

# Project Proposal: Eden Fresh

Team Web Crawlers

Alexander Dung

Devarsh Patel

Justin Calma (Team Leader)

Kayla Chu

Sze Man Tang

Submission Date: September 30, 2021

Approval Date: October 1, 2021

# 1. Introduction

## 1.1 Pain Points

There are many people who are able to grow fresh produce; however, there is a lot of leftover produce that goes unused and the grower would like to sell it but they have no effective way of connecting with people within their neighborhood who are actually interested in their produce. For some people, an ingredient that they are looking for might not be readily available in their local market and might require them to travel far just to get it.

## 1.2 Intended Audience and Value

Eden Fresh is intended for urban growers seeking to sell their produce and buyers looking for homegrown produce around their neighborhood. The value that Eden Fresh aims to bring into existence is to be a free web application that aims to provide an online platform for urban growers and buyers to connect with each other, allow growers to sell their products and receive profit, while giving convenience for buyers to purchase homegrown ingredients around their neighborhood.

## 1.3 Product Vision

The current vision that we have for our project is to expand from creating urban growing communities within neighborhoods and allow for those communities to connect with other communities around the country. We also envision that our project will have a delivery option that lets urban growers from different neighborhoods easily sell their produce and provide convenience to those who do not have the ability to attend in-person meetups. In the matter of what we want to accomplish with this project, we want to create urban growing communities that are connected across the country, promote urban growing communities within neighborhoods, and create an alternative to self-service food markets.

## 1.4 Direct Competitors

- Direct competitors of our product would be online grocery delivery services like Amazon Fresh, GrazeCart, LocalHarvest, and Farmigo
  - Amazon Fresh - Online grocery service that allows for grocery delivery or in-person pick-up
  - GrazeCart - Online service designed for farmers, butchers, and fishmongers to post their products and let consumers order them online and have them delivered.
  - LocalHarvest - Online service that allows local and professional farms to post their perishable food for consumers to purchase.
  - Farmigo - “Online farmers’ market” that connected its consumers with local farms.
- Other competitors of our products would be a self-service store that serves foods: Supermarkets and Farmers’ Markets

As opposed to our competitors, our web app focuses on local growers that live within cities, promoting accessibility for buyers purchasing in person and increasing the variety of produce that can be accessed, as urban growers may grow foods that local farmers do not.

## 2. Product Overview

### 2.1 Product Scope and App Updates

Eden Fresh will support the desktop version of Google Chrome version 89 and any later versions released until May 2022. The language and geographic region that our product will support is American English and will be available for anyone within the United States only. Our product will only support U.S. currency. All produce will be listed by their English-translated name if it exists and their English-transliterated name if a translated name does not exist. The ages that our product is intended for are those who are 18 years or older. The metric system that our web app will support is the United States customary units.

**Expansion:** Future updates may allow the web app to support mobile browsers, Firefox, Microsoft Edge, Safari, and other Chromium-based browsers. Future updates may allow for the web app to support other languages and be available for other geographic regions. Other metric systems may be supported with future updates.

### 2.2 Features

#### 1. Miles Radius Search

- a. Users' current location will be used with their permission in order for the system to facilitate search features.
- b. Buyers will be able to search for ingredient listings within a specified distance of their choosing from a location they have set.
  - i. Buyers will be limited to a 5, 10, or 15-mile search radius which allows buyers to search for sellers around a location of their choosing.
  - ii. Buyers are able to use their current location or set a specific location as the center of the area search

1. Buyers' current location will be used as their placeholder location until they have changed it to a location of their choosing

## **2. Cuisine Filter**

- a. Buyers have the option to refine their search results by using the cuisine filter.  
This applies a filter to the buyers' miles radius search in order to find sellers that specialize in their desired cuisine
  - i. Buyers will be able to select predefined cuisine(s) applied for their filter and the results from their miles radius search will be refined down to the specified cuisine.
    1. See Section 3. Possible Cuisines to Select to view the cuisines that buyers are able to select.

