Step into a user’s shoes. 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.

I. 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. 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!

In pairs you may: choose an interface to observe, create interview questions, and conduct interviews. All other work is to be done individually, including but not limited to taking your own notes and summarizing the responses on your own. If you would like to be assigned a random partner, submit this form by 9/22 (Sat) at 11:59pm.

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!

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1 The Basics of Crafting Good Questions and the Understanding lecture slides may help you write better questions.
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 and limit this description to 100 words.

II. **Record Observations**

With a partner, observe at least 6 users, and interview at least 4 of those users. 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**). Mention who you partnered with for this portion of your handin. 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.

III. **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 second part of this assignment, you are going to take the data you collected from your observations and interviews and use it to (1) construct 2 mental models and (2) generate 2 personas accordingly. The two 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, 1 for each of the 2 personas.** 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 1–2 sentences.
- Explain how each mental model affects a user’s behavior or actions in 1–3 sentences.

These mental models should help you in developing your personas.

2) For constructing personas, you’ll be asked to describe what users think, feel, say, and do by creating four-quadrant empathy maps 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.²

For each persona:

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

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 (right). 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:

- For the “Thinks,” “Feels,” and “Says” quadrants, you may make assumptions about what the user would say (for instance, you may include what the user would say), think, or feel. If you are confused about the differences between the Says and Thinks quadrant, you can think of Says as something that

² For a better understanding of personas, you can also check out the section in this article on creating a persona.
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 the Thinks, Says, Does, and Feels quadrants may be contradictory. A famous example is grocery shoppers who said during 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.
- Do your best to headline your thoughts. That is, don’t include full paragraphs, but instead the few words that capture the root of the observation. For instance, with the following example, we wrote “Pressured by the line behind her”, which succinctly captures a single thought.

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 have made this persona to represent this type of user. This enables us to guide our design to address the needs identified by this persona.

IV. Storyboard

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 using software (Boords or Plot are examples of tools you can use), 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 the 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.

1) Storyboard your persona’s user journey from start to end. For instance, the figure below depicts a story starting with Tom sitting on the floor, progresses to Susan using the Heartline app, and ends with Tom’s friends checking up on him. It does not, however, show Susan getting gas that morning, or show Tom’s friends at work. 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 3–5 sentences. Place this description beneath your storyboard.

V. Handing in your assignment

Submit at most 2 pages of text 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 2 pages of text. Text can be spread out over multiple pages but should be able to fit onto two pages, if copied and pasted into a new document at 12pt type. Feel free to insert necessary visuals within the text or in additional pages. Number figures (Figure 1, Figure 2) and cite them from the text if it's unclear which one you are referring to.
VI. Grading and Requirements (22 points)

Record Observations (5 points)
- 2 pts — Sketch and description of the interface with annotations/explanation.
  - After reading your description and looking at your sketch, do we fully understand how the interface works? Did you convey to us everything we need to know about interacting with this interface?
- 2 pts — Objective key observation notes of at least 6 people using a public interface.
  - Details about user behavior, reactions, and environment. It should set the scene like a theater.
  - Objective key observations that seem like they would help a designer.
- 1 pts — Summary of the interview questions and responses for at least two users.
  - Good questions that can open up to a conversation and thorough, descriptive summary of users’ responses with key details of interaction with user.

Personas (8 points)
- 2 pts — Descriptions and explanations of 2 mental models.
  - Concise and thorough descriptions of each mental model.
  - Explanation of how each mental model affects the user's actions and behaviors.
- 4 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!
  - After reading the empathy map, the reader can imagine a real person.
  - Someone reading the entire persona can act it out in different scenarios.
  - Are the items in the correct category?
- 2 pts — Brief explanations of each persona including:
  - Descriptions of your persona
  - Problems of the interface that your personas face.
  - Why and how each persona represents the users of your chosen interface—be consistent with your observations.

Storyboard (7 points)
- 3 pts — Figure of storyboard (storyboard should have at minimum 6 frames, but should depict the entire user journey), and a 1 sentence description for each frame of the depicted action.
  - 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.
  - Storyboard is logically consistent with user’s goals.
- 2 pts — Storyboard visuals are clear and the user’s journey is logical.

Style (2 points) — Is this the quality of a Portfolio piece? Check out the style guide for tips on make something a portfolio piece.