

6.813 GR1: User / Task Analysis

User Analysis

We have several main user classes:

1. Young people and students who don't cook for themselves or go out to eat often.
2. Professionals who are trying to coordinate going out to eat while managing their busy schedules.
3. Two people who really don't know each other well and want to find a place that will allow good conversation (like a date!)

Case Study 1

We interviewed Mercedes, a 19 year old female student at Wellesley College. If she wanted to go to dinner with her friends, she would either a) call her friends and ask what they want to eat, or b) walk to her friends' rooms and ask what they want to eat. She feels that it takes too long to call all of her friends, and that as the group gets bigger, it gets exponentially harder to figure out what to eat. If all of her friends wanted to go to different places to eat, they would have to get together and have a long discussion before they figured out where they want to eat. Sometimes the discussion is so extreme that they decide to stay in rather than to eat out at all. Her friends also have very different schedules, so it can be very hard. The total process of finding a place to eat for dinner can take all day for her, which is incredibly inefficient.

Lessons Learned from Case Study 1

- While there may be other technical solutions to her problem, Mercedes only uses texting/calling and talking in person to schedule a meal time with her friends. This indicates that either the current technical solutions to her problem are inadequate or she hasn't heard of any good technical solutions.
- Most of the problems she faces deal with efficiency: It is a hassle to figure out who is available to eat at any given time, and it can take a long time to discuss where to go to eat
- If these problems aren't all solved within a reasonable amount of time, she elects to stay in rather than go out to eat.

Case Study 2

We interviewed Jeff, who is a 46 year old manager in a medium-size company. Jeff only has about 30 minutes to an hour for lunch, so when he wants to go out with his coworkers for lunch, they need to make decisions fast. He typically talks to his coworkers in person to figure out where to go for lunch, and sometimes uses email if he is trying to plan a bigger lunch event (like with 20-30 people). Because of the lunch time constraint, sometimes a decision is made about

where to go to lunch without consulting the rest of the group, which leaves some of the coworkers feeling left out and annoyed.

Lessons Learned from Case Study 2

- Like Mercedes, Jeff's main problem is with efficiency: He has a very limited amount of time to go out to eat, so every minute spent figuring out where to go to eat detracts from the amount of time he has to eat.
- It is a major hassle to factor in the opinions of all of the people who want to go out to eat, and if someone doesn't get a say in where they want to eat, they feel left out.

Case Study 3

We interviewed Happy, a 20 year old male student at MIT. He described going out on a date and the dilemmas involved. He described the difficulty in picking a restaurant because of several important goal criteria. First (Goal A) trying to determine the decor and atmosphere of the restaurant, and attire. This was important because he wanted to find somewhere that have the right atmosphere for good conversation, and fall into a particular level of required etiquette. Next in his description of his goals in choosing a spot, he mentioned (Goal B) determining whether the restaurant had an accessible location via walking or public transportation. As a college student without a car, convenience is paramount, especially when inviting a guests. Also, he mentioned that proximity to attractions like Boston Common and Fanuil Hall influenced his decision. Lastly, he mentioned (Goal C) price information as an important factor. It was important to choose just the right place: a nice restaurant, but not particularly expensive. This issue is linked to the atmosphere of the establishment.

Lessons Learned from Case Study 3

- It can be annoying to use one than one mobile app at once, so any information the user wants to know about a particular restaurant must be inside the app.
- Date culture and common date communication patters dictate that sometimes the decisions are made primarily by one person, and that user wishes to invite another user, so streamlining the decision process must be an available option.
- Happy's description tells us that key points of information are requirements for efficiently picking a restaurant: prices, location.
- Reviews from other users/outside sources, so that users have realistic expectations when they arrive.

Overall Properties of Our Users:

Age, gender, culture, language

- Most aged 18-50 (the demographic of smartphone users), though accessible to any age-group
- No restrictions on gender, culture, or language

Education (literacy? numeracy?)

- No restrictions on education

Physical limitation

- No physical limitations

Computer experience (typing? mouse?)