## **3. Rating and Review**

- a. Buyers and sellers will be able to rate and review each other once a transaction between them has been completed or cancelled.
  - i. Buyers and sellers are allowed to rate each other from a 1-5 star scale.
  - ii. A user can rate and review any specific user and product only once, but it can be changed at any time.
  - iii. Buyers will be able to rate and review the product(s) that they have received and their experience with the seller. Sellers will be able to rate and review their experience with the buyer.
    1. A review is limited to 4 images and 40 MB per image
    2. The review is limited to 1000 UTF-8 characters.
- b. Buyers and sellers are able to view all ratings and reviews that others have posted.

- i. Ratings and reviews regarding a buyer or seller will be viewable on their profile
- ii. Ratings and reviews regarding a product will be viewable on the product listing

#### **4. Set-up Shop**

- a. Sellers are able to post their current products for sale and their preferred meetup location on their profiles.
  - i. The preferred meetup location will be used as the criteria for the miles radius search.
  - ii. The preferred meetup location will default to the seller's home location, but the seller can change it to another location at any time.
    - 1. The preferred meetup location will not be visible to see until a transaction is ready.
    - 2. Sellers' location will be used with their permission in order for the system to facilitate search features.
- b. Sellers are able to set the necessary information for each product, such as the current number of stock, price per pound or piece, images of the product, and a description of the product.
  - i. Whether the price is per-pound or per-piece is chosen by the seller.
  - ii. A posting is limited to 4 images and 40 MB per image.
  - iii. The description is limited to 1000 UTF-8 characters.
  - iv. Sellers will be able to update any of the product information at any time.
- c. Sellers are limited to having up to 20 active posts at a time.
  - i. Sellers cannot post another listing if they already have 20 active listings.
- d. Posts last indefinitely and can be removed by the seller.

## **5. Real-time Notifications**

- a. Users will be able to receive and view their real-time notifications
  - i. Users will be able to change their real-time notification settings at any time
- b. The default notifications that users will receive are product updates, direct messages, ratings and reviews made about them or their products, and update notifications regarding their current reservations
- c. Buyers must opt-in to get notifications about followed sellers individually
- d. All users can opt to not receive product update notifications, direct message notifications, ratings and reviews made about them or their products, and notifications from sellers that they follow.
  - i. Users cannot hide notifications regarding produce reservations and request fulfillment.
- e. Users can delete one or multiple notifications.
- f. All notifications saved will be automatically deleted every 6 months (January 1st and July 1st) unless users choose not to delete the messages.

## **6. Request Fulfillment**

- a. Buyers are able to post a request for a specific amount of produce that is visible to all sellers.
  - i. The request can be left posted for 30 days and canceled by the buyer at any time.
    - 1. If the request is left unfulfilled for more than 30 days, then it is automatically removed.
- b. Sellers can leave a post on the buyer's request, with a price offer to fulfill their request.

- c. Once the buyer has selected a seller to fulfill the request, the request is removed.
- d. After selecting a seller, the buyer can see the state of the order.
  - i. The seller and the app are able to set the state to one of 2 states: “Processing” and “Ready”.
  - ii. The initial state of the reservation after acceptance is “Processing”.
  - iii. Once the produce is gathered and the seller is ready to perform the transaction, the seller will manually set the state to “Ready”.
    - 1. Once this occurs, a chat request will be sent from the seller to the buyer (if there is not already a chat between the buyer and the seller), and a notification will be sent to the buyer that the transaction is ready.

## **7. Reservation and Transaction**

- a. Buyers are able to reserve their desired product from a seller by selecting an amount from the current unreserved stock and sending a request to the seller.
  - i. Buyers are unable to reserve produce that is currently out of stock or reserve an amount that is greater than the current stock.
  - ii. Buyers are able to send the request to the seller after confirming the amount they have selected
  - iii. Sellers will receive a notification for the request to accept or deny it.
    - 1. Sellers also have the option to cancel a reservation after accepting.
    - 2. Once a reservation is accepted, the buyer will receive a notification about its acceptance and the reservation will last for 72 hours without confirmation of a transaction by the seller.



