CS5356 - Building Startup Systems - Project Proposal

1. Basic Information
    a. names of team members

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    b. name of your app

      LetsEat

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

    Motivation:

    It is believed that food discovery is an important part of life. Our team is dedicated to leading people to a healthier, happier life by finding friends with common tastes in food.

    Philosophy:

    Eating is better than not eating.

    Discovering, sharing and enjoying.

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

    Related Apps:

    Food by everNote. Record you own meal, and learn and save new recipes.

    twogrand. This app more focuses on pushing you to eat more health to meet your weight goal by comparing and following others.

    MyPlate. Record the meal you ingest everyday and track the calories to make you eat more health to meet your goal.

    By comparing to above apps. ours provides basic food journaling function with a social feature to match you with others with the same eating taste and habits.

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

user accounts/management

Use php as server side language to handle user authentication and related mangement works. First time user need to sign up via mobile app or web interface, the user's information will be stored in MySQL database on server.

native app on Android or iOS

Will develop an Android mobile app. Users can use mobile app to sign up, log in, take picture, add description, add tag and view previous journals. The app will be developed and tested on a Nexus 4 with Android 4.3.1.

meal description/metadata logging with date/time stamp photo capture/storage
User can take a picture in our mobile app using Android existing camera api and application. The image will be uploaded to server and stored in a dedicated image directory and save the file path in the MySQL database. Will provide an interface for user to submit the picture and related meal description and tags to server.

thumbnailing/image manipulations
Use Android camera application to encode and retrieve the thrumbnail images as a small Bitmap. Will decode large bitmaps to lower resolution to save device memory usage and reduce image loading time.

at least one service (in the sense of SOA)
> TBD

rudimentary web presence
Will use AngularJS as the front-end framework for our web interface. The web interface will provide basic functions for user to sign up, log in, view the posted journals and a dashboard to show some interesting information related to their journals.

basic API for data export
Will provide an interface for user to retrieve their journals in JSON format.

integration with 3rd party API
Integrated with twitter or facebook API to share journals with friends.

4. Deep Dives
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.
> In the later stage, in order to go beyond the minimum entry requirements, the LetsEat app will focus on the functionality of Social, which will recommend dining friends based on previous food journling. Basically, everytime the user upload a food journling photo, the location information and the restaurant information will be recorded as well (after user approves) for future analysis. In fact, the LetsEat app could recommend a dining friend based on so many different ways or a synthesis way. Two users will be matched by our

program if they have lots of shared restaurants or if their preferences for food are alike. Other factors will also be considered in the algorithm such as timing for dinner, consumption levels of individuals and dietary habits. During the process, some machine learning and image recognizing technology will be applied to the algorithm. After the matching process, users can send friend invitations to the recommended dining friend if they are willing to and may making dining appointments afterwards.

5. Milestones
a. Four to six milestones
   1. Basic functions of food journeling website.
   2. Customer investigation and market research
   3. First version of social features
   4. Final version of system testing
   5. Open studio
b. Deadlines to achieve milestones
   1.   Oct 15
   2.   Oct 30
   3.   Nov 15
   4.   Dec 10
   5.   Dec 16
c. Division of labor between team members
      Lizhang will mainly focus on the server side and web interface labor.
      Zhigang will be in charge of the mobile side and database work.