

PROBLEM SPACE OF DESIGNING A ROBOT

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

USER(S)

Group(s) Name the user group(s).	Characteristics What characterises the user group(s)?	Needs What needs do these characteristics lead to?
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Goal(s) What goal is the user trying to accomplish with the robot? What advantage are they gaining by using a robot?	
short-term	long-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-term	long-term

Advantage(s) What is the potential advantage and added value of using a robot in this solution, as opposed to other technologies, or people? Consider long and short-term advantages. Think about the list below, and color in where you think they'll be useful. Are there other advantages?	
Social competence	Are social skills an advantage?
Personalization	Can the robot bring joy through recognizing specific users?
Emotional response	Does the robot generate an emotional response for the user that can't be achieved with other tech?
Precision	Can the robot do something more precisely than a human?
Mobility	Is mobility an advantage?
Environmental manipulation	Is environmental manipulation an advantage?
Sensing	Can the robot use sensors the gain an advantage?
Connectivity to technology	Can the robot be connected to other technologies like humans can't?
short-term	long-term

ROBOT

