

# Needfinding (Exercise)

**Human Computer Interaction**

Luigi De Russis, Fulvio Corno

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# Goal

- Develop the plan for a Needfinding process in an example project
- Overview of Needfinding tools
- Plan the Observation process
- Plan the Interview process
  - Develop the Interview tool
- **Interactive exercise** – please contribute, suggest and comment!

# An example project

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TO/WHILE/IN/... <general activity/topic>

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- We would like to SUPPORT/HELP/ENHANCE/... <target population>  
TO/WHILE/IN/... <general activity/topic>
- We would like to help University Students,  
within Student Teams, to better manage the  
enrolling, training and inclusion of newly  
selected students

# Target group(s)

- Groups

- ~~Existing Team Members (not so important)~~
- Team leaders and Group Leaders, for one specific team
- New Team Members (don't know the specifics of the team or its activity, yet)
  - May be in for social aspects, for technical challenges, for getting extra credits, for traveling to challenge locations, ...
  - Italian vs International student
  - Visiting student (double degree / erasmus / ... ) with limited time in Politecnico
  - Bachelor vs Master
  - Working in presence or on-line


# Activity (onboarding)

- Gaining the Knowledge of the new students
  - Understanding the skills of new members
  - Organizing the interviews (including the help of all current members)
- Creating socialization opportunities
- Assigning students to role/groups/tasks/responsibilities/ ....
  - (some groups more critical than others)
- Creating links/introductions with current components of the sub-group where they are assigned
- Sharing common knowlege (at the team level / at the sub-group level)
  - Training + Documentation + ...

# Needfinding Recap

Design Methods – Needfinding 1

**What to do in Need Finding**



The most important thing about need finding in design thinking is that we look without knowing what we are looking for. We trust that our ability to define the problem will emerge during the need finding process.

**PRINCIPLES**


- Human Centered Design (Look to users for design inspiration.)

**PURPOSE**

- Uncover Latent Needs: Gaps in Use, Usability & Meaning (Look for surprises, differences between what people say they do and what actually do.)
- Gain Empathy for Users (Discover the emotions that guide behaviors.)
- Look for Extreme Users (Users who are pushing the system may reveal needs before the mainstream.)

**PROCESS**

- Bring back Stories (specific) and Artifacts (photos, drawings quotes) that communicate your Insights.
- After the observation phase, you will gather with your team to share findings and insights. Bias toward capturing your observations in ways that are visual, sharable & evocative.
- PHOTOS  
Use photos to isolate points of interest & generate later discussion. Take as many as possible: 20 / hr is a good pace.
- SKETCHES  
Sketches are a great way to interpret a scene, to create a broad representation or to call out specific details.

**d.**   
HASO PLATTNER  
Institute of Design at Stanford

- <https://hci.stanford.edu/courses/dsummer/handouts/NeedFinding.pdf>

# Planning an Observation

- What: Follow the steps of an (future or past) onboarding process in a team
- Who: a task leader \*\*, some new students \*\*, some sub-group leaders, existing members
- Where:
  - Future: follow the activity
  - Past: recall from memory, OR re-play it in a lab setting \*\*
- When:
  - Future: at next team call
  - Past: recall information from last call
- How:
  - Pure observer, and questions after each phase. Time keeper: ensuring all stages are played in the allowed time



# Planning an Interview

- To whom? Team leader, New students (different categories), Current member who was involved in the onboarding
- **Direct 1:1 Interview** vs. Focus Group vs. Survey
- General Structure
- Questions
  - How many?
  - Which ones?
- Interacting
  - Follow-ups?
- Recording
  - Paper / Audio / Video / Pictures ?

# Interview Structure

- Introduction: why are we here? 20 minutes, about a project idea on..., not testing you, you are helping us, there are no wrong answers, how it works, ask for permission to share/elaborate responses + recordings
- Questions about the topic -> some are the same for everyone, some depend on the user
- Questions about the user -> age, degree enrolled, ~~country~~, kind of international students, ~~gender~~, ~~profession~~, role in the team, skills on ICT, skills on the domain/job
- Thank you, gift, contact information

# Questions (examples)

- Tell me about the student team you are in
- Do you remember when you first met the team members?
- [TL] How do you manage/organize the meeting of new members?
  - How do you assign new members to the sub-groups?
- [NEW] What happened when you were just joining the team?
  - Can you tell me about any socialization activities in the beginning?
  - What kind of training did you have
  - Are you happy with the role you are playing in the team?
- How did you handle communications in the first steps?
- What question didn't I ask you?