Human-Computer Interaction 2024/2025

Lab Class 2

Personas and Contexts of Use

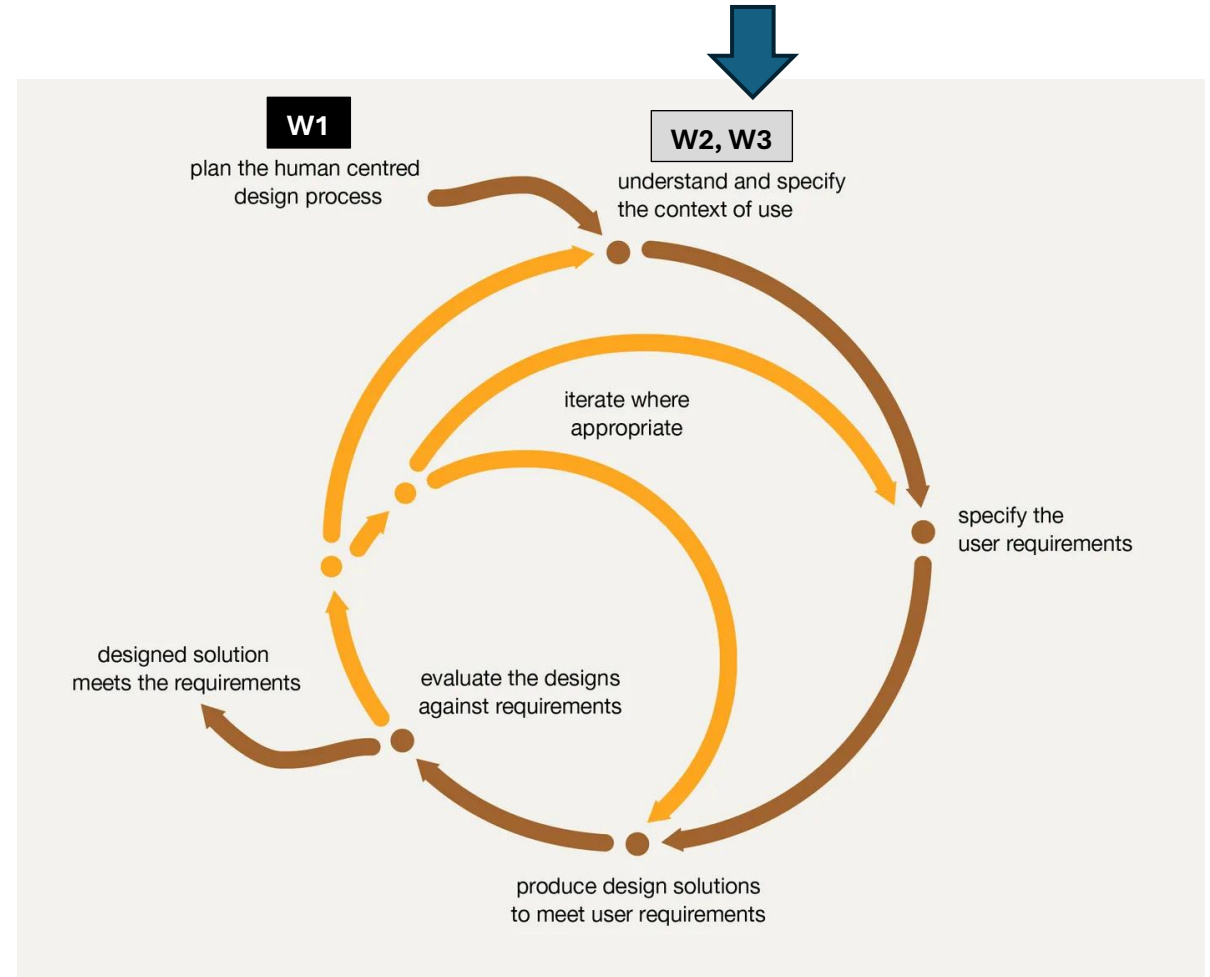universidade de aveiro

deti — departamento de electrónica, telecomunicações e informática

HCI Lab This Week

W3
Understand and specify context of use

Today we will clearly define personas and scenarios

Today, we will explore users (personas) and contexts of use (scenarios)

Why look into personas and contexts of use?

