User Interaction

COMPSCI2031

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Recap: What we did last week

- Experimental Design and Variables in Research
- Reading: MacKenzie Chapter 5, Desinging HCI Experiments

User Interaction Topics

✅ HCI History and Introduction

✅ Usability and Heuristics

✅ Heuristic Evaluation and Human Cognition

✅ Human Perception and Capabilities

✅ Experimental Design & Variables Research

- Personas and Scenarios

- Surveys in HCI

- Ethnography

- Statical Methods

- Theories in HCI

- Models of Interaction

- Large Scale and Mobile HCI

- User-Centered Design

- Ethics in User Testing

- Revision & Example Exams

Personas & Scenarios

Lecture 7

References and Readings

- Matthews et al. "How Do Designers and User Experience Professionals Actually Perceive and Use Personas?", CHI 2012

- YouTube video URL: http://www.youtube.com/watch?v=B23iWg0koi8&t=1s

- Web reading: Creating Personas www.uxbooth.com/articles/creating-personas/

Persona and Scenarios

- What is a user persona?

- Why are personas important?

- Designing personas

- User scenarios

What is a user persona?

- **Personas** are 'fictional' characters who represent different groups of users that would interact with our system.

- Personas are used to guide our design. Creating personas help understand users' needs, experiences, behaviours and goals.

- Creating personas can often help designers and developers to step out of themselves and reduce ego-centric biases or assumptions.

- Personas are usually created on the basis of user research.

- Personas are distinct and memorable.

Example

A page or shorter with

- Name
- Photo/sketch
- Narrative – Relevant features of life, goals and behaviours

Why are Personas Important

- Aid communication between designers/ developments by providing a shared points of reference
  - "How does this design decision impact persona: XYZ"
  - "How does this design decision impact this group of users"

- Communication is important for:
  - Helping with planning
  - Creating a single point of reference (e.g., shared definition)
  - Highlighting problems earlier in the development process
  - Ensure development efforts are streamlined

- An abstract idea can constantly change in a discussion/argument with a college – a concrete design artifact can not

Designing Personas

A number of ways to think about this:

- Goal Directed – For well developed concepts, values and goals may be defined in advance

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- Others
  - Quantitative data driven
  - User archetypes
  - Marking
  - Possible more?

Designing Personas

- **Engaging** – A well-rounded personas design to elicit empathy
- **Fictional** - Developed without any data (so can be deeply flawed)
- **Bad Actor** – Who intentionally tries to break everything or misuse the system

Designing Personas

Name: Rebecca
Role: Spotify user
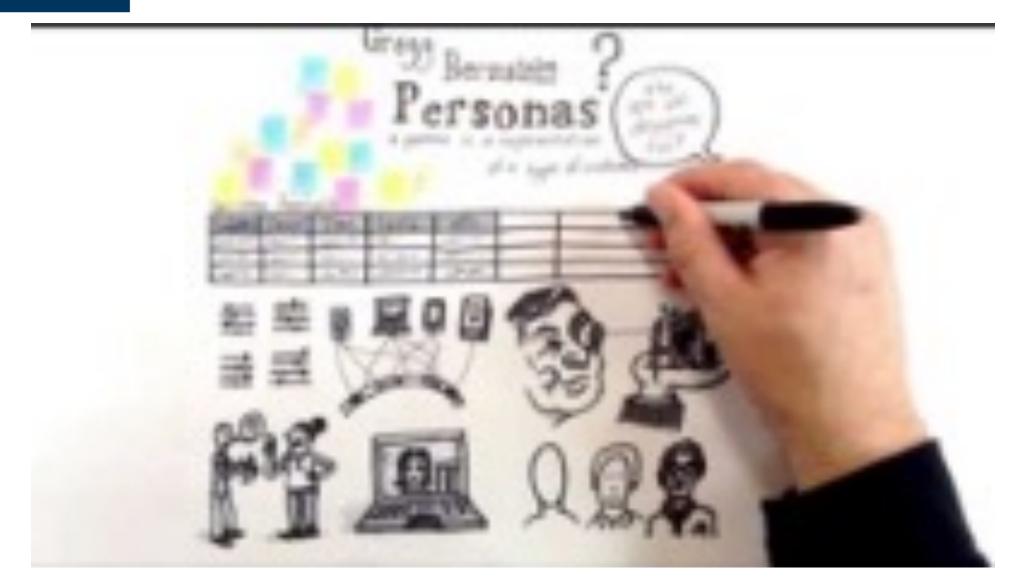
Age: 26
Profession: Data Scientist
Device: iPhone, Macbook Pro

Details: Music is essential to Rebecca's life. She wants to listen to great music almost every second of her life, particularly while working through her busy schedule.

Influences: Own taste in music, friends, co-workers, music charts, ads

Designing Personas: Data Driven

Designing Personas

Basic steps for designing personas:

- Step 1: Find the users – Study lots of users to start getting a sense of who they are
- Step 2: Identify relevant context and list users' attributes
- Step 3: Group users with similar attributes
- Step 4: Find patterns to form groups
- Step 5: Construct personas – one representing each different group; avoid stereotypes

There is a need to revisit personas over time as they can change with time

Downside of Using Personas

- Personas are abstract – it is hard to understand the abstraction process from user data to persona.

