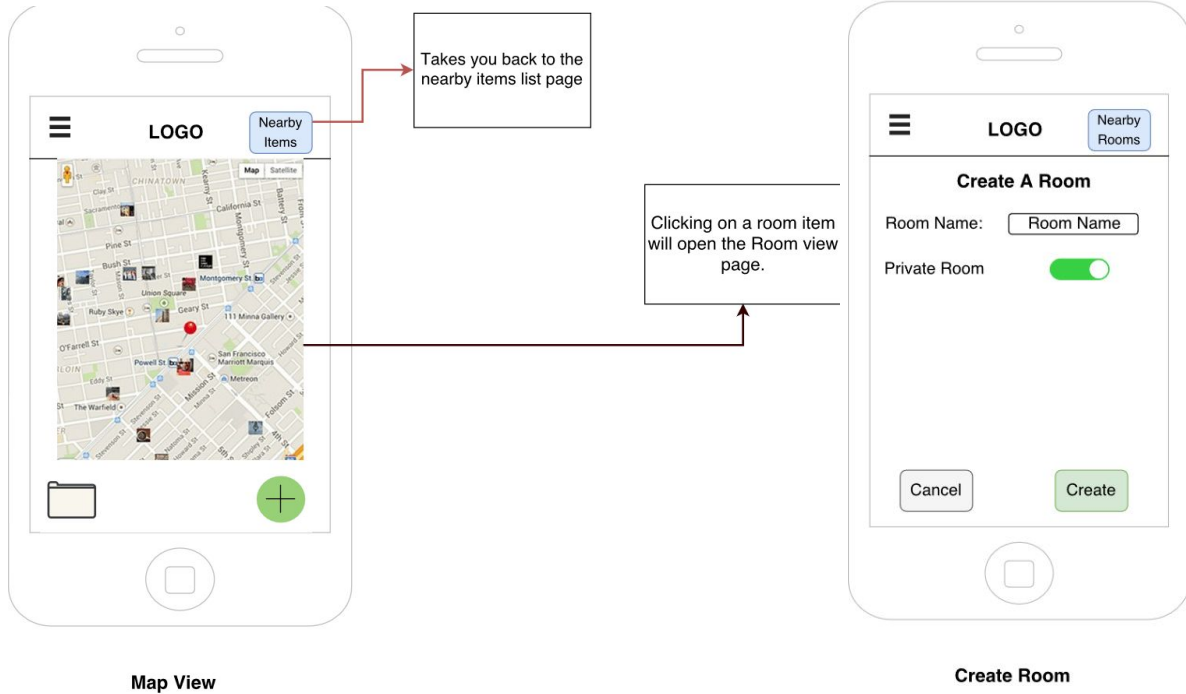
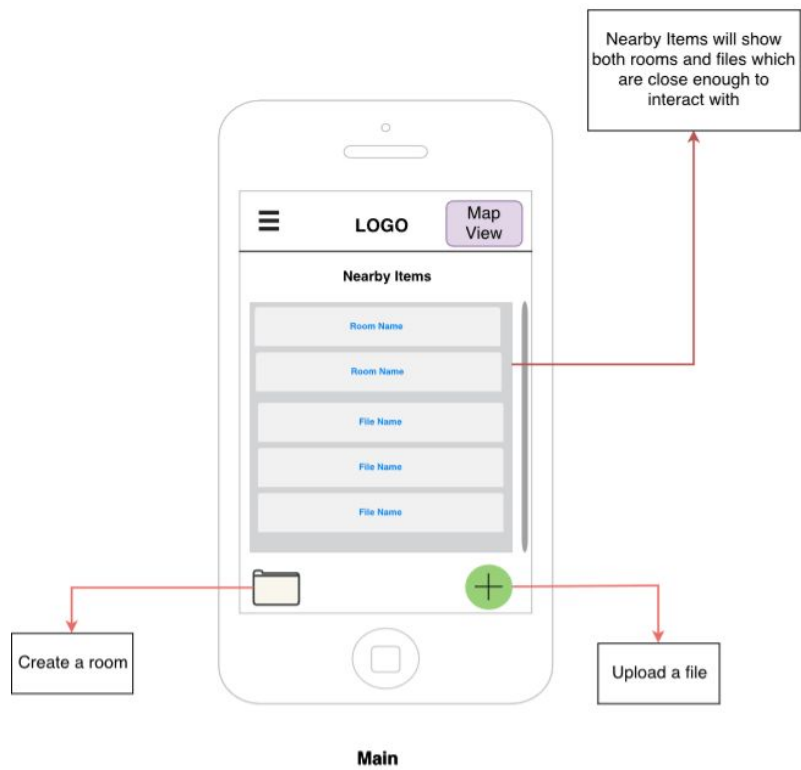
Login error