- **Human-Centered Design**
  Ensures interactive systems meet real user needs.
- **Improved decision-making**
  Helps prioritize features based on user behaviours/motivations.
- **Effective Communication**
  Align team-members with a clear scope of target audiences.
- **Higher engagement & adoption**
  Increases user satisfaction and adoption by addressing real-world contexts.

Interviews

(Semi) structured conversations used to gather insights, opinions, or experiences from target users.
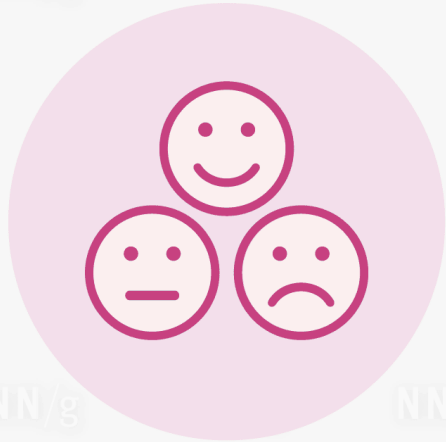
User Interview

- Help learn:
  - who your users are;
  - what their experiences are like;
  - what are their challenges/needs;
  - what they need, value, and desire.

- Popular UX research method often used in the discovery phase.

How to do a User Interview

- Identify what you'd like to learn;

- Prepare a guide (and improve it over time if needed);

- Start with simple questions and move into more detailed topics – make users feel comfortable (rapport);

Where to get detail: https://www.nngroup.com/articles/user-interviews/

How to do a User Interview

Nonverbal Cues

- Frequent eye contact
- Nodding
- Raising eyebrows
- Mirroring Posture

Verbal Cues

- Neutral acknowledgement
- Making noises like *"mmmh"*
- Echoing the participant
- Adjusting speech delivery

How to do a User Interview

- Follow up and delve deeper:
    - Tell me more about that.
    - Can you expand on that?
    - What do you think about that?
    - How do you feel about that?
    - Why is that important to you?

- Treat user interviews like a research study, not an informal chat with friends.

Reflection

- help team-members build empathy for their users;

- **user interviews** are different from **usability tests.**
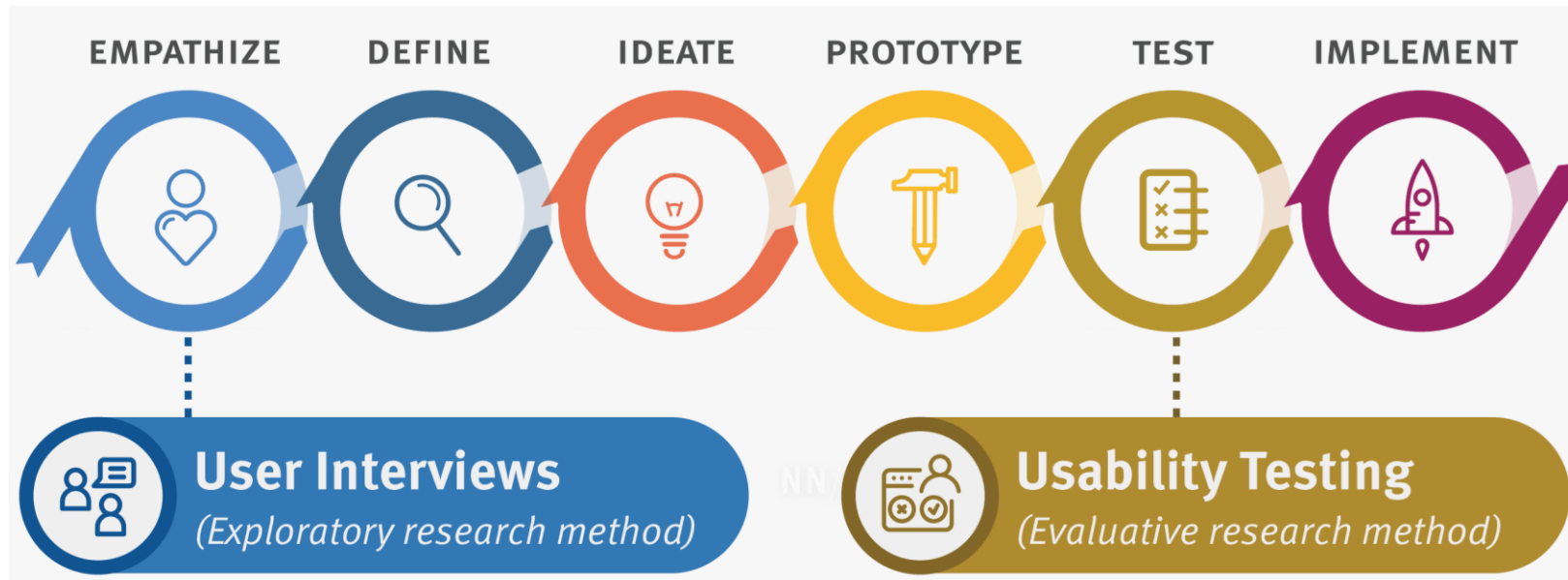
Personas

