Project outline:

Application Concept:

Feed the Kitty is an application for splitting bills for everyday items among a group using existing mobile payment platforms. One person would pay for the item, then create a tab to request payment from the rest of the group. The tab would automatically request payment from each group member and give the money to the tab owner, who paid for the item.

Key Functionality:

Users in the app will be able to create and access Tabs. Each tab consists of a payment amount and a list of venmo accounts that the payment will be requested from. The tab owner will be able to request and receive payment from all of the users and receive confirmation in the app that the payment has been received.

Components used:
- Firebase
- Recycle view
- Notifications

Required Resources:

The only data structure we need for this project is a firebase database composed of accounts and tabs

Each account is composed of the following:
- Email
- Password
- Venmo account
- Optional phone number

The tabs data would consist of three things:
- A payment amount
- The tab owner
- A list of users who the payment is being requested from and whether or not they have paid

Payments will be carried out using the Venmo API.

Structure:

Login screen

Home screen
- List of your tabs
- Create tab button
    - Optional: tabs you are a part of

Tab activity
- Has an adapter with a list of the users/venmo accounts that you are requesting payment from with an indicator as to whether they've paid.
    - Optional: click on a user in this list to have a dialog open up to resend the request or link
- Has a textview at the top with the total payment amount and the amount already paid

Receive real-time updates about your payments via webhooks.
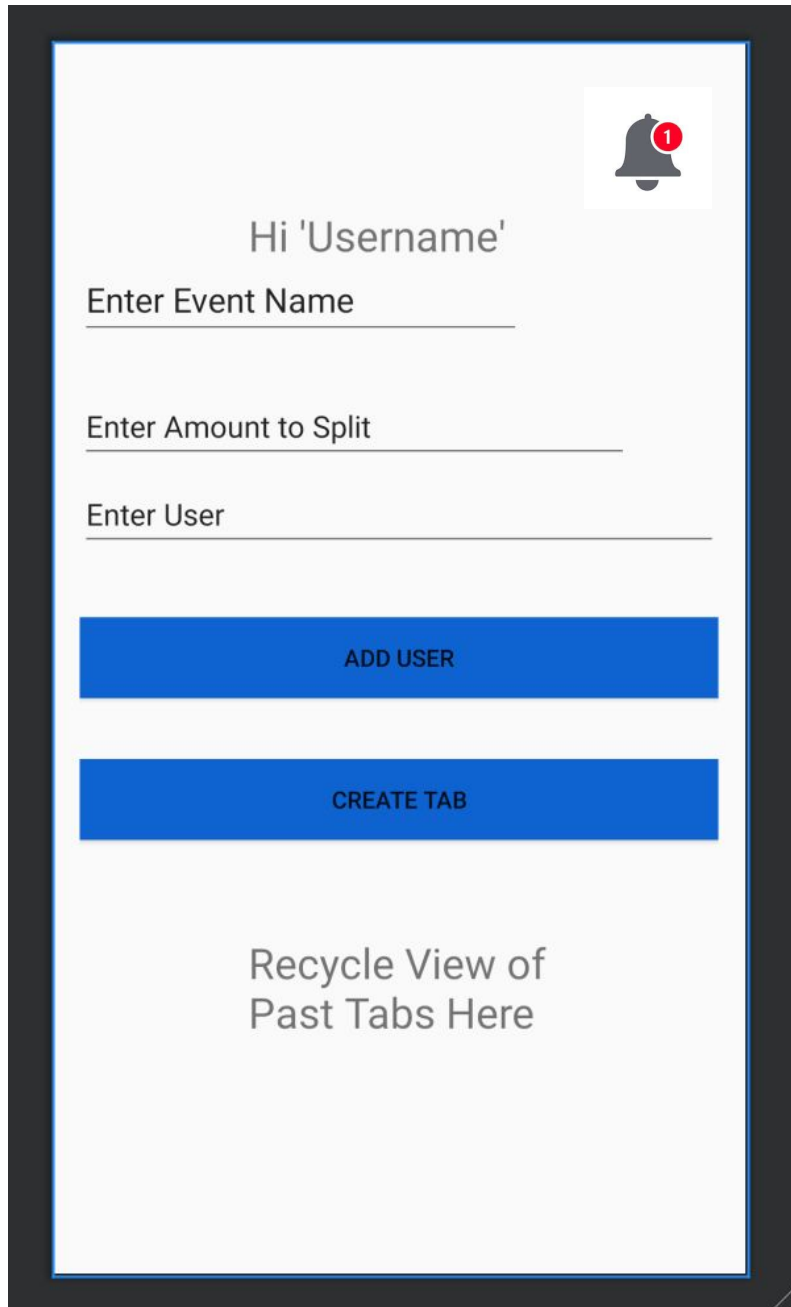
Feed the Kitty

Email

Password

Confirm Password

REGISTER

Already Registered?

Although the images aren't finalized, above shows the registration screen once the user launches the app. The email of the registered user will be stored as the username in the database. Additionally, there will be a redirect login page for those who have already registered.

The host will be allowed to set up a name for the event and the total amount which will be split evenly amongst all provided users. The add user button will allow for the host to add users to the tab. The create tab will send a notification request to the user, in which they can confirm to accept the request and send the required amount. At the bottom of the screen shows a recycle view of all the past transactions made by the user. If the user receives a request to pay a tab, they can click the icon in the top right. From there they can confirm payment.