Reunion, Ammon Nelson, Roberto Reynoso

Description: To make a one-stop shop for Family/ Friend hangout/reunion activities.

Purpose: To provide a seamless method of organizing reunions with family and friends.

Scope: 28 weeks.

Overview: This project will be a mobile app, that will be developed using Dart, Flutter, and Google Firebase. The Project will provide the ability to create/plan reunions based on specified preferences of the Users/Groups.

- ➔ Workflow:

Tasks and schedule:

Learning Dart and Flutter through Udemy course	43 Hours Per person	Jul 1, 2022
Landing page creating and implementation:	10 Hours Per person	Jun 1, 2022 check in- if not done hyper focus and be done by june 7th
Setting up databases:	10 Hours Per person	Jun 21, 2022
Account creation:	2 Hours Per person	Jun 24, 2022
Encryption for pass/ 2FA:	15 Hours Per person	Jul 31, 2022
User preferences:	5 Hours Per person	Jun 30, 2022
Writing tests for app so far:	10 Hours Per person	Jul 25, 2022
Creating family/friend groups:	5 Hours Per person	Sep 28, 2022
Creating plan recommendations:	5 Hours Per person	Oct 15, 2022
Creating location recommendations:	10 Hours Per person	Oct 30, 2022
Tests for app:	15 Hours Per person	Dec 1, 2022
Budgeting development:	10 Hours Per person	Nov 15, 2022
Total:	140+ Hours Per Person 280+ Hours Together	Dec 14, 2022

- We will follow the Coding standards that the Dart and Flutter Documentation recommend so we can make sure that we are building the app in the most efficient way.
- We have a few security risks with storing user data and in order to mitigate that we will need to make sure that we are making that data private and encrypting it when we are using it.
- For metrics, google firebase has a metric system that we will use and utilize to know what parts of our app are being used and how much activity it has.
- We will be doing an Agile coding architecture since we will be implementing things as we go along. We want to be able to get our product out as fast as possible and then be able to get real feedback and then implement that feedback.
- For quality Assurance Characteristics we will make sure to write unit tests for each function of the app to make sure it works as intended. This will help us mitigate bugs that we might encounter otherwise.

➔ **Section 2a: Requirements**

- The User will be able to create an account and their user and password will be saved into a database that enables them to access their account at any time from any mobile device.
  - Password and Username will be stored and they will be able to log into their account at any time.
- The user will have account preferences that are tied to their account.
  - Their likes and dislikes will be tied to their account and will be able to be edited.
- The Users are able to join and invite friends to Reunion Groups
  - The users should be in a group with others
- The Users in the group can see each other's likes and dislikes.
  - Each person in the group has the ability to see each other person's likes and dislikes
- The Users can plan an event.
  - The event has a date and a location of where the event will take place
  - The Users of a group can assign different tasks.

