

Vanier College
420-436-VA

Application Development 2
Final Report

Title: Donation app

19th December 2021

Elia Morhej

Aim and description:

This application aims to offer a wide variety of charities to users. Any charity could be inserted into the application for users to donate to. Users would use this app to find new charities they haven't heard of before or simply to donate regularly to their favorite charity.

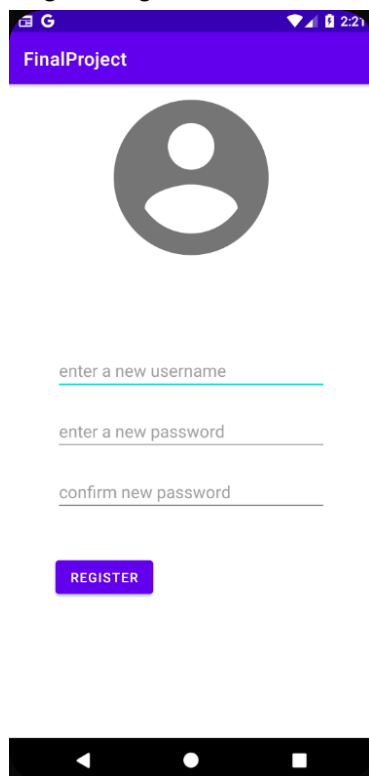
The application implements the google pay API to process payments and store payment options. Keep in mind that you cannot get charged from this app at all because google pay was implemented in a test environment mode. This was the documentation used:

<https://developers.google.com/pay/api/android/guides/tutorial#paymentsutil.java-java>

Additionally, please read the README file if you are having issues.

Activity navigation flow

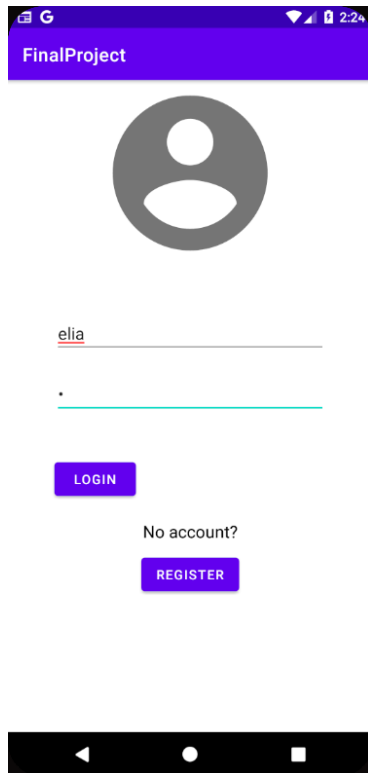
Registering:



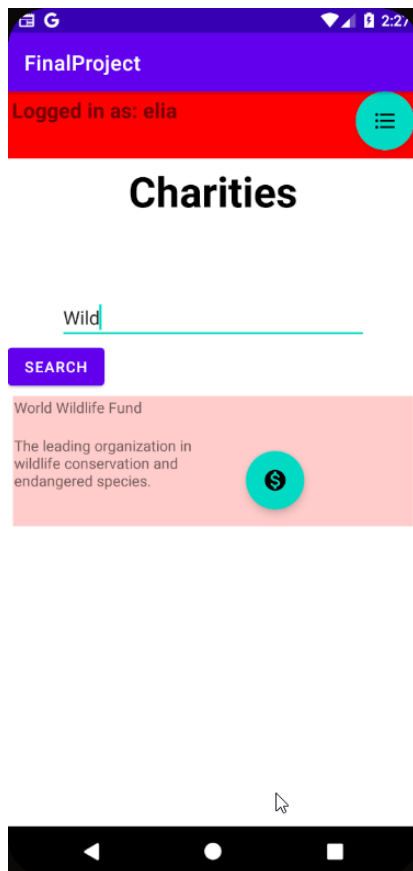
Logging in:

