Overview

Step into a user’s shoes. In groups of 2-3, you will observe real users interacting with an interface, interview these individuals about their experiences, construct users’ mental models, create personas based on these users, and illustrate a storyboard for one persona. This is a classic UX task. You can reference this upcoming reading (just Chapter 5) that explains more in-depth about personas to get a better idea of what a persona is and how they are developed.

Please read through the ENTIRE document before starting.

Task

Part 1: Preparation

For the first part of the assignment, you will observe and interview real people while they’re interacting with an interface — this is called a contextual inquiry. Choose an interface to observe, create interview questions, and conduct interviews. Within your groups, you may split the workload however you like.

1) **Select a publicly accessible interface.** By this, we mean an interface that is physically accessible to the public and you can observe someone using. Looking over someone’s shoulder when they’re using an app or website does not count. There are many options. For example, you could go to a library and observe how people use the printing station, a bus terminal or airport to watch people use a ticketing kiosk, or a grocery store to observe how people use the self-checkout station. There are a lot of other examples; feel free to come up with your own, or ask the TAs for help. Ensure that your interface is not overly simple (i.e. credit card swipes, single button appliances like faucets), so that you have ample material to talk about. If you’re unsure about your interface, ask the TAs for help!

2) **Prepare some questions for users regarding their experiences with the interface.** Have questions prepared to get insight about their expectations, experience, motives, and
challenges using the interface (steer the user to talk about the interface, not the product. For example, discuss the interactive screen of the soda machines in Andrews, not its ice-making capabilities). Some users will be more willing to share than others, so while a list of questions is a good place to start, don’t be limited by the list. Show enthusiasm!

3) Create a sketch and write a brief description of the interface. The sketch can be hand-drawn and it does not have to be a masterpiece! Simply get a feel for your interface and annotate its key interactive components. In your description, briefly explain the problem that the interface is trying to solve and how its key components function. Please be concise with your description.

Part 2: Record Observations

When observing users, pay careful attention to how they use the interface and make objective observations about their actions. The more people you watch, the better your observations will be, which will be helpful when creating both the mental model and your personas. Look out for any struggles or difficulties that people are encountering while using the interface; you’ll write about them later. If you are observing users interact with an interface that involves a screen, take pictures of the different screens for the storyboarding part of this assignment (you can do this while people are not using the interface). Do not take pictures of the user without the user’s explicit permission. It may also be helpful to record the conversation you have with the users you interview (if you do this, ask first). Though the initial interaction may be awkward, tell your interviewees that you are doing this as research for a class assignment. This is a standard UX research mechanism and people are usually understanding!

Record what you observed by following the directions listed below:

1) Write a few sentences describing the key observations you gained from observing each user. Again, the descriptions should be based on objective observations about their actions. Do not make any assumptions about the users’ behaviors or thought processes. You should not be describing the actions of all users, but rather noting general patterns and differences in people’s interactions with the interface. Some examples of what to look for are: How did the users react while using the interface? Did the users ask other people how to use the interface or watch other people using it? Discuss the user’s behavior.

2) List your questions in a numbered list and summarize the responses of at least two interviewed users. Be sure to highlight the main points or important patterns. Your summary should be both concise and informative.

3) Population samples can be biased and unrepresentative of the range of people the interface serves. Write a few sentences to answer the following questions. In your testing, did you

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1 The Basics of Crafting Good Questions may help you write better questions.
find that your sample was a good or bad representation of the range of people that may encounter this interface? What qualities made this sample a good or bad representation?

Part 3: Personas

UX researchers and designers go out into the field to discover who their target users might be. You did this by observing people using a public interface. In the third part of this assignment, you are going to take the data you collected from your observations and interviews and use it to (1) construct mental models and (2) generate personas accordingly. The mental models and personas should be based on overarching trends you observe amongst all the users you interviewed, not characteristics you observed from a specific individual.

1) **Construct 2 mental models of the users.** A mental model is how a user thinks the interface works. The user’s beliefs or assumptions may be informed by something they said, or a behavior you observed. This is different from the implementation of the system, or the way that the interface is supposed to be used.

   For each mental model:
   - Describe the mental model in around 2 sentences.
   - Explain how the mental model affects a user's behavior or actions in around 1~3 sentences.
   These mental models should help you in developing your personas.

2) **Construct personas by creating four-quadrant empathy maps, describing what users think, feel, say, and do** for two archetypal characters that will represent part of the spectrum of users you observed. A persona is not a stereotype or a duplication of a single user you spoke with or observed, but rather a combination of several users whom you saw exhibit similar characteristics or intent in their actions. A good persona is one that someone can act out with confidence in different scenarios.

