Introduction to HCI
Fall 2021

Personas and User Tasks

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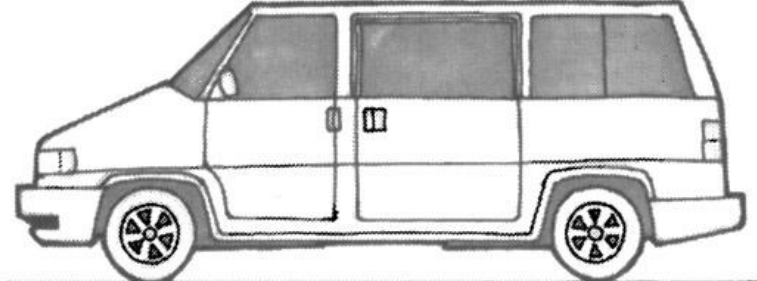© Mahyar with acknowledgements to Joanna McGrenere and Dongwook Yoon

Logistics
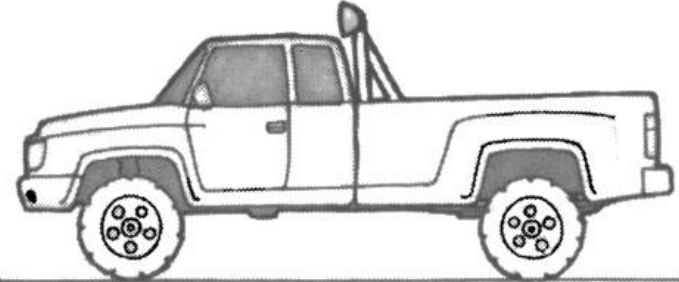
▸ Deadline for Assignment 2 is tonight at 11:00 pm

▸ Late submission is allowed for a week with a 50% penalty

▸ Assignment 3 will be released tonight

▸ Having 3 assignments and more time for the project milestone?

Learning goals

- Describe personas, specifications, and usage
  - Understand different types of personas and be able to identify and prioritize them for an HCI project
  - Describe how to develop a persona

- Describe Tasks and Task Examples

Personas

The best way to successfully accommodate a variety of users is to design for specific types of individuals with specific needs.

Alesandro's goals
- Go fast
- Have fun

Marge's goals
- Be safe
- Be comfortable

Dale's goals
- Haul big loads
- Be reliable

What is personas

- A human-centered tool to design for specific types of individuals with specific needs
  - Ground design in users' goals and activities

- A fictional user/character - a personification
  - Archetypes based on real data gathered from interviews and field research
  - The power of fiction to engage

- A precise descriptive model of the user
  - What they wish to accomplish and why

Why personas

- Provide a shared basis for communication
  - Communicate and build consensus across design teams and stakeholders
- Helps to avoid critical errors in design
  - Elastic user
    - Constantly changing definition of the end user
  - Self-referential design
    - Designers design toward their own goals, needs and motivations
    - Designers may base scenarios on people similar to themselves
  - Edge cases
    - Designers design for possible solutions but not user-centric solutions

Cooper et al, 2014

Personas specification

▶ Design for one person
  ▶ Represents a group
▶ Hypothetical not real
▶ User persona not a buyer persona
▶ Powerful tool if uses to complement other method but not replace them

Pruitt & Grudin, 2003

Why not just use real people

- Everyone has some behaviors one would not want to focus design on.
- A persona represents a group of people
  - Designing for/testing six Alans is difficult

Personas types

▶ We must prioritize our personas

▶ Primary persona (user persona)
  ▶ One primary persona per interface
▶ Secondary persona
  ▶ Has additional needs that can be accommodated
▶ Customer persona
  ▶ Address the need of customer not end users
▶ Served persona
  ▶ Not users but directly affected by the use of the product
▶ Negative/anti-persona
  ▶ The type of person you don't want to target

Creating personas

▸ Qualitative research data: behavioral patterns observed during interviews and observation

▸ 1. Group interview subjects by role

▸ 2. Identify behavioral variables

▸ 3. Map interviewee to behavioral variables

▸ 4. Identify significant behavior patterns

▸ 5. Synthesize characteristics and define goals

▸ 6. Check for completeness and redundancy

▸ 7. Expand the description of attributes and behaviors (narrative)

Cooper et al, 2014

Creating personas

- Development Process
  - Begin with intensive research based on field studies
  - Divide the team to focus on different personas, gather relevant data, consider 'anti-personas'
  - Consolidate data collection and analysis in Foundation Documents that serve as a repository of relevant data for each persona
  - Construct narrative stories based on affinity diagrams of data
  - Create images of personas and give names

Pruitt & Grudin, 2003

ABOUT

John is a graduate student at UCLA who cares deeply about animal rights. He spares his own time to volunteer at the local animal shelter and to promote pet adoption. He wishes to order some design artifacts to raise awareness at his school.

