Introduction to HCI

Modeling User Personas

Guest Lecture by:
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Today

- Quiz [10 min]

- Personas [20 min]

- In class activity [25 min]
  - Personas

- Discussion on the project [20 min]

Learning goals

• Describe the persona method, specifications, and why we use it

• Understand different types of personas and be able to identify and prioritize them for an HCI project

• Describe how to develop a persona

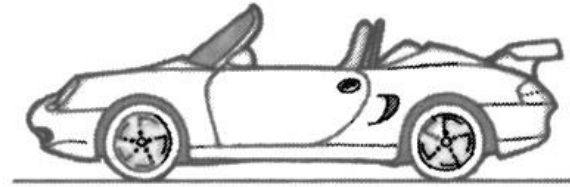• Describe the pros/cons and challenges of using Personas

Personas

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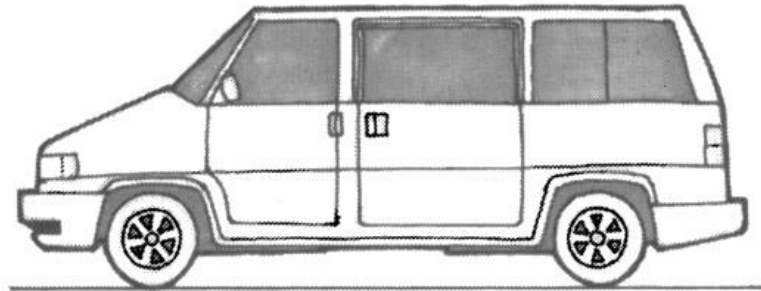is to design for specific types of individuals with specific needs.

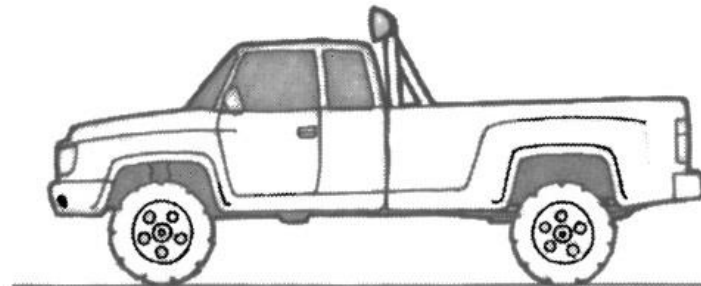**Alesandro's goals**
- Go fast
- Have fun

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 he wishes 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 situations but not for all users

Cooper et al, 2014

Personas specifications

- Design for one person
    - represents a group
- Hypothetical not real
- User persona, not a buyer persona

- Powerful tool if used to complement other methods 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

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
  1. Begin with intensive research based on fieldwork and marketing data
  2. Divide the team to focus on different personas, gather relevant research data, consider 'anti-personas'
  3. Consolidate data collection and analysis in *Foundation Documents* that serve as a repository of relevant data for each persona
  4. Construct narrative stories based on affinity diagrams of data
  5. Create images of personas and give names

Pruitt & Grudin, 2003

Creating personas

Links between Persona characteristics and the supporting data are made explicit and salient in the *foundation documents*.

Overview – Alan Waters (Business Owner)
Get to know Alan, his business, and family.
A Day in the Life
Follow Alan through a typical day.
Work Activities
Look at Alan's job description and role at work.
Household and Leisure Activities
Get information about what Alan does when he's not at work.
Goals, Fears, and Aspirations
Understand the concerns Alan has about his life, career, and business.
Computer Skills, Knowledge, and Abilities
Learn about Alan's computer experience.
Market Size and Influence
Understand the impact people like Alan have on our business.
Demographic Attributes
Read key demographic information about Alan and his family.
Technology Attributes
Get a sense of what Alan does with technology.
Technology Attitudes
Review Alan's perspective on technology, past and future.
Communicating
Learn how Alan keeps in touch with people.
International Considerations
Find out what Alan is like outside the U.S.
Quotes
Hear what Alan has to say.
References
See source materials for this document.

