- 1. Basic Information
 - a. names of team members

Fanxing Meng

Yanfeng Zhou

b. name of your app

You're Gonna Love It!

c. one sentence description of your app

Our app helps people make better choice on restaurants and dishes by connecting them with others who have similar taste.

- 2. Write a half-page description of the app addressing the following points:
 - a. motivation and philosophy behind your idea

In a big city like New York, people nowadays depend pretty much on Yelp or Zagat to look for decent places to eat. For most users, the quality and taste of food is their main concern. But current dining apps did not do a good job on the most important thing: the rating of the individual dish that you are ultimately going to enjoy or suffer. We believe that it is not the restaurant, but the individual dishes that should dominate dining recommendation.

To achieve this goal, we will start by making a food journaling app that records your preference of each and every dish that you eat, and then use recommendation algorithm to find the people that share a similar taste with you. From these users' updates, you will get credible comments and recommendations to a whole variety of dishes in the area near by, and you do not have to worry if the rating was tweaked in any way.

b. most closely related apps/technologies (compare and contrast)

Foodspotting and Foodmento. They all place dishes as the central role, but use different sets of metrics to rank the dishes or make recommendations; they also allow you to share what you like with your friends either in the app or on other social network platforms. However, the main difference between them and our app is that they only recommend popular or top-rated dishes in the area but do not provide personalized results. Connections in these apps are mainly based on already-made friends but not necessarily the ones that share the same taste with you. While our app features precise personalized recommendation of dishes based on only the people that share a similar taste with you.

- 3. Briefly explain (one short paragraph per point) how your project will fulfill the minimum entry requirements described in Lecture 1:
 - a. user accounts/management

Users do not need to provide a username and password to log in. Instead, they can log in with any one of their social network (facebook, twitter, instagram, etc.). Each user has a nickname which is not necessarily unique. Users can follow other users or add as friends on this app, and can view the photos of their friends and themselves. Each user has a

profile page which can be viewed by every user. All users belong to either normal users or gourmets.

b. native app on Android or iOS

We will be building the app on iOS using Xcode.

c. meal description/metadata logging with date/time stamp

Each time a user shares a photo using this app, a date/time stamp is generated and tagged to the picture. Users are required to choose the restaurant from the map and the name of the dish from the menu provided, then rate the dish at the same time in order to complete the sharing. Users are welcome to write comments when sharing photos. The restaurant's id, name of the dish, rating score, comment and the user's id are also tagged with the picture.

d. photo capture/storage

We will invoke the system's camera to take pictures and first store it in the user's default album. The edited picture will then be uploaded to the server for other users to retrieve.

e. thumbnailing/image manipulations

Thumbnails will be generated on-the-fly when a picture has been taken and cropped. We may incorporate other photo editing apps for this task by calling their APIs.

f. at least one service (in the sense of SOA)

The app allows users to edit their photos inside the app. Possible editing includes cropping and changing the brightness, contrast, color and hue. Also, users can log in with other social network accounts.

g. rudimentary web presence

We will be building a website for this app on top of a Wordpress or Joomla framework. More specifically, we will be writing our own plugins or components that carry out the same functions as the app, including viewing the user's own history and browsing others' newsfeed and profile.

h. basic API for data export

The data export API will take the form of a RESTful request, which handles data I/O in JSON format and enables both uploading and retrieving dish data.

i. integration with 3rd party API

We will use a number of 3rd party APIs, such as social network account login, map containing restaurant information, etc.

4. Deep Dives

a. Write a half-page description of how you plan to go beyond the minimum entry requirements, describing the modern web technologies or other advanced ideas you will apply in your project.

Based on each user's preference on cuisines and dishes, it would be possible for us to run recommendation algorithms over all users regarding their preferences. We can recommend users to each other if they have similar taste and live (dine) in the same area. A user can follow any number of people, and their recently liked dishes will appear in the user's newsfeed screen.

The ultimate goal would be to help users discover new restaurants and dishes that suit his or her taste based on recommendations from people that they know having similar taste. This is different from all the current schemes where restaurant scores are more or less fudged by all sorts of people, or even the newer apps featuring ratings of individual dishes.

To achieve this, we need the users to rate the dish they ordered on either a 5-star scale or simply with like vs. dislike.

There may be different levels of users based on the number of dishes they have rated and also their credibility. For example, we can have professional gourmets posting their "juicy" reviews on our app to attract more users. Matching algorithm may also be enhanced by incorporating user activeness or the number of followers, just as in any other social network.

5. Milestones

- a. Four to six milestones
 - 1. Determine the components and UI
 - 2. Determine the platform to be used
 - 3. User can login with social account, take photo, crop & apply color filters, store it with custom descriptions, rating, timestamp, and a thumbnail version
 - 4. Build a web-front end that supports user login and browse the same set of data they can view on the app, with RESTful APIs allowing data export; put a map interface on the app for selecting the restaurant
 - 5. Add a screen where a user can see the profile page of other users
 - 6. Implement a recommendation algorithm of users based on the number of liked dishes in common
 - 7. Build a newsfeed style homepage based on recently liked dishes by people the user is following
 - 8. Can publish the photo with description to the social media platform they logged in with
 - 9. Crawl the web for restaurant menus and let user select instead of manually input the name of the dish
- 10. Make UI prettier and finish beta test for both the app and the website

b. Deadlines to achieve milestones

Oct 1: Determine the components and UI

Oct 8: Determine the platform to be used

Oct 15: Be able to login, take photo, crop & apply color filters, create thumbnails, store it with other custom data

Oct 22: Build a web-front end with RESTful APIs, put a map interface on the app

Oct 29: Add a screen where a user can see the profile page of other users

Nov 5: Implement a recommendation algorithm of users

Nov 12: Build a newsfeed style homepage

Nov 19: Can publish the photo with description to social media platforms

Nov 26: Gather restaurant menus for users to select from

Dec 3: Make UI look better and finish beta test

c. Division of labor between team members

Before Oct 22, Fanxing will be working on the basic requirements in iOS, while Yanfeng will be dealing with the backend database and the web portal. After Oct 22, both of us will focus on the iOS app and develop the recommendation features and social features.

d. It is your team's responsibility to check-in with the TAs during office hours or Piazza to provide updates on your milestones.

Updates will be sent to TAs by email.

6. In your repository, commit your proposal drafts at the top level of the repository as either a PDF or Markdown file.

- a. Email the TAs (haa52, jlf248) once you've committed a draft.
- b. Adhere to the due dates for the proposal drafts at the top of this page.