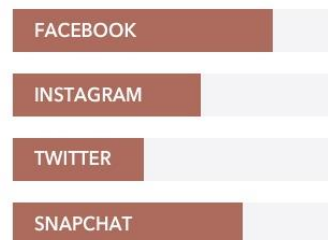|	
AGE	28
OCCUPATION	Ph.D Student
INCOME	Less than $50k
STATUS	Single
LOCATION	Los Angeles, CA

NEEDS

- Create designs that promote animal adoption
- Order design artifacts such as posters, badges and buttons to distribute them to students
- Help with the crowdfunding

FRUSTRATIONS

- Some vendors charge way too much for the designs
- Connecting with the local vendors require extra time on his end
- If he ends up not getting the funds, he has to put in his own money

SOCIAL MEDIA ACTIVITY

FACEBOOK

INSTAGRAM

TWITTER

SNAPCHAT

CURRENT FEELINGS

Stressed   Concerned   Busy

PERSONALITY

PASSIONATE   MOTIVATIONAL

GIVING   LOVING   OPTIMISTIC

USER PERSONA

John Doe

"I care deeply about animal rights and to help them live happier lives"

Amy

Goals

- Live in a clean environment
- Budget effectively as a college student
- Get along and live harmoniously with roommates

Frustrations

- Roommates don't clean as much as she would like
- She often buys shared household supplies without roommates pitching in
- Confronting her roommates makes her uncomfortable

"People just don't do their part. It always ends up being somebody else."

Age: 21
Work: Student
Family: Single, No kids
Location: Minneapolis, MN
Highest Level of Education: Pursuing B.A.

Bio

Amy is a college student who lives in an apartment with two roommates. She is quiet and grew up on a farm, so she's used to having a lot of chores. Amy usually likes to live in a tidy environment, but sometimes lets her room get a little messy. She is often frustrated when her roommates don't have as much concern about cleanliness as she does. Sometimes her roommates neglect to do chores, so Amy just ends up doing them herself in order to avoid conflict. She also feels like she is the primary purchaser of shared household supplies like toilet paper and dish soap, which is taxing on her budget. Amy wants to share the responsibility and financial burden in keeping the house clean.
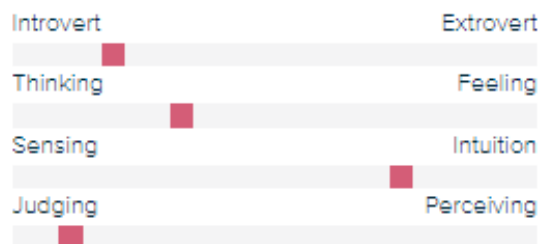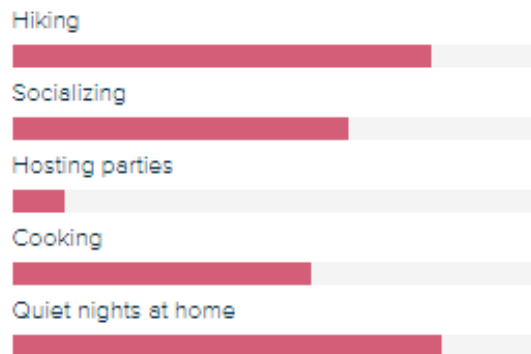
Organized   Quiet   Agreeable

Responsible   Motivated

Personality

Introvert — Extrovert
Thinking — Feeling
Sensing — Intuition
Judging — Perceiving

Values & Interests

Hiking
Socializing
Hosting parties
Cooking
Quiet nights at home

A feature-personas

► An example of how personas can become explicitly involved in the design and development process

	Persona 1	Persona 2	Persona 3	
Weight:	50	35	15	Weighted Sum
Feature 1	0	1	2	65
Feature 2	2	1	1	150
Feature 3	-1	1	0	-15
Feature 4	1	1	1	100
Etc.	-	-	-	-

 0   (the Persona doesn't care about the feature one way or the other)
-1   (the Persona is confused, annoyed, or in some way harmed by the feature)
+1   (the feature provides some value to the Persona)
+2   (the Persona loves this feature or the feature does something wonderful for the Persona even if they don't realize it)

Pruitt & Grudin, 2003 14

Tasks and Task Examples

Task centered system design

vs.