Clark Andrews

AGE 26
OCCUPATION Software Developer
STATUS Single
LOCATION San Jose, CA
TIER Experiment Hacker
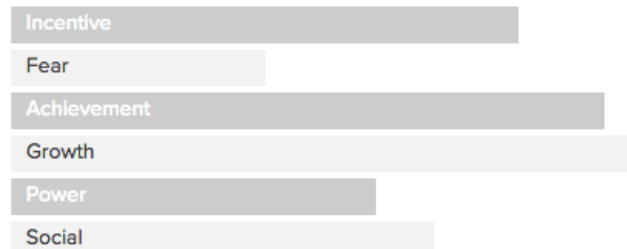**ARCHETYPE** The Computer Nerd

Friendly	Clever	Go-Getter

"I feel like there's a smarter way for me to transition into a healthier lifestyle."

Motivations

- Incentive
- Fear
- Achievement
- Growth
- Power
- Social

Goals

- To cut down on unhealthy eating and drinking habits
- To measure multiple aspects of life more scientifically
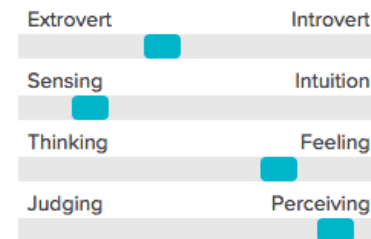- To set goals and see and make positive impacts on his life

Frustrations

- Unfamiliar with wearable technology
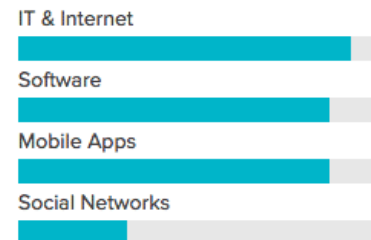- Saturated tracking market
- Manual tracking is too time consuming

Bio

Aaron is a systems software developer, a "data junkie" and for the past couple years, has been very interested in tracking aspects of his health and performance. Aaron wants to track his mood, happiness, sleep quality and how his eating and exercise habits affects his well being. Although he only drinks occasionally with friends on the weekend, he would like to cut down on alcohol intake.

Personality

Extrovert	Introvert

Sensing	Intuition

Thinking	Feeling

Judging	Perceiving

Technology

- IT & Internet
- Software
- Mobile Apps
- Social Networks

Brands

Amy Jones

"I want to present tidbits of content in a visually exciting way. It is very rewarding to educate the public about what we do and why it matters.'

AGE	34		
GENDER	Female	ORGANIZATION	NGO
STATUS	Married with 2 kids	COMPANY SIZE	Small (<50)
LOCATION	Boston, MA	OCCUPATION	Communications Manager

PERSONA BIO

Amy is passionate about promoting social good, and her work allows her to do what she cares about - raising awareness for a worthy cause. She enjoys her day-to-day job with a small and tight-knit team, but it comes with challenges.

While her organization has high aspirations for communication, she is tight on budget for media production. Amy is challenged to come up with compelling, innovative content at a low cost. While she has some basic graphic design knowledge, she is not proficient enough with advanced Adobe tools to create designs fast enough for her company needs.

Outside of work, Amy enjoys cooking organic, vegetarian food, doing Yoga and learning creative skills.
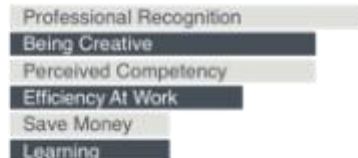
GOALS

- Educate the public about organizational vision
- Convince stakeholders about organizationa value
- Create professional looking content with speed

FRUSTRATIONS

- No budget to hire creative agency
- Time poor to learn graphic design from scratch
- Challenged to simplify complex ideas with easy to understand content

MOTIVATIONS

Professional Recognition
Being Creative
Perceived Competency
Efficiency At Work
Save Money
Learning

Desired Product Quality

Affordable

High Quality

Reliability

Easy to Learn

Versatile

Media Consumption

Google Search

LinkedIn Groups

Industry Newsletters

Public Radio

Social Media

BRAND AFFILIATIONS

npr

WHOLE FOODS MARKET

WWF

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

In class activity [30 min]

- Use your notes from interviews and observations of people (potential product's users) and identify a set of behavioral variables for each of your participant by focusing on the following types of variables:
  - **Activities**-what the user does; frequency and volume
  - **Attitudes**-how the user thinks about the product domain and technology
  - **Aptitudes**-what education and training the user has; ability to learn
  - **Motivations**-why the user is engaged in the product domain
  - **Skills**-user abilities related to the product domain and technology

Discussion on projects [20 min]

- With your group discuss next steps and plan for the milestones

On deck…

- Next class
  - 1st project milestone is due
  - readings as posted

Extra slides

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.

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