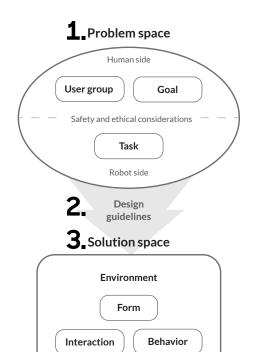
## Canvases for the Process of Designing Social Robots

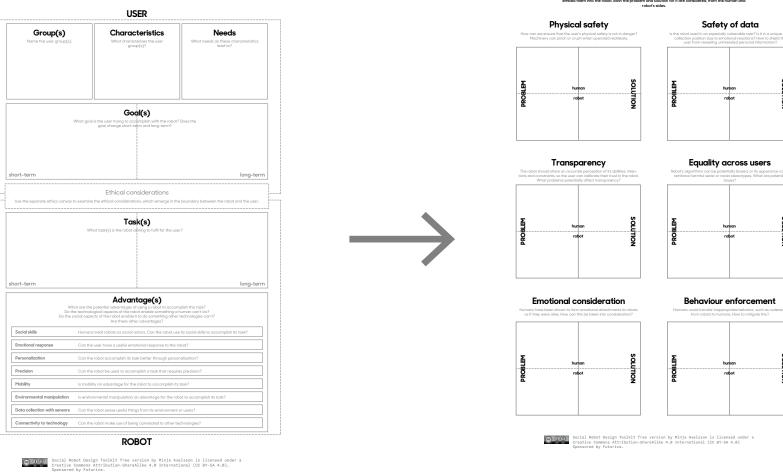


- **1.** Defining the problem
- 2. Creating guidelines
- **3.** Defining the solution
- 4. Iterate! After user and expert feedback, redefine your problem space, guidelines, and solution.

### 1. The Problem Space

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

#### PROBLEM SPACE OF DESIGNING A ROBOT What is the problem worth solving? Define it clearly through the user and the robot.



#### The Problem Canvas

Define who you are building for and why. What are the advantages? Always use this canvas first.

#### The Ethics Canvas

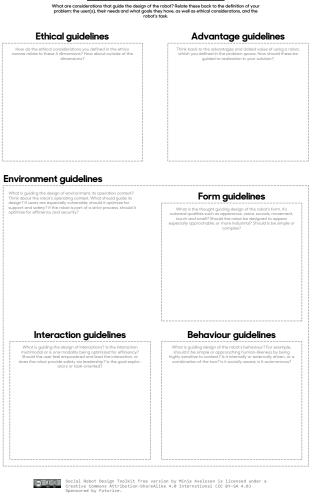
How are ethics considered already in the definition of the problem? Use these six ethical considerations.

ETHICAL CONSIDERATIONS OF THE ROBOT

#### 2. Guidelines

Create guidelines for your future robot. How will your problem be answered by the design?

#### ROBOT DESIGN GUIDELINES What are considerations that guide the design of the nobot? Relate these book to the definition of problem the user(a) their needs and what goods they have as well as a leithort considerations and

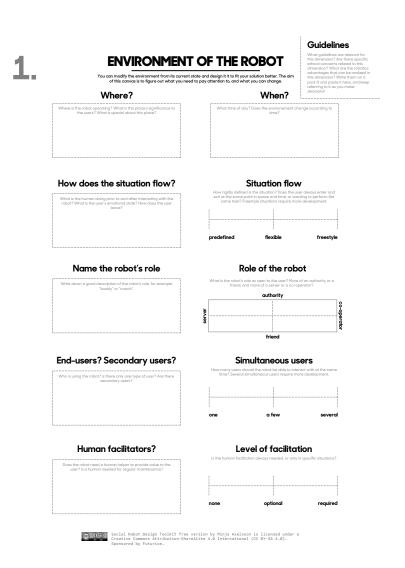


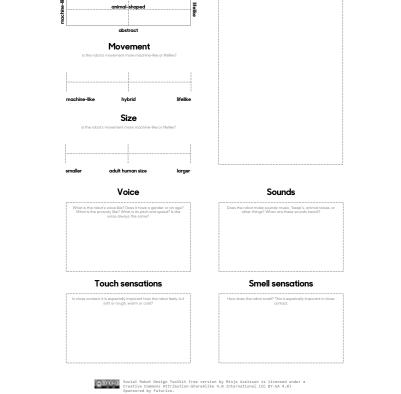
#### The Guidelines Canvas

How will the definition of your problem and the ethics be visible in the final design? Make guidelines for different dimensions of the robot.

#### 3. The Solution Space

It's time to start designing your robot! The solution is visible in four dimensions: environment, form, interaction, and behaviour.





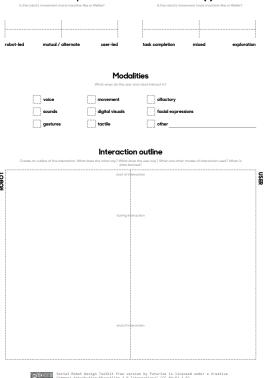
#### The Form Canvas

What are the robot's outwardly perceptible qualities?

# INTERACTION WITH THE ROBOT What characterizes the interaction with the robot? Leadership Goal(s)

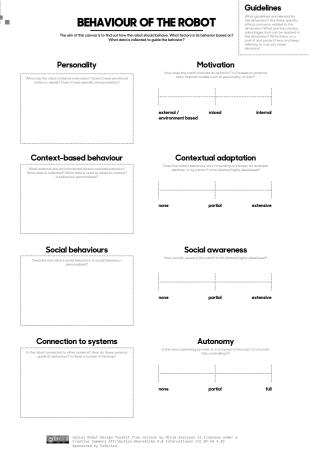
**The Environment Canvas** 

What is the context of the robot's opera-



The Interaction Canvas

How does the robot interact with users?



#### The Behaviour Canvas

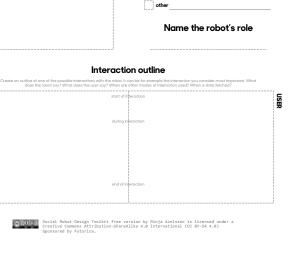
What drives the robot's behaviour?



Context-based behaviour

# Test your prototype, ask for expert and user feedback, and iterate.

4. Iterate



#### The MVP Canvas

If you want to prototype rapidly, the "minimum viable product" canvas can act as a replacement for the four dimensions.

#### TI 14/15 0