- Comfortable with smartphone technology (our case studies included people from a broad range of computer skillsets)

Motivation, attitude

- Motivation: a desire to fulfill social needs by going out for a meal with friends or network and develop new professional connections.
- Attitude: social, wanting to spend time with friends (or possibly new people who are not yet acquaintances)

Application experience

- Most young people likely to have experience with web applications regarding cuisine. Examples: Yelp, OpenTable, Zagat.
- Some older professionals may not have the same experience with cuisine web apps

Work environment and other social context

- Perhaps in close camaraderie with co-workers, or living in an area with friends, roommates, college friends, and family

Relationships and communication patterns with other people

- A person wanting to maintain their social network of friends and family and coworkers through regular conversation.

Task analysis:

General properties of the tasks

- **Where is the task performed?**
 - Most likely in the comfort of the user's home, or place of work, outside otherwise (introduces constraint of the user dealing with the elements -- rain, snow, etc.)
- **What is the environment like? Noisy, dirty, dangerous?**
 - A home environment would be comfortable, warm, and safe.
 - An outside environment could range the full spectrum of ambient sound, cleanliness, and safety. We aim to design for the lowest common denominator of these things (noisy, dirty, and dangerous environment) as best as possible.
- **How often is the task performed?**
 - This depends heavily on the user's social needs. Should the user be a fairly outgoing person, our interviews with Mercedes suggest him/her using the app almost daily. Should the user be less outgoing, we expect the user to use the app once or twice a month.
- **What are its time or resource constraints?**
 - The only resource constraint is how much the user is willing to pay for a meal, or perhaps the price for our app should we stray from a "free-app business model".
 - Should the user be in a comfortable atmosphere, the user will have no time constraint other than scheduling the meal in a timely manner in advance of the meal itself.
 - Should the user be in an otherwise uncomfortable atmosphere (out in the cold, the rain, in a dangerous part of town, etc.) the user would simply want to complete the task as soon as possible. Touch-screen phone input often requires users to take off their gloves in the cold, something that Mercedes often complains about when using her phone.
- **How is the task learned?**
 - The task must be learned via an intuitive and pointed interface, which is entirely on our shoulders. They can also watch videos of users or observe friends using the application, but these are indications of low learnability of our app, which we hope to avoid.
- **What can go wrong?**
 - Wrong:
 - participants in the meal
 - time of the meal
 - place of the meal
 - meal type
 - franchise location (e.g. user schedules at one McDonald's, meant to meet at another McDonald's)
- **Who else is involved in the task?**
 - All participants in the meal in question
 - Perhaps restaurant owners who want to interact in the process of users scheduling meals, encouraging them to pick that restaurant

Task 1: Selecting people to join the meal

Goal: To pick people who are likely to want to eat together

Subtask 1: Pick friends to have a meal with

Subtask 2: Alert friends in question of meal logistics, aggregate feedback from participants (e.g. times that don't work, other preferred dining places, etc.)

- Why is the task being done?
 - The user wants to fulfill his/her social functions as well as his/her appetite
- What does the user need to know or have before doing the task?
 - The user either needs to have friends in mind he/she would like to dine with, or be willing to meet and eat with new people.

Task 2: Receiving to a social meal request and responding with an RSVP

Goal: Communicate user's intentions of attending (or not) the meal

Subtask 1: User must receive the meal invitation/request

Subtask 2: User must browse all logistics information regarding the meal

Subtask 3: User must indicate that he/she plans to accept the meal request and attend the meal

- Why is the task being done?
 - The user wants to fulfill his/her social functions as well as his/her appetite
 - The user wants to refresh his connections with the other participants
- What does the user need to know or have before doing the task?
 - The user needs to know all information about a meal (time, place, kind of food)
 - The user must keep in mind his/her own schedule, food preferences, how hungry they are, allergies, and cultural restrictions.

Task 3: Pick one restaurant (or more candidates) to dine at

Goal: Ultimately, to choose a place to eat that the meal participants are likely to agree with

Subtask 1: User must decide what kind of food he/she would like to eat

Subtask 2: User must consider what kind of food his/her meal participants would like to eat

Subtask 3: User must notify meal participants of desired restaurant(s)

- Why is the task being done?
 - The user wants to suggest to a group of people that they eat together at a particular venue

- What does the user need to know or have before doing the task?
 - The user needs to know all information about a meal (time, place, kind of food)
 - The user must keep in mind schedules food preferences, how hungry they are, allergies, and cultural restrictions for all participants involved.