# Human-Computer Interaction

Practical Class 2

### This Class

Discuss and refine questionnaires

### Next Steps

### Conduct user study

Bare min. 15 users (from potential target audience). Ideally 20+

### Start user and task analysis

Answer II questions

Characterize users

Create 2-3 personas

Start defining activity scenarios

### How to find users?

# People next to you

Colleagues, friends, family, ...

# Do not use FEUP mailing lists!

Really, there are 80+ groups

### User Characterization

### Only potential users

Do not design for those who will not use the UI

### As much detailed as possible

Age, experience, habilitations, preferences, habits, etc...

#### Personas

Detailed descriptions of imaginary people

Represent the various profiles of potential users

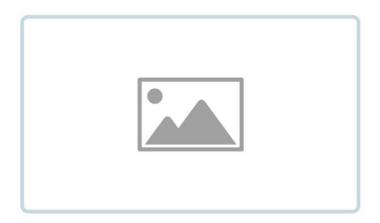
Are distinguished by individual differences

Are defined by the objectives they intend to achieve

Not real, but based on the real people we've studied.

Should have a name, a visual representation, personal details (e.g. hobbie)

#### Name



#### "encapsulating quote"

Age:

Education level:

Work/occupation:

Family:

Location:

Technological proficiency:

Preferred devices:

Archetype:

personality trait 1

personality trait 2

#### Narrative/Lifestyle/Behavioural patterns

A short paragraph used to describe the lifestyle and behavioural patterns of a persona, including some of their history that leads them to a potential use case. Highlighting a few factors from their personal and professional life might help coloring the user's profile and build empathy across the team.

#### Objectives/Needs

- · A task that needs to be completed.
- · A goal that needs to be reached.
- · An unavoidable requirement.
- · An experience to be felt.

#### Frustrations/Pain points

- · A challenge they might feel or would like to avoid.
- · A current state of mind.
- · An obstacle preventing them from achieving their goals.
- Issues with an available solution.

#### **Laurent Garnier**



"Just because you like technology, it doesn't mean that everything's useful.

Age: 32

Education level: MSc degree

Work/occupation: Chemical engineer

Family: **Girlfriend, no children** Location: **Marseille, France** 

Technological proficiency: **Above average** Preferred devices: **Mobile phone, laptop** 

Archetype: the 'hard to convince'

perfectionist

stubborn

outgoing

witty

#### Narrative/Lifestyle/Behavioural patterns

Very tech-savvy, but also very hard to convince on a discussion, with the real value of technology being one of the themes. He believes that app stores are full of unnecessary, useless garbage, and that software houses nowadays only want to make a quick buck selling something, even if it does virtually nothing and it's full of ads. He is very selective on which apps he chooses to install on his smartphone. Doesn't mind about paying for a good and well-maintained service, but feels discouraged to do so due to previous bad experiences. Drives his car everywhere, but has recently broken his leg, which is forcing him to use crutches for the next 3 months, plus another 3 for physiotherapy. His current status is making him rethink on how to get around town.

#### Objectives/Needs

- As he is unable to drive and his girlfriend isn't available most of the times to give him a
  ride, he is on his own and has to rely on a different accessibility level, as well as public
  transportation.
- He is interested in understanding how easily the public transportation network can be integrated with his walking routes.
- He will prefer less crowded routes to better move around, as well as low slopes, few steps, and if needed, access to elevators.

#### Frustrations/Pain points

- He is not used to being in this situation, so it might feel frustrating having to change habits, as he will have to endure this for a while.
- Doesn't want to take an Uber because feels like it would be too expensive to do it every time he needs to go somewhere.
- Not familiar with the use of public transportation, so might take a while understanding how the whole system works and how to make the most of it.

### **Activity Scenarios**

### Stories of people and their activities

Describe users performing tasks (with our system)

Without UI details!

# Highlighting concepts and actions is good practice

It will help in the creation of the conceptual model

### Example Activity Scenario

John has just arrived from his vacation in the Caribbeans. When he got home, he took his digital camera out of his bag and went to transfer the photos to PhotoLib, his application for organizing and sharing photos. After authenticating, John transferred all 1047 photos. After, John starts to organize them, dividing them by the several days of the vacation. To do this, he searches for photos with the same date and selects them. He creates an archive which name is the date and moves the selected photos into it.

### Until Next Class

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Create 2-3 personas

Start defining activity scenarios

### Next Class

# Discuss personas and activity scenarios

Continue user and task analysis

Conceptual model

Usability requirements

**Functionalities**