

Specify your task and goal, so your progress can be tracked.

Task

- Payment method and API for visa/master cards
- Application get the access to the local gallery and choose photos
- Or take photos directly (API)
- Get access to web server and database
- Exchange and deal with request
- Database design
- Navigation bar at the bottom

Feasibility study

how to implement, strategy, show ways

Main Method

Html + CSS + JavaScript + Android (load html in AndroidStudio project webview - assets)

Python - web server (django?)

MySQL

Payment API

resource: <https://developer.visa.com/vdpguide> + tutorials

Visa Developer Center helps to access APIs and associated credentials and reference material. It provides effective authentication and authorization methods. There are many APIs provided, we are considering the API of CyberSource.

Card data is encrypted on the customer's device and sent directly to CyberSource, by passing your systems altogether. This guide describes how to create an account, get credentials to start building your test project and connect to the sandbox for testing your project. Once we finish testing your project, we can request for moving it to the production environment.

There are two standard and supported authentication methods for calling the APIs, and we may choose the method of "API Key - Shared Secret (x-pay-token)".

The guidance is very long and there are many sample codes for Authentication Methods to connected to the Sandbox, which all needs us much time to understand and implement.

Get the Access to the Local Gallery

Take Photos Directly

Using camera and selecting images from local albums is of great importance for our application functions, because charity organizations need some images to post their charity activities and which is also a relatively difficult point for us to achieve. Thus, we spent much time learning how to use camera through html in Android, searching a lot of online resources and testing our codes for this part. There are three loading approaches in different kinds of resources:

- load a website
- load a html page in a package
- load a local html page in mobile phones.

What we need is the second approach. Firstly, create a html file and save it in assets folder and the code frame as following picture.

```
webView.loadUrl("file:///android_asset/test.html");
```

Then we load webview in the main activity by below code.

```
localWebview.loadUrl("file:///android_asset/myhtmlfile.html");
```

We referenced an associated website about webview: <https://blog.csdn.net/u012810020/article/details/52708557>, following its guidance step by step, try to understand each step. However, at the beginning, there always exist some errors and we tested for a lot of times.

Web Server and Database

In progress

Database Design

In progress

Floating Navigation Bar

Floating navigation bar should stay at bottom of screen when people scroll up and down. It contains function of Home Feed, Search, Explore, Activity and User Profile. The difficulty is how to keep the navigator at the bottom of the page. At first, I think we can achieve that using JavaScript.

I searched for relevant information on the webpage. (Responsive Bottom Navigation

https://www.w3schools.com/howto/howto_js_bottom_nav_responsive.asp)

However, After discussion in our group, we discarded the original idea and adopt a new one. The navigation bar does not have to be suspended. It can be fixed at bottom of every pages. Apart from that, we will add function of scrolling based on that.

Agenda

Hand-writing

Want to solve in the coming week (20th - 26th)

- Complete sketches and float chart
- Complete the user interface about sign up & log in
- Do feasibility study

- Learn, discuss, choose appropriate language, framework, data base, web server (make a try)
- Installation and fundamental configuration
- Build and implement Django and MySQL

What the project will look like in the end of the year?

- Basic functions will be implemented. Test users can use the application to donate money to some particular test charities. Payment system is very important in our application and will be implemented.
- Users can edit their profile (name and profile photo, and add 10 photos to show in the application).
- Users can search the charity by name (among test charities).
- Users can see the popular posts in Explore.