The User
a pretend person who
will mold themselves to
fit your system

Mary
a real person with real
constraints trying to get
her job done

Tasks are central to HCI

- Cooper's 3 types of user goal:
  - Life goals (reflective)
  - End goals (behavioral)
  - Experience goals (visceral)

Cooper, Alan, et al. (2014) About Face: The Essentials of Interaction Design, Chapter 3. Modeling Users: Personas and Goal (pp. 61-99) John Wiley & Sons. [Read p. 81-97]

Task description: Task examples work together with task analysis

- In HCI, establishing requirements typically begins with establishing tasks:
  - Task examples describe tasks and (to some extent) users
- Together with design prototypes, task examples are also a good way to evaluate initial designs at low cost and effort

USERs ->in this lecture, when you see User, think Persona

Creating design goals: Scott Klemmer

https://www.youtube.com/watch?v=m92DLyQNoS8

Task examples

▸ Articulate concrete, detailed examples of tasks users perform or want to perform that your system should support

▸ It is useful to categorize task examples:
  ▸ Routine
 ▸ Infrequent but important
  ▸ Infrequent and incidental

Key point to note

- Task examples are interface independent, or as independent as possible.

- The key distinction between a scenario and a task is that a scenario is design-specific, in that it shows how a task would be performed if you adopt a particular design, while the task itself is design-independent.

Grocery list task example

▶ Melody is doing the weekly menu planning for her family of 4. She chooses a set of recipes that suit the season, available prep time, current individual dietary preferences and her own preference at that moment.

▶ Many of this week's choices are regulars. She creates a shopping list of ingredients, ordered by where they can be found in the grocery store. Her partner Cameron, who does the actual shopping and is more familiar with the store, supplies "feedback" on any errors she makes.

▶ When a recipe requires an ingredient that was already needed for an earlier day's meal, it is incremented. After getting through the week's meals, she adds a few regular items like milk, bread, cereal and juice. After Cameron has left with the list, she realizes she's forgotten to check the pantry for staples like flour and rice.