- a. Once the reservation is confirmed by the seller, the product stock will be reduced by the number reserved.
    - b. If the transaction is not confirmed within 24 hours, it will be canceled and the stock is not reduced.
  - iv. Buyers can also cancel a reservation at any time.
  - v. Buyers can send a request to the seller to change the reserved amount to another non-zero amount within the unreserved stock count.
    - 1. The request can be sent after the reservation is accepted.
    - 2. Upon request, the seller will receive a notification and must accept or decline before the transaction can be confirmed. The confirmation date is also extended by 24 hours if the initial request was already accepted.
      - a. If accepted, the reserved amount is changed to the buyer's desired amount.
      - b. If declined, the reserved amount remains the same.
- b. After the reservation is accepted, the buyer is able to view the state of the transaction according to the seller.
  - i. The seller is able to set the state to one of 3 states: "Processing", "Pending Approval", and "Ready".
  - ii. The initial state of the reservation after acceptance is "Processing".
  - iii. If the buyer has requested a change to the reservation, the state is automatically set to "Pending Approval".
    - 1. Once the reservation is accepted or declined, the state is automatically set back to "Processing".

- iv. Once the produce is gathered and the seller is ready to perform the transaction, the seller will manually set the state to “Ready”.

- 1. Once this occurs, a chat request will be sent from the seller to the buyer (if there is not already a chat open between the buyer and seller), and a notification will be sent to the buyer, notifying that the transaction is ready.

## **8. Chat Feature**

- a. All users can send a request to another user to open a chat between each other to ask questions that they may have regarding their stock and arrange a place to meet up.
  - i. Users that receive the request can accept or decline beginning a chat.
  - ii. Users cannot have multiple active chats with the same user.
  - iii. Users are able to communicate by text with each other through the chat.
    - 1. Each chat message is limited to 500 UTF-8 characters.
    - 2. Images of sizes up to 30 MB can also be sent.
- b. Users are able to access previously opened chats
- c. Users can have up to 500 active chats at once.
  - i. Opening a new chat after having 500 active chats will result in the oldest one being deleted, preventing either party from accessing the deleted chat.
  - ii. Users can manually close chats.

## **9. Meeting Point Directions**

- a. Once a buyer’s reservation or request fulfillment bid is ready, they will have access to a map showing street directions from a location of their choosing to the seller’s meetup location.

- i. With the users' consent, their current location will be used as the origin point to connect to the preferred meeting location as the default.
  - 1. The origin location to begin directions from can be changed by the user.
- ii. Sellers will be able to change the preferred meeting location at any time.
- b. Once the respective transaction either expires or is marked complete by the seller, the buyer will no longer have access to the seller's location or directions there.

## **10. Transactions View**

- a. Users will be able to see a list of all accepted reservations and request fulfillment bids involving them, sorted chronologically, latest-first.
  - i. If a chat is open between the user and the other party of a transaction, they can access that chat through the transaction listing.
  - ii. When a transaction is ready, they will be able to view street directions to the transaction's meeting point.
  - iii. Edits to the transactions can be initiated from this view.
- b. Cancelled and completed transactions are also visible but can be removed by the user.

## **11. Following Sellers**

- a. Buyers will be able to follow sellers, which adds them to a list of sellers they follow and lets them receive real-time notifications if the seller has restocked a product or posted a new product on their profile
  - i. Buyers will be able to follow sellers through the seller's profile.
  - ii. Buyers are able to unfollow sellers at any time, which removes them from their following list.

- b. Buyers will be able to view their following list on their profile.
  - i. Users are able to view another's following list by going onto their profile.
    - 1. Users will be able to make this information visible or hidden.
- c. An individual buyer can follow up to 300 sellers.

## 12. User Block Feature

- a. All users can opt to block other users.
  - i. Blocked users cannot open chats with, follow, or view old and new posts by the user that blocked them.
  - ii. Blocking a user who has already opened a chat with you will prevent them from sending more messages to you.
    - 1. All previous messages are still visible to both parties.
  - iii. Blocking a user who is already following you will remove you from their following list.
- b. Users can view the list of users that they have blocked and they are able to unblock them
  - i. Users are unable to see another user's list of blocked users.
- c. A user can block up to 1000 other users.

## 3. Possible Cuisines to Select

- Asian
  - Chinese, Japanese, Indian, Korean, Thai, Vietnamese
- European
  - French, Greek, Italian, Spanish
- Latin American
  - Mexican

**Expansion:** Possible updates to add more cuisines to select from.