- Personas are impersonal – the personifying details in personas fail to provide a sense of empathy.

- Personifying details may mislead – it is difficult to select personal details that do not create false constraints on the design problem.

- Personifying details distract – personifying details make it hard to focus on the aspects of a persona that are critical for the design problem.

Source: Matthew et al. CHI 2012

User Scenarios

- Scenarios are narratives that explore an interface from the user's point of view.

- Using personas,
  - identify users' common tasks
  - the context where interaction will occur
  - Identify users' goals and the steps needed to achieve the goal

- Scenarios can cover both common and uncommon usages.

User Scenarios

We use scenarios and personas generally to:

• Identify users' goals and the steps needed to achieve the goal

• Identify steps to be completed by the user and the system

User Scenarios

Uses

- Software development
  - Prescriptive to evocative

User Scenarios

- Uses
    - Software development
        - Prescriptive to evocative
- Normally focused on actors who have one or more roles
- Scenarios normally built from personas

Scenario vs. Storyboard

- Scenario is a narrative and may have limited or no visual aids

- A storyboard provides visual narrative that focuses on capturing context…

Image: Austin Center for Design

Creating Scenarios – Scenario 1

Name: Rebecca

Role: Spotify user

Age: 26

Profession: Data Scientist

Device: iPhone, Macbook Pro

Scenario 1: Rebecca loves to explore new music, but she is too busy to search for new artists or new music. How can she updated with new music and new artists?

Creating Scenarios – Scenario 2
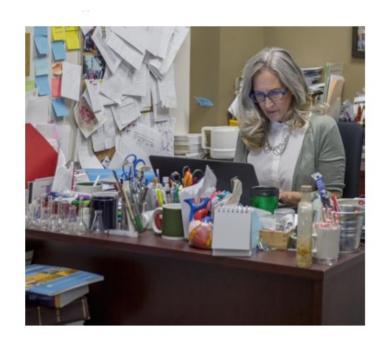
Name: Rebecca
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Scenario 2: Rebecca is often using mobile data to play music, sometimes for several hours. How can she listen to music in a data-efficient manner?

Example of Scenario

Name: Jane
Role: Product user
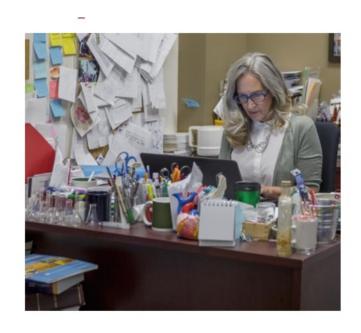
Age: 44
Profession: Academic
Device: Android, Linux

Details: Jane is an academic with a rather untidy office. She works a busy schedule full of research, teaching, administration, and volunteering for her research community. She drinks a lot of caffeinated beverages at her desk.

Influences: Contemporary theatre and immersive experiences.

Example of Scenario

Name: Jane
Role: Product user

Age: 44
Profession: Academic
Device: Android, Linux

Scenario 1: Jane leaves many cups of tea on her desk, but she usually can't remember which one is her fresh cup of tea. She wants a way to know if her tea is fresh or not, so she doesn't accidentally sip a rotten cup of milky tea.

Example of Scenario

Name: Jane

Role: Product user

Age: 44

Profession: Academic

Device: Android, Linux

Scenario 2: Jane is an academic and needs caffeine to be productive at work. She makes her tea with boiling water, but can't drink it until it cools down. She wants a way of knowing if her tea is the optimum temperature before burning her tongue or having an unpleasant sip of cold bitter tea.

Conclusion of Personas and Scenarios

A user personas is a representation of the goals and behaviours of a hypothesis user type (group of users/ potential users)

Often (but not always) personas are derived from data collected through some investigative means (e.g., surveys/ interviews/ etc) which we will cover later in this course.

Scenarios useful for UX design and to help understand and create empathy for users to find the best solution and also help figure out where usability testing and understand key tasks in a product.

Questions?
Comments?
Concerns?

Persona Task:

1. **Individually,** create a persona that represents your personal approach as a student.
   - Choose one of the persona templates provided to communicate your learning style, motivations, and goals.
   - You can use the template as is, mix and match between the templates, or add your own sections - the format is flexible and can be changed or adapted as needed.
   - Complete a single page persona and post it you your User Interaction groups channel on Teams for group discussion.

2. **As a group**, discuss the personas, identifying common features and key differences.
   - Based on your discussion, develop an 'archetype' persona that represents the different types of students in your group more generally.
   - You may use one of the templates provided, or develop your own format based on the personas developed by your group.

3. **Each group** should post their archetype persona to the 'General' User Interaction channel on Teams.
   - Take a look at the personas posted by other groups and feel free to leave some constructive criticism. Do these personas represent you, as a student?

Persona Task: Class Discussion

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No Reading