REVISED PROJECT PROPOSAL

GroupUs

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1 Background

- Team OS: 3 Mac + 1 Win (We will use MacOS as the platform though)
- Application (Demo): Desktop APP (javafx)
- Language: Java

We came up with this idea of designing a simple platform for Columbia students to group together easily for different kinds of daily activities. We agreed that the three types of common group activities for us are eating, studying and going home together at night when studying till midnight.

2 Use cases

Here are the use cases we came up with so far including both MVP features and wish-list features.

• MVP

- Sign up/in: Users could register using their Columbia email address.
- Profile: Users could see past events statistics they posted/joined
- Post: After log in, users could post group-up events
- Search: After log in, users could search group-up events
- Join: After log in, users could join group-up events
- Recommendation: When posting eating event, nearby restaurants can be shown in event content.

• Wish-list (Might Change)

- Edit: After posting, users could update events info in time.
- Quit: After joining events, users could drop out the events they join previously.
- Invitation: Event poster could start event by sending out invitation
- Notification: Event poster could receive notification for new "join"

- Ranking: The events could be shown in the order of posting time/popularity.
- Double Opt-In: For each person enter into the event, the organizer can choose whether to team up with him or her.

3 MVP User Stories

There are some features to complete so as to deliver a minimum value product for the first iteration.

- (i) Login: As a Columbia University student, I want to use this group-up application so that I can find some after-class group events among Columbia students. My conditions of satisfaction are (1) If I use the email address correctly ending with a suffix of @columbia.edu for registration, I should be able to sign up properly. (2) If I use email address with wrong format, I will get an error message and be reminded to use my @columbia.edu email.
- (ii) Search: As a user who has logged in successfully, I want to have the place to search for events so that I can either join a group event or post one if I do not find one fits my need. My conditions of satisfaction is that (1) I could search for events by categories (study, eat, go home) and see their basic information (start and end time, event description). (2) The displayed events should be listed in the order of distance to the user's current location.
- (iii) Join: As a user who has logged in successfully and has searched out a list of available events, I want to be able to join the event by clicking on the JOIN button. My condition of satisfaction is that I could see this joined events listed in my profile.
- (iv) Post: As a user who doesn't find suitable events, I want to post a new event so that I can find someone else shares the common interest with me. My conditions of satisfactions are (1)I could have a profile to save the events I create.(2)I could specify the start and end time of the event, and give detailed description, location of the event. Both the plain text format and geolocation format of location will be saved into database, because the Yelp API requires plain text location while our "search nearby event" requires event geolocation information for distance calculation.

(v) Recommendation: For eating events, I hope this App could give us several real-time restaurant suggestions based on the final formed group's information and what we prefer (e.g. the number of people, Location, Cuisine, Dining Time), and also we want to know the weather condition near the restaurants we finally choose if possible.

4 Wish-list User Stories

If time allows, we have a list of improvement on features to work on.

- (i) As a user who has logged in successfully, I want to be able to invite certain users to my posted event, so that I could have a private group where members are pre-decided. My conditions of satisfaction are (1) I type in the email address of the user who I want to invite and I can send out an email notification to them. (2) This type of private event cannot be searched by users out of the invitation list.
- (ii) As a user who has logged in successfully, I want to have a profile page so that I can see my history of posting and joining events. My conditions of satisfaction are (1) I could see the list of posted and joined events in different categories in the past from my profile page. (2) I could manually update my profile to change password.

5 Potential Challenges

- Technology: We are new to Desktop APP development, so there might be a learning curve for us to get familiar with the language as well as the platform.
- Time Management: Before the first iteration, apart from completing the Desktop APP development, we should also finish the corresponding unit test and CI/CD pipeline definition.

6 Technologies

• Back-end Development: Java (javafx)

• Database: AWS RDS

 $\bullet\,$ API: Google Geolocation API, Yelp API, OpenWeatherMap API

• Demo: Desktop UI

• Code testing: JUnit

• CI/CD pipeline: GitHub