P02-Project Proposal

Application name: Zero Hunger

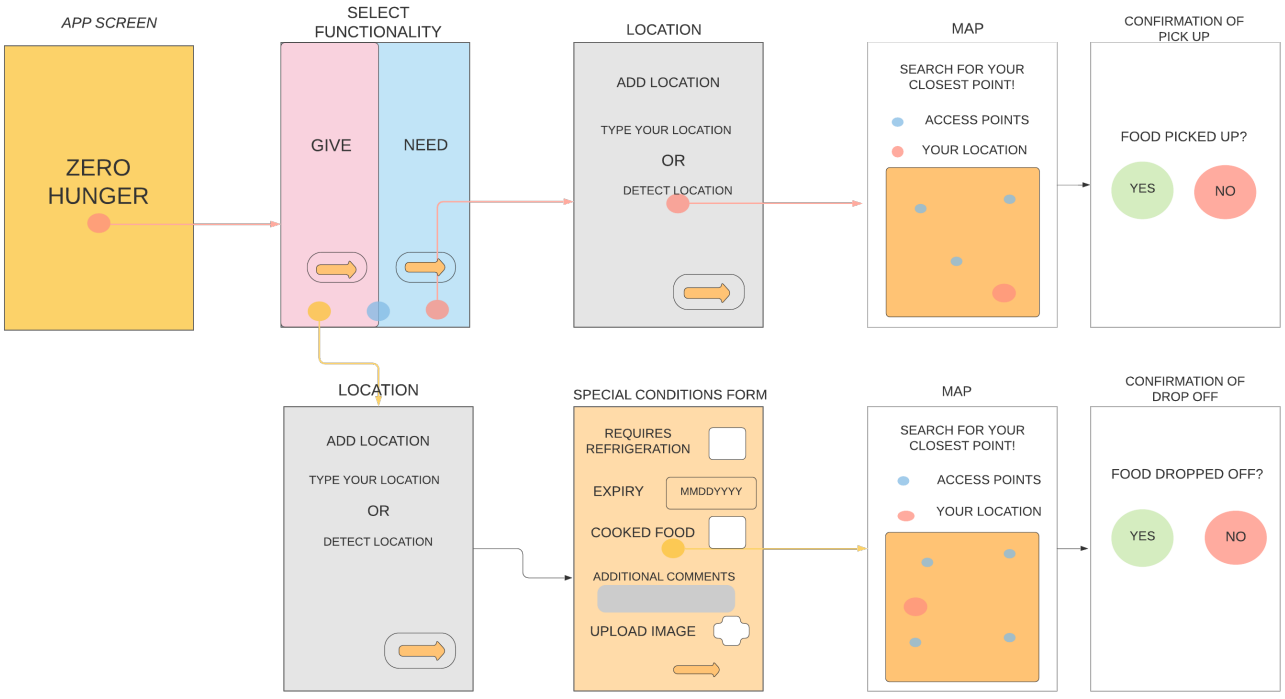
Existing Problem:
- Hunger is a major issue in today's world
- Excessive food wastage

Resolution:
The Zero Hunger mobile application tries to take a step to eradicate hunger. The strategy is to gather the surplus food from restaurants, cafes and peoples homes and deliver it to the people who need the food. Using this we can achieve the goals of serving the needy as well as reduce the wastage of food items with no big investments.

Intended Audience:
The app is targeted to feed anyone who is hungry and needs food.

Services/APIs:
- Google Maps API - This API would be used to create a map in the application by using GPS. Using maps, people can drop and pick up food from certain access points.
- Cordova Camera API - To click a photo using the device's camera to capture the image of the food that is dropped off.
- Geocoding API - Using this API, users can determine their current location and check the location of the food access points.

Planned output - Sketch/Wireframe:



It is an appropriate choice for the user as they can find and pick up food items easily through an app (as everyone uses a cellphone) and thereby reduce food wastage.

Development Timeline:
I will be starting with the main pages (maps, locations, forms etc) followed by the opening app page (start up) and confirmation pages (pick up and drop off).

Roughly I will be following -

Week 1: The page for selecting "Give/Need" and start on "Special conditions" form.
Week 2: Complete "special conditions" form along with upload image functionality.
Week 3: The location page including detection of location using Geocoding API.
Week 4: The map pages for dropping off and picking up food.
Week 5: Simple start up and confirmation of pick up and drop off pages.
Week 6: Any pending work and app designing

Major Functions:

- *giveOrNeed:* An option for giving or picking up of food
- *locationUser:* Determining the location of user
- *locationAccessPoint:* Determining the location of access points
- *currentFoodDetails:* Input from the user for the food conditions using a form
- *uploadImage & displayImage:* To upload and display food items image
- *createDisplayMap:* Create & display a map to show user and access points.
- confirmPickUp: Confirmation of picked up food.
- confirmDropOff: Confirmation of food which is dropped off at access points.

Order of implementation:
First, the basic functionality of the application, i.e to drop off and pick up food will be implemented followed by the implementation of camera to click images and overall design of all the pages.

Regular Goals:
- User can select "give" or "need" option
- Collect data on current state of the food
- Find current location and location of access points (if tedious, will move to stretch goals)
- Click images and upload

Stretch Goals:
- The user who picks up the food, will be able to click on access points in the map to view availability of food at each of the access points.
- When someone drops off the food, an sms will be send to the registered homeless.
- Addition of access points dynamically through the app.