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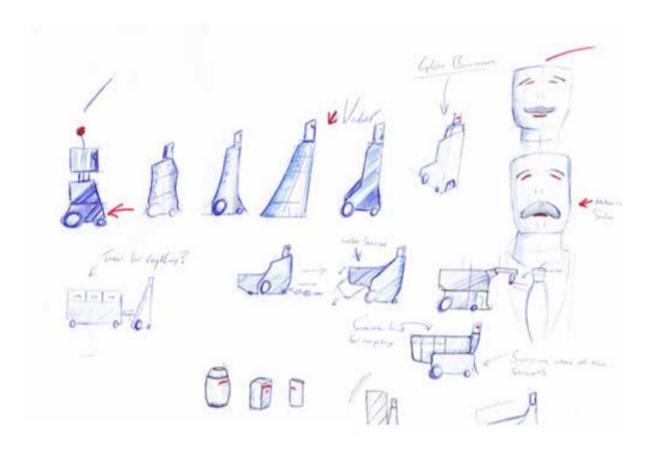
# 1. Background

The original design is made by students of Industrial Product Design. One of the first things they produced was a morphological chart. The chart is made to create an overview of all options and functions of the robot.

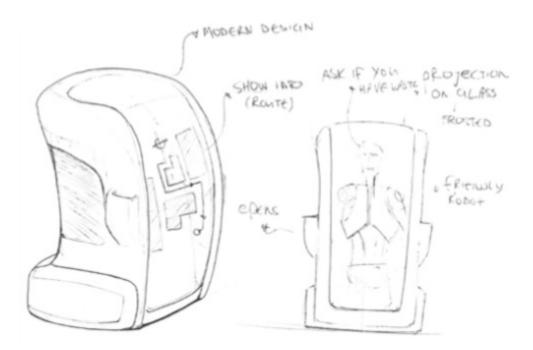
# Morphological chart

Detect Human	Conera	<b>8</b>	<b>Q</b> 1 ∧cp	Dane	Tauch screen
Interaction with Human	<b>Q</b> Aco	Face	Sound	Screen	Gastures
Detect waste	Carea	<b>8</b>	<b>€</b> H•	Drane	Color
Pick up small waste	<b>3</b>	<b>O</b>	Mechanical	50000	.) Broom
Pick up big waste	Closm	Mechanical	Picca.		Shi in
Waste dispasal	Recycling	Bun	Disposol Ront	By Human	C) Reus t
Charge battery	Station	Moving charger	Wind energy	Solar énergy	F41 Oy Hurson
Move around	Wat and	*	₩ ₩ Tirecad	<b>(7)</b>	And Andrew
Protect against damage	Alcrin	Coneo	Snote	Aggressive	ST Police

With the morphological chart in mind they started brainstorming and made sketches from the ideas they had.



One of the early designs is the one below. In this design a large tv screen is already installed. The idea of a butler like robot came to mind. Willy has to be polite, informative and have a strong character.



Because of the complexity the idea above was not realistic to make as a prototyping project. This is one of the reasons why they made a less complex version which certainly is realistic to make.