Fictional, detailed representations of target users based on data.

Personas

- Fictional, yet realistic, description of a typical or target user;

- Enable us to design with real customers in mind;

- Help us align ideas and create a shared understanding.

How to create Personas

- Include relevant aspects to help understand the target audience:
  - Fictional name, demographics;
  - Background;
  - Problem/Frustrations;
  - Motivation/Needs;
  - Environment;

- Other aspects may be included!

Persona for Nuno Rocha, a kid diagnosed with ASD.

Nuno Rocha, born on February 20th, 2005, in Aveiro, Portugal, lives with his parents and a 13 year old sister. At the age of two he went to a Child Development appointment, at the district hospital, because his parents suspected that something was wrong, after which he was sent to an autism exam at the Paediatric Hospital of Coimbra. At the age of three, he was diagnosed with an Autism Spectrum Disorder (level 2 in the scale of severity), with associated cognitive deficits. | General characterization of the child

He is attending the 4th grade at Anadia's Primary School, benefiting from a Structured Teaching Unit (STU) delivering him a structured learning model (TEACCH) and the application of interdisciplinary intervention methodologies. He also benefits from Speech Therapy sessions.
Nuno follows an individual curriculum (consisting of changes to the normal curriculum, by introducing, replacing or eliminating goals and contents). On a daily basis, for 2 hours, he attends the regular class to work sociability, whereas functional classes (like functional Portuguese, world knowledge, functional math and every day activities) are learned at the STU. | School and curricula

At home, he prefers to watch TV and play computer games. When asked about professional preferences, he mentions he would like to stay at home with his mother and watch TV or play computer games. He appears to dominate the basic functions of a computer; however, he only uses his ability to play computer games. He is not able to research information on any search engine, nor does he use social networks for communication. | Technology adherence and proficiency

He appears to understand simple oral material, specifically words or sentences related with his social and familiar day-to-day. On the other hand, difficulties are observed on the comprehension of longer sentences that lack visual support or that are out of the context. | Receptive-expressive language

Motivation: Nuno would like to _**be more autonomous**_ using social networks to communicate. Plus, he would like to be _**able to share with his parents the activities**_ that he does at school, through the day.

Where to get detail: https://www.nngroup.com/videos/personas-101/

How to present Personas

• Use representative images;

• Create a summary table for each persona;

• Include the most relevant data without too much details;

• Be creative – this will help establish a solid framework.

