CS 30700 - Team 19

Foodie: Product Backlog

Team Members

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Problem Statement

When students try to have meals on-campus or off-campus, there are often times when they

face difficulties finding seats or eat by themselves. Foodie will help people establish connections

and help people around campus who have the same preference of food or are eating alone to

get together. We will provide information about on and off-campus restaurants, real-time users

who can get connected, and recommendations based on students' preferences or tastes. This

will provide new or current students necessary information that will aid them in choosing

restaurants or dining courts as well as meeting new people. Also, students who find it difficult to

go to restaurants that are far from their dormitories will be able to get there with ease by

carpooling with other students who might be going to the same restaurant.

Background Information

Nowadays, people tend to be connected via internet but, they should now step out of their

comfort zone to continuously interact with others. Before people used to text everyone they

know to see their availability but now users can just log in to the application and see who is free

at that time. While eating food, they will be able to start their conversation easily because of

their similar interests and that keeps them connected. Also, the carpool will be encouraged as

people who would like to go to restaurants that are far from campus will find out if other people

are going to that same restaurant and can tag along with them for the ride.

Users:

The main users of our applications will be Purdue students and faculties. However, when people

visit the university, they will still be able to download the application and communicate with

students.

Domain:

The category our application falls under is "lifestyle", where it represents a strong connection within students' lives.

Similar features:

Within the application we will be presenting, some similar features that are provided from Yelp, Zomato, Let's eat and Snapchat. These applications provide reviews and interaction with students in various ways. Yelp provides reviews about restaurants. Zomato provides filters by mood and discount coupons. Let's eat allows students only in the same university to make appointments. Snapchat allows us to add other snapchat users through QR scan codes.

Limitation:

All of these services are useful, their limitation is that they do not know the current users online or are limited to school students. Our team believes that students should broaden their social connections beyond students within their major. Our main feature, which is finding free people online and connecting others, will be a different feature that other competitors do not have. Also, some of these features do not include options that would let us know the availability of the dining courts, which is specific to the university campus.

Functional Requirements

- As a user, I would like to be able to see the menus of nearby restaurants.
- As a user, I would like to be able to get locations of restaurants around me.
- As a user. I would like to be able to reserve a table at the restaurant.
- As a user, I would like to be able to talk in a live chat room so that my questions can be answered quickly.
- As a user, I would like to be able to know the total price of the meal including tax.
- As a user, I would like to be able to make comments on the foods I've eaten.
- As a user, I would like to be able to read reviews for the restaurant.
- As a user, I would like to be able to rate the restaurant.
- As a user, I would like to be able to get notifications about new menu items.
- As a student, I would like to be able to get recommendations for food within various menus.
- As a student, I would like to be able to save my preference for the items I have from the restaurant.

- As a student, I would like to be able to connect with other people while having my meal.
- As a student, I would like to be able to filter the restaurants around me.
- As a student, I would like to be able to get contact information of the restaurant.
- As a student, I would like to be able to track the position of people who are coming to the dinner party.
- As a student, I would like to be able to turn on and turn off the tracking service.
- As a student, I would like to be able to get a series of data showing where I dine the most.
- As a student, I would like to be able to share my recent activity with my friends.
- As a student, I would like to be able to share photos I took with people at a party.
- As a student, I would like to be able to add people to my contact by just scanning their unique QR code.
- If time allows, I would like to be able to introduce some secret menu on the restaurant.
- If time allows, I would like to be able to split the bill with friends who go with me.
- If time allows, I would like to be able to get notifications about promotions or events of restaurants.
- If time allows, I would like to be able to have a feature that will prevent me from calling or texting when I'm drunk.
- If time allows, I would like to be able to see other people's most recent activated time so that we can contact them.
- If time allows, I would like to be able to track my monthly spending when I use the app to pay.
- If time allows, I would like to be able to get real-time feedback from people who are in certain restaurants (space, waiting time, etc...).
- If time allows, I would like to be able to get notifications about any coupons.
- If time allows, I would like to be able to get notifications about any coupons. I would like to be able to carpool with people who might be going to the same restaurants which are far from campus.
- If time allows, I would like to be able to pay with Apple Pay directly.

Non-Functional Requirements

Architecture and Performance:

We are building an app that is based on an iOS platform by using Swift as the core programming language. We will be using the MVC structure. We expect the time to search for people around you to be finished in 5 to 10 seconds without the user specifying (and if they do, we can set the upper bound to around 30 seconds), and the time for the login to execute should be less than 5 seconds. We also expect the restaurant search to complete in less than 10 seconds. We will be mainly separating our app into two parts, the front-end, and the back-end. For the front-end, we will be using the auto-layout offered by Xcode, and also some of the icons that are free and provided by the various website. As for the back-end, we are planning to use Firebase to create our user database, Yelp's API to gather information about restaurants, and Google Maps' API for the location services.

Security:

Foodie's security is mainly dependent on the login as well as the tracking of a contact's location. We are planning to build a login system which can link accounts by using Facebook or Google accounts. On top of that, we are going to allow users to switch on or switch off their current locations whenever they'd like. If the user switches off his or her current location then the locations of friends or colleagues cannot be seen as well. We will also implement a series of tasks for the user to finish before they can access their phone when they are drunk. We will add the mechanism of checking the identity (such as checking the fingerprint before paying or accessing the app) just in case if someone robbed a phone from our user, with the user already being logged into his or her account.

Usability:

The interface should be easy for users to navigate through applications and be simple enough for the users to understand. As there are various features of our application, it is important to know which tab offers what. We will provide tutorial on how the app functions when opened for the first time to make the app user-friendly.

Hosting/Deployment:

Using firebase as a database, there should be continuous communication between the server. Also, there should be another server for the number of people who went into dining courts.