

CS 449/649 F22

# Reading Reflections

Welcome to your reading reflection document! This is where you'll write your individual weekly reading reflections. The course website explains what is expected and lists the readings for each week.

Your weekly reflections are due **Mondays at 12pm ET**. Your TA will review your entries each week and assign a mark. They may also provide comments to help improve your reflections and writing.

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## Minqi Xu

< m259xu@uwaterloo.ca >

### Team Name:

Goosinator

### Project Topic:

D8: supporting elderly in their use of modern digital technology

### Team Design Document:

<https://docs.google.com/document/d/1lf9HOk0kf4XSAr7jIWbwhXm-dDFpJeylYd5WXzezLHg/edit?usp=sharing>

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## Week 2 Reflections

DUE MONDAY SEPT 26

[ Grade: 1/2 ]

Starred Choice

### Empathy Mapping: The First Step in Design Thinking

- Empathy map is a really useful tool which can help UX developer understand what aspects of user knows and needs or even the things user needs but did not realize. It

can also help UX developers establish common ground among team members and find the weakness of their research. It is a quick and easy-to-understand way to illustrate user attitudes and behaviors, and it is extremely useful at the very beginning of the design process.

Since people have spent more and more time on internet from mobile ends, when we design product, we need to follow rule of “progressive advancement” (mobile first) to save product design time and improve designers’ productivity. Also, it helps designer to have a neat and practical designs.

- To use empathy mapping, we can struct the personas and corresponding 1 to 1 empathy map. This can give us a strong view of what our user need, and what kind of feature we need to consider when we design our product. This helps us focus our attention better on what we truly need to. Also, we need to follow the rule of progressive advancement, by designed the product on the mobile end first, then expand it to tablet or desktop version. And this agrees with responsive web design.

## Other Choice

### {{ title }}

- {{ what you learned }}
  - {{ how can be applied to your project }}
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# Week 3 Reflections

DUE MONDAY OCT 3

[ Grade: 2/2 ]

## Starred Choice

### Interviews from Interaction Design: Beyond Human-Computer Interaction

- There are many different types of interviews, and each of them has their own advantages. Developers needs to adapt their data collection techniques to suit the participants. During the interview, the interviewer should avoid suggestive questions.
- As we did in this week, we interviewed three people with different backgrounds. The questions we designed are trying to avoid any suggestive questions, and we successfully gathered a lot of useful information for our design.

## Other Choice

### How to Conduct a User Interview That Actually Uncovers Valuable Insights

- Interviewers need to take into account a lot of different factors to conduct an interview properly. There are three important times of the product development process: at the beginning of a project, during the early stages of product development, and after the product has shipped. To get more information, a semi-structured interview format is a good choice, follow-up and open-ended questions are recommended.
  - At the beginning of a project, when we doing the value proposition and personas, we are trying to understand potential users and their wants and needs. We are currently in the early stage of product development, then we hold interviews this week, and we are trying to let the interview be semi-structured. Also, we designed some open-ended and follow-up questions to get more useful information.
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## Week 4 Reflections

DUE MONDAY OCT 17

[ Grade: 2/2 ]

## Starred Choice

### Affinity Diagrams - Learn How to Cluster and Bundle Ideas and Facts

- Affinity diagrams can help understand the insights gathered during research and the ideas that come out during ideation sessions. After completing the affinity diagram, data will be more organized and it is easier to synthesize it further and find the problem.
- Like what we did this week, we have created the affinity diagrams. After organizing the items, it is not hard to find the main problem of our product, which helps us determine the aspects that we need to focus more about in the future design.

## Other Choice

### Affinity Diagrams - Tips and Tricks

- During the process of creating the affinity diagram, we should not worry about amount of items that we have, also, we should not worry about modifying it. We should not force items into pre-determined categories, and don't prematurely add hierarchy and timelines.
- When creating our affinity diagram, we found that there are a lot of duplicated items, so we rephrase it and delete all duplicate ones. Also, we didn't construct the

pre-determined categories, every category was constructed when there is an item that is not suitable for all existing categories.

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## Week 5 Reflections

DUE MONDAY OCT 24

[ Grade: 2/2 ]

### Starred Choice

#### How to Improve Your UX Designs with Task Analysis

- A diagram that illustrates the steps users must take to accomplish their goal is one of the most often used ways to do task analysis, this can help designers minimize the number of actions the user has to perform without assistance. Also, task analysis is not a one-time process, we can repeatedly process it for future design.
- Like what we did this week, we have completed three HTAs which clearly indicates what our user should do to finish the high-level task and achieve their goal. We found some unnecessary steps and some missing steps (in the third meeting) and adjusted our HTAs accordingly.