Example of a Persona

Persona	BookAddict user
Fictional Name	José Manuel
Job Title	Lawyer

Goals and Task
- Consulting his wishlist
- Track the page of the book being read
- Read others opinions about some book

Demographics
- 40 years old
- Married
- Father

Environment

Using his cellphone while he is on the train after work to know the page he was reading a determined book. He is an active reader and internet user.

Contexts of use

Background information or circumstances that give meaning to an event, statement, or idea.

Contexts of use

• Also described as Scenarios;

• 'Detailed' descriptions of a realistic situation relevant to the design of a system;

Contexts of use

- *"...the extent to which a system, product or service can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use";*

when, where, how, why

Contexts of use

- Include a potentially broad array of factors:
  - physical and social environments;
  - human abilities and disabilities;
  - cultural issues and similar.

How to create Scenarios

- While not all aspects mentioned apply in each case, it is important to consider what is and isn't relevant. Consider the following:
  - Where do your users engage with your product or service?
  - What is happening to the user when they are using it?
  - What is physically or socially preventing users from completing their tasks?
  - When does usage happen and what triggers it?
  - What expectations do users bring to the task?
  - Why do users want to do this before that?
  - What makes sense to users and why does that differ from how you think about it?

How to present Scenarios

- The user should be at the center of the action;

- Provide enough detail to make clear to others not familiar with the problem, what is the context associated;

- Example:

"Nuno just finished an activity he was performing during speech therapy and he would like to take a picture to keep it and share the moment. To do so, he only needs to access the system and touch the icon corresponding to the camera, available on the main menu. The system takes the picture and saves it automatically. …"

Example

José is going home by train after a day of work. He wants to continue reading the book he was reading. He wants to know where he left his reading. To achieve his goal, <u>he goes into the **application page tracker** and checks the current page.</u>

José is home due to the quarantine, worried about his reading habits, he decides to start reading a new book. He is looking for opinions and ratings on this new book everyone is talking about. So that he can achieve his goal <u>he opens the application a **searches for recommendations.**</u>

HIC – ASSIGNMENT n.2

Design and prototyping of an application
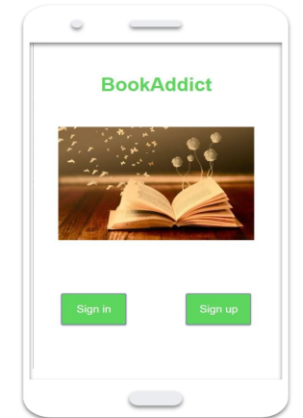using a human-centered approach

Project title:

BookAddict an application for avid readers

Group:

João Laranjo, Margarida Martins and Tiago Oliveira

Lab:

P6

The previous example was actually from a group of HCI students, from some time ago....

This is the level of detail/quality you should aspire to achieve with your work...

Useful Sources

- Interviews:
https://www.nngroup.com/articles/user-interviews/
https://www.interaction-design.org/literature/topics/user-interviews

- Personas:
https://www.nngroup.com/videos/personas-101/
https://www.nngroup.com/articles/personas-study-guide/
https://www.interaction-design.org/literature/article/personas-why-and-how-you-should-use-them

- Contexts of use:
https://www.nngroup.com/videos/using-personas-prioritize-features/
https://www.interaction-design.org/literature/topics/contexts-of-use

Let's Get to Work

For this class...

- Start by conducting some **interviews** with other students

- Identify relevant **personas** for your context – 1 or 2 should be enough – avoid personas with similar motivations

- Define the **contexts of use** associated with each persona

- **Register** all the information in your group's **logbook**

Tasks to complete until next class...

- Have the **Personas and Scenarios ready**

- **Start thinking about requirements for your interactive system** - what will your system need to do?

- **Analyze the Assignment 1 template** and discuss it with the teachers if you have any questions.

- **Register** all the information in your group's **logbook**

Github rep for Logbook

https://github.com/UA-DETI-41549-HumanComputerInteraction/41549_HCI_LogBookTemplate

You can either clone/fork the repository and pull subsequent additions to the template or just download it and check the repository for changes "manually"