People make many kinds of grocery lists
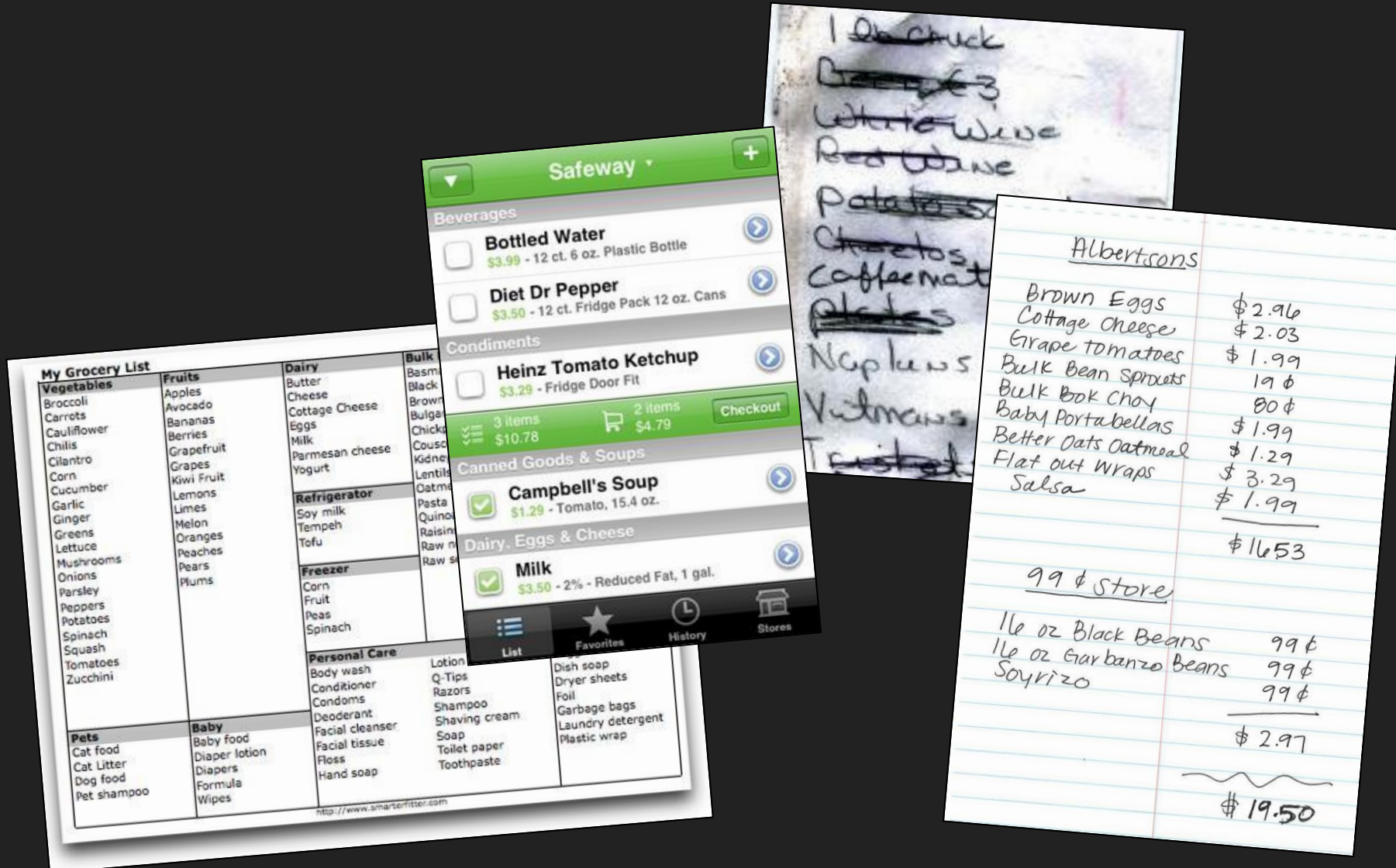
And lists are just one of the ways that people vary in how they do their meal planning

▸ Plan ahead, or last minute??

▸ Alone, or as a family?

▸ Does list maker also shop?

▸ Improvisation allowed?

In-class activity (20 min)

- Work in teams

- Create a persona and an anti persona for your project

- Think about their following behavioral variables
  - Activities
  - Attitudes
  - Aptitudes
  - Motivations
  - Skills

- https://tinyurl.com/2h4kfz6s

Optional reading

- About Face: The Essentials of Interaction Design - Chapter 3: Modeling Users: Personas and Goal
  - https://drive.google.com/file/d/1jAW-AbycGIB0-uYO3Gh3SXugI2qlRDIx/view?usp=sharing

Additional Information

Persona Benefits

▶ Become a management tool in the development process

    ▶ Guides development towards building a human centered product instead of tech-centered

▶ Provide internal and external project participants with a common language and a common understanding of the users

▶ Help make assumptions and decision-making criteria explicit

▶ Help establish who is and consequently who is not being designed for.

▶ Provide insights into and maintain focus on user needs and company goals

Persona Challenges

▶ Expensive tool: it takes time and money to create personas
  ▶ Demands a proper validation and large sets of data

▶ Hard to keep in mind that the personas are not real users and cannot replace meetings with real users

▶ Difficult to encompass a large cast of personas in design process (more than 10)

▶ The method does not provide instructions on how to use the personas, as the focus is on descriptions of people

▶ It can be difficult to get management support
  ▶ Validity of a small number of interviewed

Risk of personas

▶ The characters are not believable
  ▶ Designed by committee (not based on data) or the relationship to data is not clear
▶ The characters are not communicated well
▶ Adopt or adapt personas
  ▶ Marketing and product development have different
▶ Needs that require different persona attributes
▶ Personas can be overused
  ▶ At worst, they could replace other user-centered methods, ongoing data collection, or product evaluation

Pruitt & Grudin, 2003