### Other Choice

#### Hierarchical Task Analysis

- Hierarchical task analysis can describe the interaction between users and software systems, it can help designers explore various possible ways to accomplish the same task. Although doing such analysis takes a lot of time, each step reduces the likelihood that the designer will overlook any knowledge that users need, it helps designers maintain focus on the task and discover opportunities to further improve the user experience.
  - During this week's meeting, while building HTAs, we did come across multiple different ways of completing the same task, by comparing them, we finally selected the one that is most reasonable and easiest for user to do. Also, we found some problems that we hadn't considered before, this helped us a lot to improve the design.
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## Week 6 Reflections

DUE MONDAY OCT 31

[ Grade: 2/2 ]

## Starred Choice

### **The Surprising Habits of Original Thinkers**

- Originals do not stick to the rules, they not only have new ideas but also defend them through practice, they are the ones who fail the most because they are the ones who try the most. Also, Procrastination can lead to a loss of productivity, but it can also be the cradle of new creation, and many times moderate procrastinators have more ideas.
- For our future design, we should not be afraid of trying the wrong thing, because maybe some amazing ideas will come up during those attempts. Also, we should put some pressure on ourselves over time, by doing this, we may allow us to be more efficient and creative.

## Other Choice

### **Ideation in Practice: How Effective UX Teams Generate Ideas**

- It does not take a large group of people to get ideas, but group ideas are more effective at producing high-quality design ideas than working individually, those with very efficient idea-generation processes collaborate more frequently and rely less on individual ideas. Also, teams need to get management support to give them enough time for user research and ideation sessions, and let the multidisciplinary participant involve to generate diverse ideas.
  - We should arrange enough time for our team to do the design, try to conceive of more and wider users, and try to think about ideas from the perspectives of different disciplines. Also, we should avoid assigning work to individual ones, but work together and express thoughts in the group and discuss together.
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# Week 7 Reflections

DUE MONDAY NOV 7

[ Grade: 2/2 ]

## Starred Choice

### **The Sketch Test: How to Test and Improve Your UX Deliverables and Other Documents**

- Sketch tests can help designers discover two types of questions which are the content that is not easily noticed in the document and content that is not comprehensible. And the feedback from participants can help improve deliverables so that become better match our user's mental models and expectations.

- In our future design, maybe we can find a potential user and do a sketch test. By doing this, we can have a better understanding of what our users think, and design our product so that it meet our users' expectations.

## Other Choice

### How Google Approaches the Process of Ideation

- Ideas can be divided into "simplify", "me too", "virtualize", "remix", and "almost-impossible" categories, before going further, designers should validate their ideas and be passionate about them. After the product is delivered, designers should use data such as metrics to measure traffic, customer satisfaction, and engagement to drive solutions and improve existing features.
  - For our team, we have already validated our ideas and be passionate about them. So the thing that we should consider is after publishing our product, we need to use data to maintain our product, add new features to it, and improve existing features of it.
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## Week 8 Reflections

DUE MONDAY NOV 14

[ Grade: 2/2 ]

## Starred Choice

### The Aesthetic-Usability Effect

- A well-designed good-looking interface will make users tolerant of some UI problems and prevent problems from being found during usability testing, designers need to listen to users, but first consider their behavior. Users can feel pressured to comment or say something good about your product, so when hearing positive feedback about the visual design, it doesn't necessarily mean your visual design is working.
- In our future design, we can design the UI more beautifully, so that we can get more positive comments. But at the same time, the aesthetic usability effect should be considered when observing user feedback, and focus more on user behavior rather than their feedback.

## Other Choice

### Paper Prototyping: Getting User Data Before You Code

- Paper prototypes allow users to test early design ideas at a very low cost, allowing designers to address usability issues before wasting money implementing something

that does not work. As a rough estimate, early availability data is at least 10 times more beneficial than later availability data. Late usability studies typically add 100% to the final design's desired metrics, but early ones can increase by 1000% or more, and paper prototypes allow usability data to be collected early.