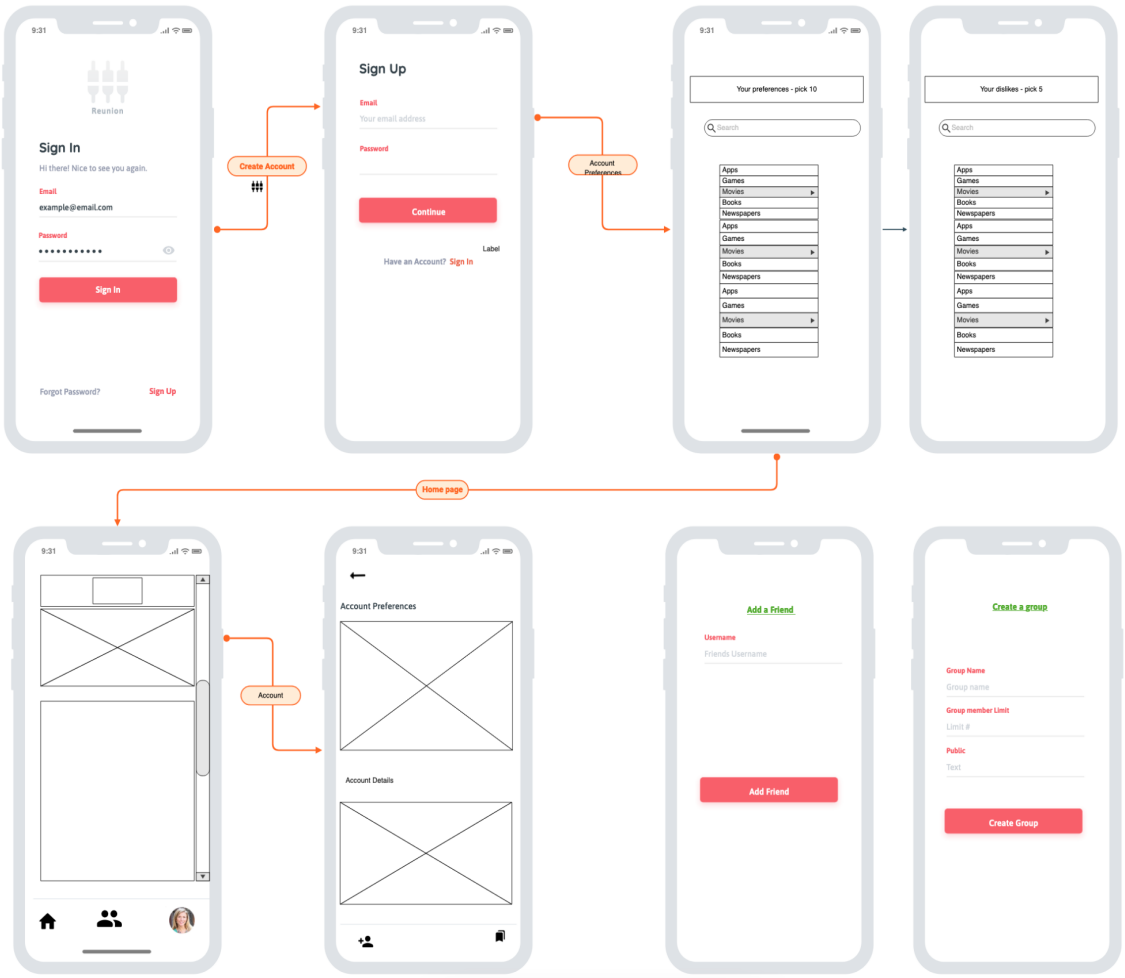
➔ **Section 2b: Stretch Requirements**

- Users inside a friend group can see the location of other group members
- There will be a budget system in place to help the users plan for the reunion.
- Two-factor authentication for the user to use
- Having a user photo profile picture
- Event deadline countdown - Reminders for events

➔ **Section 3: Design Overview of the Product.**

- Workflow: The user will start on the log-in page and then continue to the registration page if this is the first time creating their account. After this, they will be brought to the homepage and they will be able to see the groups that they are in. They will also be able to see their preferences. If they click on a group then they will be able to see who is in the group as well as the event that they have planned.
- Resources**:** We have been using Udemy to learn Dart and Flutter. We plan on using these technologies to build and make the application. We plan on using google firebase to be the backend and handle all of the data that we will gather from the user.
- Data at Rest: This will be stored in a Google Firebase and tied to their unique username and password. This will be encrypted and we will be figuring out how to best do that.
- Data on the Wire: This will all be handled on the backend. Google firebase will be able to handle this for us. Firebase will handle making sure this data is safe and secure when it leaves the database and gets sent to the user application.
- Data State: The data will come from user input. It will be handled by our backend code and set off to Google firebase to be stored or processed. In order to retrieve data the user will need to be connected to the internet and Firebase will bring data to their phone.
- Cost: The cost for firebase will be free for now. But in the future when we need to scale it we need to make sure that we are picking the firebase plan that will best fit the needs of the application. But for now, we can get away with the free version of Google Firebase.

- HMI/HCI/GUI: Provide a prototype (drawing, pic, etc) of what the user will see while using the application



➔ Section 4: Verification: How will the requirements be tested.

- **Demo:** We will know that the app works when we can have a user sign up and use the application as intended without needing assistance in setting up the app. The data that we will use is a person in test to see if they can set up the app properly.
- **Testing:** The User will be able to create an account and their user and password will be saved into a database that enables them to access their account at any time from any mobile device.

  The user will have account preferences that are tied to their account. That they will be able to see and change at any time

  The Users are able to join and invite friends to Reunion Groups. They will be able to see others that are in their groups and view the likes and dislikes of the group.

The Users can plan an event. And that event will be successfully posted to the group page. Event reminders will be working and sent out. And there will be an assignment feature to be able to distribute various planning tasks.

Additional testing that we will do is we will have a trial run of having a group of users download and use the app and then provide feedback for us.