   For each persona:
   - Describe the user.
   - Point out the interface problems that your personas face.
   - Explain why and how a given persona represents the users of your chosen interface.

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2 For a better understanding of personas, you can also check out the section in this article on creating a persona.
While a persona simply describes a type of user, using the proper techniques to construct your personas is crucial. In this assignment, you'll use a four-quadrant empathy map to construct and present your personas as shown in Figure 1 (above). This is an example of a framework, or a system of organizing data to gain insights. Using the data you collected from the Observations section, create 2 personas of users of that interface.

Consider the following when creating your empathy maps:

- You may make assumptions about what the user would say, think, or feel in each quadrant. If you are confused about the differences between the Says and Thinks quadrant, you can think of Says as something that someone might say to someone else, and Thinks as something that someone might think to themselves. The two are not necessarily the same!
- Items in different quadrants may be contradictory. For example, a famous example is grocery shoppers who said during an interview that they frequently purchased healthy products, but in reality did not. So here, statements in Says and Does disagreed.
- Two observations taken from the same user may be split and used to inform two different personas. Don’t worry about capturing every user exactly. The idea is to discover general trends and significant patterns. Empathize with the user’s emotions and intentions.
- Avoid full paragraphs, instead focusing on bullet-style sentences which capture the root of the observation.

Let’s take a look at an example of a persona for a user of a self-checkout machine at a grocery store, who we’ll name Rushed Ramona (Figure 1, above). Our intention is to create a generic
personality that encompasses busy parents trying to get shopping done quickly after work. We observed several parents exhibiting similar characteristics during our research, so we made this persona to represent this type of user. This enables us to guide our design to address the needs identified by this persona.

Identifying needs of a user through personas can also lead to ethical consequences for a given interface. Sometimes, personas that seem entirely valid and can be used in unethical manners later on in the UI design process. For example, for an up-and-coming online clothing company, a persona of a teenager who cares a lot about their social status that goes to a very fashion-forward school is a persona that could represent an important target user group.

The characteristics of this persona can be interpreted ethically and unethically. For example, the designer could create advertisements that take advantage of the importance of social status in teenagers’ lives and guilt the user group into spending more money. Alternatively, the designer could keep in mind that fueling the obsession of social status is potentially harmful to teenagers, and use this persona to make sure that their advertisements avoid sending any intentional or unintentional subliminal messages to this target user group.

3) Pretend you are a UI/UX designer working for a trendy new social media company. Construct another persona using a four-quadrant empathy map that represents a target user group. Pick one of the characteristics you used to describe your user and answer the following questions in a few sentences. How can this characteristic be manipulated into unethical practices?

Part 4: Storyboards

A storyboard is a visual tool for exploring how an example user experiences a product. In a storyboard, a designer visually displays the process that a user may undergo in order to accomplish a goal. The process is called a user journey. Storyboards and user journeys help product designers, engineers, and managers understand how users may interact with their products which, in turn, helps designers create more human-centered products. Your task is to create one storyboard for either of the personas that you created. See the below comic or this article for an example of a storyboard, and more information on how to construct one.

Your storyboard can either be hand-drawn or created digitally, but it must be well-formatted and legible if hand-drawn.

Your storyboard should be portfolio-quality. If you submit a hand-drawn storyboard, it should be easily readable and clear; photos of storyboards will not be accepted if they are blurry. If you are drawing your storyboard (and especially if you submit photos), please consider doing it in pen to improve readability or scanning your storyboard instead of taking photos. You should have at least 6 frames. We suggest no more than 12 frames, and there is a strict maximum of 15 frames. Title your storyboard with the name of your persona.
Helpful Tools:
- For creating digital storyboards, Boords or Plot are examples of tools you can use and The Noun Project is great for icons.
- For scanning hand-drawn storyboards, the Scili Basement has scanners or you can use apps like CamScanner or Scannable (iOS only) to scan with your phone camera.

