**CSTP2202 MVP Proposal**

**Food Donation App**

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**Contents**

1. **Ideation**………………………………………………………………………………………………….3
   1. Our Chosen Idea and Motivation…………………………………………….……..3
2. **Scope**…………………………………………………………………………………………….….…….4
   1. List of features………………………………………………………………………….…..4
3. **Group**……………………………………………………………………………………………….……..5
   1. Core Values……………………………………………………………………..……….......5
   2. Project Goal………………………………………………………………………..………...6
   3. Things to Learn……………………………………………………………………….........6
4. **Market Research**………………………………………………………………………….…………6

4.1 Why we need this App…………………………………………………………………..6

4.2 Statistics showing food wastage within Canada………………………………7

4.3 Similar Existing Apps…………………………………………………………….………7

1. **References**…………………………………………………………………………………………….8

**Ideation**

Our List of Ideas

* Person Shopper App
* How to App
* Share Your Story App
* Ticket Reselling App
* Tell a secret App
* Plan My Day app
* Rate My Boss App
* Photo Album + Journaling App
* Handyman App
* Supermarket Checkout App
* Elders Care App
* Take my Garbage App
* Food Donation app for restaurants

Our Chosen Idea and Motivation

Our project team before initiating the project conducted a survey among members of our team and family members of each participant, in order to get information about which application we want to choose to work on and what needs we have that are not satisfied by current apps within the market. We figured that the “Food Donation” application would be the most helpful for our communities and for local businesses. We have the necessary knowledge, instruments, and a motivated team in order to successfully create this application.

**Problem statement**: after the conducted app research on Google Play - we did not find an application that would cover all our needs and needs of potential clients:

* Sharing restaurant’s excess food on an everyday basis;
* Food safety protocol guaranteed;
* Motivating restaurants to join the program as they can see real life results

**Solution**: we settled on developing the “Food Donation '' application using Kotlin programming language for the interface with Node JS + Express for Backend (Firebase TBD).

We are interested in making this app because there are many individuals and families who cannot afford to put food on the table every night. Many restaurants have extra food that they are going to throw out at the end of the day. So, our solution is to provide an outlet for people in need to find food at local restaurants that have excess and get that food into the hands of those who really need it.

**Scope**

## Features for General Users

* The app will display a list of generous food providers who offer give-away food, images of the food items, a brief description of what is being given away, available time and the location of the pick-up place.
* Users can view details about the give-away food event in a detail page.
* Events can be filtered by food event title or food providers name or date (i.e., all today’s events, events from the last two days etc.)
* Users can show interest in the food item by clicking the “like” button. (This won’t reserve the food item for the users; food items are given away on first come first basis)
* A map will show the pick-up location in the detail page; users can click on the map then it will redirect the user to Google map
* A quick dial button on the app which the user can call the food providers

## Features for Food Providers

* Food providers can set details about the give-away food event. (date, available time, where to pick up, full description and condition of the food items, food allergy warnings, expiration date, restriction about how much food each person can get etc.)
* Food providers can upload 3 pictures of the give-away food.
* Food providers can cancel the event at any time.
* Each food provider has its own profile page which displays some details about the food provider (such as who they are, some images about their organization etc.);
* The profile page also shows all the past events that the food provider has organized

**Group**

## Core Values

1. **Teamwork** – we fulfill our project goals as a team; each member will commit time and effort to the project.

2. **Open communication** – everyone is encouraged to express their ideas and constructive feedbacks during group discussions.

3. **Responsibility and Reliability** – everyone will be expected to participate in group meeting and to complete their assigned tasks on time.

## Project Goal

* Reduces the wastage of food by donating excess food and leftovers to the hungry communities and homeless.
* Users can easily look up for restaurants willing to donate food nearby their area.
* Accessible pickup points are provided to the users for food pickup and donation.
* Easy way to serve hungry people free meals.

## Things to Learn

* Key Features in Kotlin and best practices.
* Setting up a cloud-based backend store for a mobile app.
* Setting up authentication for a mobile app.
* How to upload images from a mobile app to a database.
* How to save data on a phone for data caching.
* How to deploy the app onto Google Play Store.

**Market Research**

Why we need this app?

* The main reason behind this call is that the need for food is everywhere.
* Over 900 million people suffer from hunger, undernourishment, and death all over the world.
* Because everyone nowadays has access to mobile phones and the internet, installing an app and registering it accordingly (donor or receiver) is the simplest activity that may save the lives of millions of people.
* Through the food donation application, a user can directly contact the NGO or food banks, especially for the leftover food from big events such as marriages, parties, etc.

Following are some statistics showing food wastage within Canada.

* The National Zero Waste Council conducted research about food waste in this country in 2017 and the result were 63 percent of the food Canadians throw away could have been eaten (that is about 2.2 million tons of edible food wasted per year).
* According to UNEP Food Waste Index report 2021, global food waste data availability is currently low, however there have been a growing number of national estimates of food waste from country around the world in recent years, with 152 food waste data points identified in 54 countries.

Similar Existing Apps

* **Food For All** is an application that helps restaurants to eliminate food wastage by connecting them to customers one hour before they close, at that time, a customer can get up to 80% discount on food and can also donate food to people in need through app.
  + Disadvantages:
    - Only available on iPhone/ iPad.
    - Available in only Boston and NYC.
* **NoFoodWasted** is an application which stimulates the demand for discounted products with best before date. It alerts supermarkets which items are approaching their expiration date. Customers can check deals online and can get discounts on different products. Presently, this app is being used by 77,000 people.
  + Disadvantages:
    - Only available in Netherlands and in ‘Dutch’ Language.
* **OLIO** offers a food-sharing platform, connecting people with neighbors and local shops to donate food items. Users can add a photo and description of an item, indicating where and when to pick up.
  + Disadvantages:
    - Application sends spam emails and a lot of notifications.
    - Application does not work smoothly and lags while searching for any food item.

**References**

* *16 apps helping companies and consumers prevent food waste | Greenbiz*. (n.d.). GreenBiz. Retrieved September 20, 2021, from <https://www.greenbiz.com/article/16-apps-helping-companies-and-consumers-prevent-food-waste>.
* L. (2021, February 24). *Food Waste in the Home*. Love Food Hate Waste Canada. <https://lovefoodhatewaste.ca/about/food-waste/>