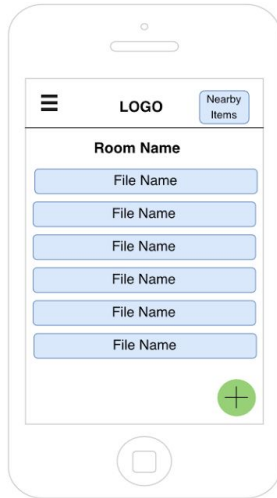


Sign up

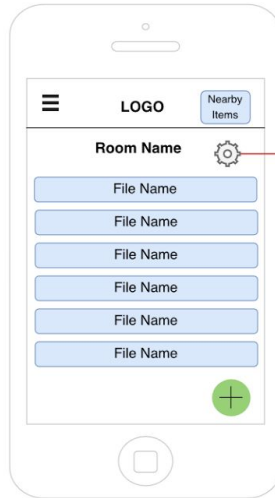


Account recovery



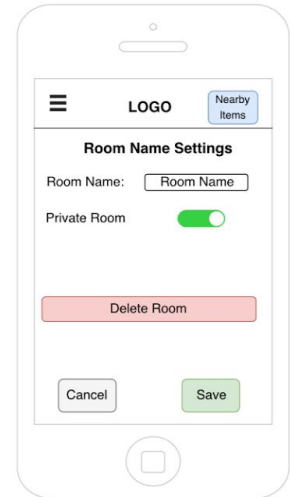


User Room View

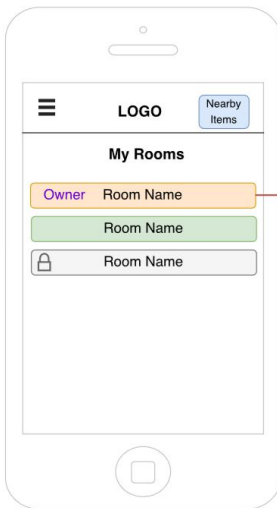


Creator Room View

Room Creators will get a Room Settings option when they are viewing. Clicking this will open the Room Settings page.



Room Settings View



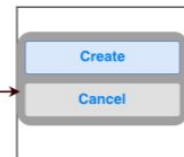
My Rooms

Owner
Shows you are the owner/ creator of this room you can moderate access creator features even when not in range

Green = in range
Yellow = not in range but owner abilities
Gray = not in range

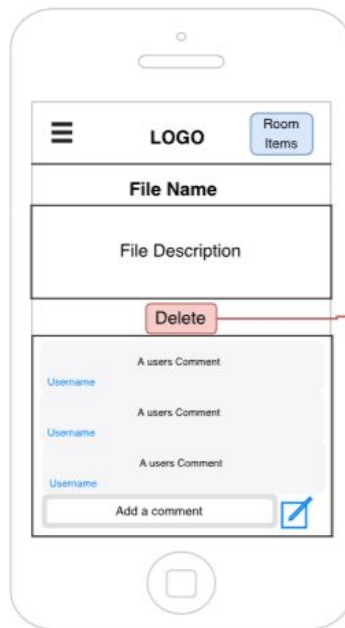


Create File View

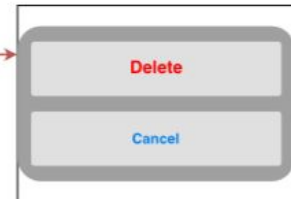




User File View

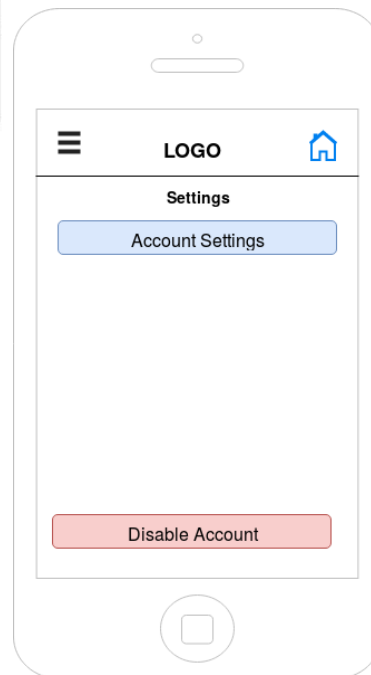


Creator File View



My Files

These are files you have uploaded. You can manage your files from this menu



Settings

Thank you.