1) **Storyboard your persona’s user journey from start to end.** For instance, the figure below depicts a story starting with Marco changing upon a lost teddy bear, progresses to Marco using the iFound app, and ends with him returning the lost item to its owner. It does not, however, show Marco getting ready that morning, or show the teddy bear owner’s day. You should include a frame if it represents your persona’s most salient actions or provides important context to their behavior. If depicting a scene would better put you in the user’s place, include it in your storyboard. Streamline your thinking as much as possible, while still conveying the most important parts of the story. Your storyboards should reflect the goals of your persona, and include all necessary steps for using an interface. If you observed people interacting with a screen, look back at the photos you took, and show what users pressed on each screen. If we follow your storyboard, we should be able to complete the task ourselves. **Again, the entire user journey should be depicted.** For each frame, **write a 1 sentence description of what is happening in the scene.** Place each caption below the corresponding frame.

2) **Describe how the user journey relates to your personas’ goal in around 3–5 sentences.** Place this description beneath your storyboard.
Suggested Timeline

Note: This is a suggested timeline for students to follow for the given assignment. It should act as a helpful guide, rather than a strict requirement.

Fri. 9/20 - Sun. 9/22: Complete preparation and find the interface you want to analyse
Mon. 9/23 - Wed. 9/25: Record observations and interview users
Thurs. 9/26 - Sat. 9/28: Construct mental models and finish one persona
Sun. 9/29 - Mon. 9/30: Construct the second persona and plan your storyboard
Tues. 10/1 - Thurs. 10/03: Finish the storyboard, review your work and finalize handin (make sure it functions as a standalone piece!)

Summary

1. Select a publicly accessible interface, prepare questions for users regarding their experiences with the interface and create an annotated sketch along with a brief description of your interface.
2. Observe at least 4 users, and interview at least 2 of those users.
3. From your observations and interviews, construct 2 mental models and generate 2 personas represented by four-quadrant empathy maps.
4. Construct an additional persona based on ethical considerations as outlined.
5. Of the two personas, create a storyboard outlining one persona’s user journey from start to end. Describe how the user journey relates to your personas’ goal in 3–5 sentences.

Intermediate Step

In order to receive a late pass for future assignments, have Part 1, Part 2 and at least one mental model and one corresponding persona submitted through this Gradescope by September 26, 2019 at 6:00pm. Remember that this step is optional and you will not be penalized for not completing it.

Handing in your assignment

Submit at most 1000 words and as many additional pages of figures as necessary to Gradescope containing your Observations, Personas, and Storyboard. Storyboard captions do not count as part of the 1000 word limit. Feel free to insert necessary visuals within the text or in additional pages. Number figures (e.g. “Figure 1”, “Figure 2”) and cite them from the text if it’s unclear which one you are referring to.

Grading and Requirements (22 points)

Record Observations (6 points)
• 2 pts — Sketch and description of the interface with annotations/explanation.
  o After reading your description and sketch, do we fully understand how the interface works? Would we be able to interact with this interface given the sketch and description you provided?
• 2 pts — Objective key observation notes of at least 4 people using a public interface.
  o Details about user behavior, reactions, and environment. It should set the scene like a theater.
• 1 pts — Summary of the interview questions and responses for at least two users.
  o Good questions that can open up to a conversation and thorough, descriptive summary of users' responses with key details of interaction with user.
• 1 pts — Answers to questions regarding bias and representation in population samples.
  o Analyze your own findings using the provided guiding questions.

Personas (8 points)
• 2 pts — Descriptions and explanations of 2 mental models.
  o Concise and thorough descriptions of each mental model.
  o Explanation of how each mental model affects the user's actions and behaviors.
• 3 pts — Two well-developed personas using the four-quadrant empathy map framework. Empathy maps should be presented in a typed visual manner similar to the Figure 1 example given. All assumptions should be logical and based on the observations that you made. No paragraphs of text please!
  o After reading the empathy map, the reader can imagine a real person.
  o Someone reading the entire persona can act it out in different scenarios.
  o Are the items in the correct category?
• 2 pts — Brief explanations of each persona including:
  o Descriptions of your persona
  o Problems of the interface that your personas face.
  o Why and how each persona represents the users of your chosen interface.
• 1 pts — One additional persona for the users of social media company and explanation of how its characteristic can be manipulated in ethical and unethical ways

Storyboard (6 points)
• 2 pts — Figure of storyboard (should depict entire user journey), and a 1 sentence description for each frame of the depicted action.
  o All storyboard frames should assist with putting the reader in the user’s shoes.
• 2 pts — Explanation of how storyboard relates to persona’s goals.
  o Storyboard is logically consistent with user’s goals.
• 2 pts — Storyboard visuals are clear and the user’s journey is logical.

Style (2 points) — Would this stand alone as a Portfolio piece? Check out the Style Guide for tips on making something a portfolio piece.