- As we did this week, we made a paper prototype at a very low cost, and this paper prototype will serve its purpose next week, helping us collect the user feedback and usability data we need. And the data we will collect will play an important role in the future design.
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## Week 9 Reflections

DUE MONDAY NOV 21

[ Grade: 2/2 ]

### Starred Choice

#### Interactive Menu for Food and Beverage - UX Case Study

- There is no single answer to the question of flat or deep hierarchies, but researches show that people are easily overwhelmed with too many choices, but when people click on the right thing first, they are nearly as likely to complete the task 3 times that of others. People tend to scan first rather than read right away, so fewer words are more informative and concise pages are more useful when reading online. Frequent changes are better when testing prototypes, frequent iterations give each design change more time to surface to more users, allowing more evolutions.
- We should use instructions or other features to lead our users the right way when they first time using our product, trying to use fewer words rather than a long paragraph to help them. Also, we should change our prototype often to show our designs to users.

### Other Choice

#### Basic Patterns for Mobile Navigation: A Primer

- On mobile devices, both navigation and search come at a price: they take up screen real estate and draw the user's attention. Different basic navigation patterns try to solve this problem, but all face various usability issues. The key is to choose the type of mobile navigation where the inevitable drawbacks do the least harm to the types of tasks users are most likely to perform on our site.
- Although we are focusing more on building a desktop web app, we still need to think about which navigation and search pattern we should use, and even more, we may consider the mobile terminal in the future. Now, we are using a homepage-a-navigation-hub pattern, which is quite suitable for what we are trying to

design now, but we should also consider the disadvantage of this way and discuss whether other patterns are better than the current one.

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## Week 10 Reflections

DUE MONDAY NOV 21

[ Grade: 2/2 ]

### Starred Choice

#### 7 Rules for Creating Gorgeous UI

- The seven rules are Light comes from the sky, Black and white first, Double your whitespace, Learn the methods of overlaying text on images, Make text pop and un-pop, Use only good fonts, and Steal like an artist. Designers make screens look like 3-D, designing in grayscale before adding color simplifies the most complex elements of visual design, doubling the whitespace makes UI look engineered, and they are good at mimicking other great designs.
- As we did, we first create our low-fidelity prototype which is lack of colors, this lets us focus more on the spacing and laying out elements, after that, we used mockups to decide our design system and make the high-fidelity prototype. Also, for later designing, we should try to follow the 7 rules mentioned in the reading material to help us make a better UI.

### Other Choice

#### Hierarchy with Fonts

- Designers should rely on a single typeface rather than multiple typefaces for establishing visual hierarchy, the key is that work with a typeface that offers at least three different variations, the more variety within a typeface the easier it is going to be to establish the hierarchy. Combining typefaces can be very elegant but there needs to be a reason for combining them.
  - Like what we did this week, for our high-fidelity prototype, we only introduced one type of font. Also, for future designs, we should try to avoid introducing too many fonts without any reason, which is very likely to mess up the design.
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## Week 11 Reflections

DUE MONDAY DEC 5



## Starred Choice

### Turn User Goals into Task Scenarios for Usability Testing

- Usability testing is the process of observing users to understand what is useful and what is not in an interface. During usability testing, it is best to mimic the real world as much as possible, that is, let the time and their tasks be reasonable, encourage them to interact with the interface, and never tell them how the interface should be used.
- In the last few weeks, we held some usability testing, and that did give us a lot of useful feedback for improving our interface, it is obvious that our interface has a huge difference between the first version (low-fidelity prototype) to our last version (revised high-fidelity prototype). Also, during the testing, we are trying to avoid giving assistance to the testers, that is let the testers figure out how to use the application by themselves.

## Other Choice

### How to Conduct a Cognitive Walkthrough

- Cognitive walkthroughs are used to check the usability of a product, it is a task-specific usability method, it's inexpensive and easy to implement, it allows the usability of a system or product to be checked from the user's perspective and provides quick feedback to support decisions during the design process. To do a cognitive walkthrough, tasks should be divided into a simple process to follow, and think about the questions during the walkthrough: Will the user try and get the right result? Will users notice that they can use the correct action? Will users associate the correct action with the desired outcome? If the correct actions are taken, will the user see progress toward their desired outcome?
- In the future design, we can try to hold some cognitive walkthroughs as early as possible, because the earlier the feedback we get, the more and easier we can improve our product, this can save a lot of money and time. Also, observing the user's behavior during the cognitive walkthrough can help us understand what users will usually do and is their behavior the same as what designers intended.