Elia Morhej
420-431-VA 00002

Sakkaravarthi Ramanathan



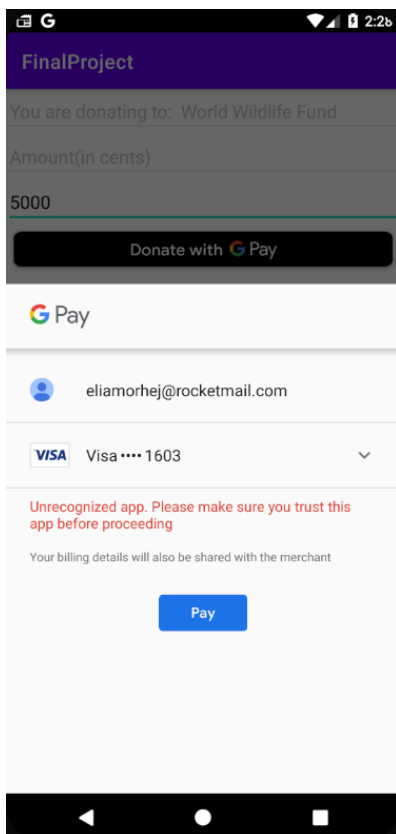
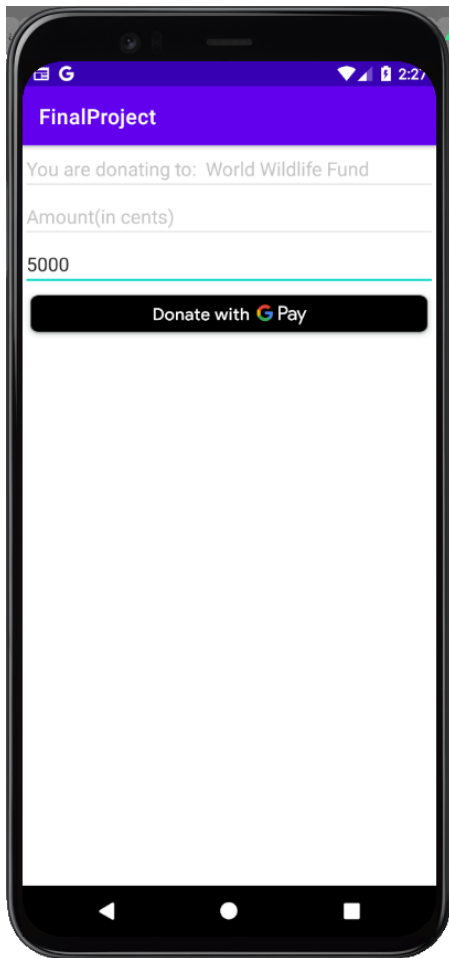
Searching for charity:



Donating:

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Sakkaravarthi Ramanathan



Elia Morhej
420-431-VA 00002

Sakkaravarthi Ramanathan

Adding payment method:

Payment Details

Google Pay

eliamorhej@rocketmail.com

+ Add new credit or debit card

Card number

#

MM/YY CVC

elia

2732 Rue d'Obernai, Laval QC H7...

Unrecognized app. Please make sure you trust this app before proceeding

By continuing, you agree to the Google Payments [Terms of Service](#). The [Privacy Notice](#) describes how your data is handled.

Your billing details will also be shared with the merchant

Viewing donation history:

FinalProject

Your donation history

Search

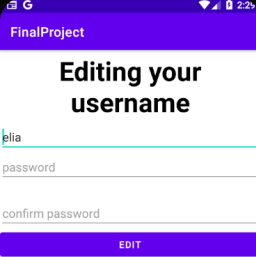
SEARCH CHARITY NAME BACK

red cross	5.00 \$	18/12/2021 18:30:18
red cross	76.00 \$	18/12/2021 18:40:04
red cross	10.00 \$	18/12/2021 18:48:49
The breakfast club	60.00 \$	19/12/2021 14:08:46
World Wildlife Fund	50.00 \$	19/12/2021 14:29:15

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Editing your username:

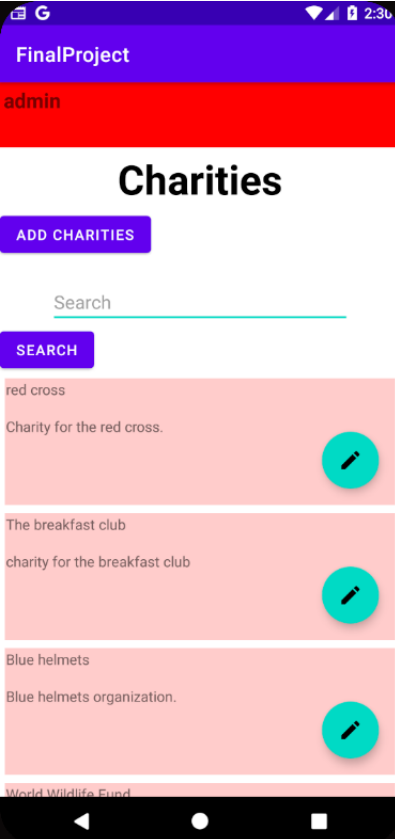


The screenshot shows a mobile app interface with a purple header labeled 'FinalProject'. Below the header, the title 'Editing your username' is displayed. There are three input fields: the first contains 'elia', the second is labeled 'password', and the third is labeled 'confirm password'. At the bottom, there is a purple button labeled 'EDIT'.



