

# PROBLEM SPACE OF DESIGNING A ROBOT

What is the problem worth solving? Define it clearly through the user and the robot.

# USER

<div style="text-align: center;"><b>Group(s)</b></div> <p>Name the user group(s).</p>	<div style="text-align: center;"><b>Characteristics</b></div> <p>What characterises the user group(s)?</p>	<div style="text-align: center;"><b>Needs</b></div> <p>What needs do these characteristics lead to?</p>
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**Goal(s)**

What goal is the user trying to accomplish with the robot? Does the goal change short-term and long-term?

short-termlong-term

**Ethical considerations**

Use the separate ethics canvas to examine the ethical considerations, which emerge in the boundary between the robot and the user.

**Task(s)**

What task(s) is the robot aiming to fulfil for the user?

short-termlong-term

**Advantage(s)**

What are the potential advantages of using a robot to accomplish this task?  
Do the technological aspects of the robot enable something a human can't do?  
Do the social aspects of the robot enable it to do something other technologies can't?  
Are there other advantages?

<b>Social skills</b>	Humans treat robots as social actors. Are social skills an advantage in accomplishing the task?
<b>Emotional response</b>	Can the user have a useful emotional response to the robot?
<b>Personalization</b>	Can the robot accomplish its task better through personalization?
<b>Precision</b>	Can the robot be used to accomplish a task that requires precision?
<b>Mobility</b>	Is mobility an advantage for the robot to accomplish its task?
<b>Environmental manipulation</b>	Is environmental manipulation an advantage for the robot to accomplish its task?
<b>Data collection with sensors</b>	Can the robot sense useful things from its environment or users?
<b>Connectivity to technology</b>	Can the robot make use of being connected to other technologies?

# ROBOT



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