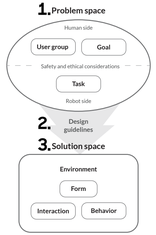
Canvases for the Process of Designing Social Robots



1. Defining the problem

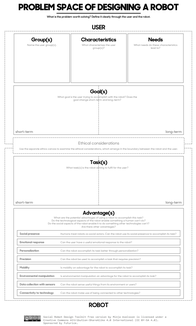
2. Creating guidelines

3. Defining the solution

4. Iterate! After user and expert feedback, redefine your problem space, guidelines, and solution.

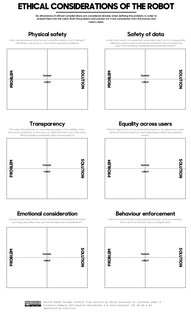
1. The Problem Space

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



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.

2. Guidelines

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

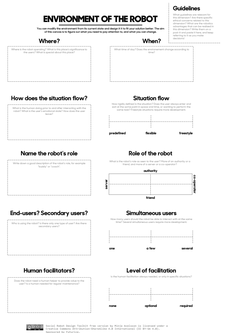
The Guidelines Canvas

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.

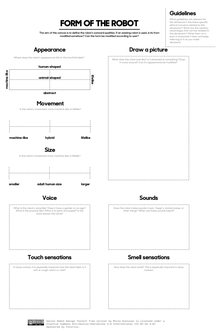
1.



The Environment Canvas

What is the context of the robot's operation?

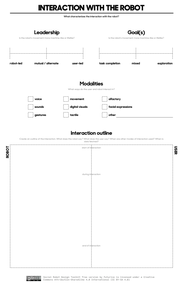
2.



The Form Canvas

What are the robot's outwardly perceptible qualities?

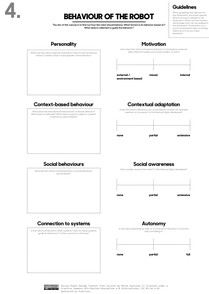
3.



The Interaction Canvas

How does the robot interact with users?

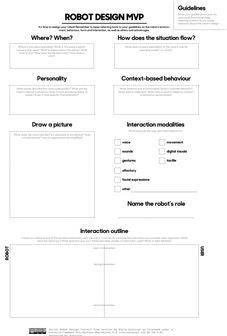
4.



The Behaviour Canvas

What drives the robot's behaviour?

OR



The MVP Canvas

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

4. Iterate

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