As an admin

Main page:

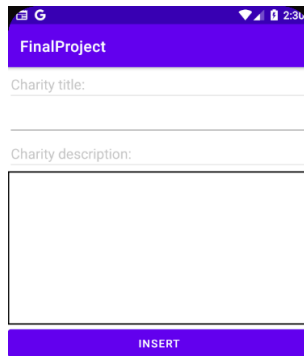


The screenshot shows the 'Charities' main page in the FinalProject app. The header is purple with 'FinalProject' and a red bar below it with 'admin'. The title 'Charities' is centered. Below it is a purple button labeled 'ADD CHARITIES'. A search bar with the placeholder 'Search' is followed by a purple button labeled 'SEARCH'. Below the search bar, there is a list of charities, each in a pink card. The first card is for 'red cross' with the description 'Charity for the red cross.' and an edit icon. The second card is for 'The breakfast club' with the description 'charity for the breakfast club' and an edit icon. The third card is for 'Blue helmets' with the description 'Blue helmets organization.' and an edit icon. The fourth card is for 'World Wildlife Fund' and is partially visible at the bottom. The Android navigation bar is at the very bottom.

Adding new charities:

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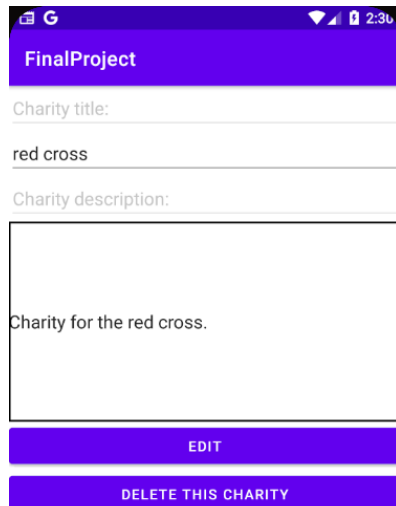
FinalProject

Charity title:

Charity description:

INSERT

Updating/deleting charities :



FinalProject

Charity title:

red cross

Charity description:

Charity for the red cross.

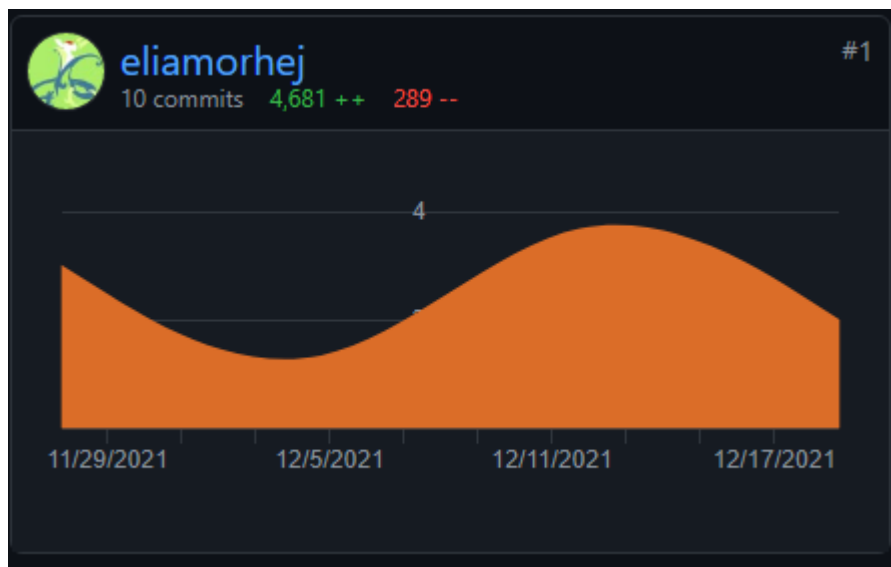
EDIT

DELETE THIS CHARITY

Team Contributions

I had to learn to learn to use google pay, by learning about tokenization and how payments are processed digitally (through a gateway). I also had to learn room database and how to use it for more advanced things such as foreign keys. Passwords were stored using hashes, which we learned to do in our eCommerce class. The rest were concepts we had learned during the year, such as a big use of fragments, intents and recycler views to list items.

My Commits



<https://github.com/eliamorhej/donationapp.git>

Conclusion

This was an insightful project to make and taught me a lot about the dynamics of multiple activities and services working together. Handling the activity back stack was a challenge to do without learning about intent flags. Room database, another challenge in this project, was rather unconventional to use because of the differences it has with SQL services like my SQL. However, the biggest challenge was without a doubt Implementing the Google pay API. Understanding how payments worked was a long process, but thanks to the online api it was manageable.