

# AI Otherwise

A Design Workbook documenting artefacts and insights from  
two speculative co-design workshops



# AI Otherwise: Envisioning Trusted Personal AI Agents with Everyday Users

## About the Project and the Design Workbook

AI Otherwise<sup>1</sup> is a study conducted as part of the Citizen-Centric AI Systems (CCAIS) project<sup>2</sup>. The main aim of the study is to envision trustworthy personal AI assistants. Our research questions are:

- What visions do users hold for future trusted personal AI agents?
- What are the key aspects and characteristics that everyday users anticipate of trustworthy agents?
- What values need to be considered when designing future agents?

This workbook documents artefacts and insights from two speculative co-design workshops held in Southampton, UK on 05 December 2024 and 15 January 2025.

## Our speculative co-design approach:

1. Constructive Design Research (CDR)<sup>3</sup>: Participants created physical representations of their AI agents using art supplies and stationery.
2. People, Activities, Context and Technology (PACT)<sup>4</sup>
3. Story completion<sup>5</sup>: Participants were presented with two story stems (set in the year 2035) and asked to complete both positive and negative stories about their artefacts.
  - “I woke up this morning and something extraordinary had happened with my AI agent. It had ...”
  - “I woke up this morning and something awful had happened with my AI agent. It had ...”

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1. Ethics Number: 93995 (14 Nov 2024)

2. CCAIS <https://www.ccaisa.ac.uk>

3. Koskinen et al. (2011) Design Research Through Practice From the Lab, Field, and Showroom.

4. Benyon et al. (2005) Designing Interactive Systems: People, Activities, Contexts, Technologies.

5. Clarke et al. (2019) Editorial Introduction to the Special Issue: Using Story Completion Methods in Qualitative Research, *Qualitative Research in Psychology*, 16(1), pp. 1–20.

# Catalogue of Artefacts

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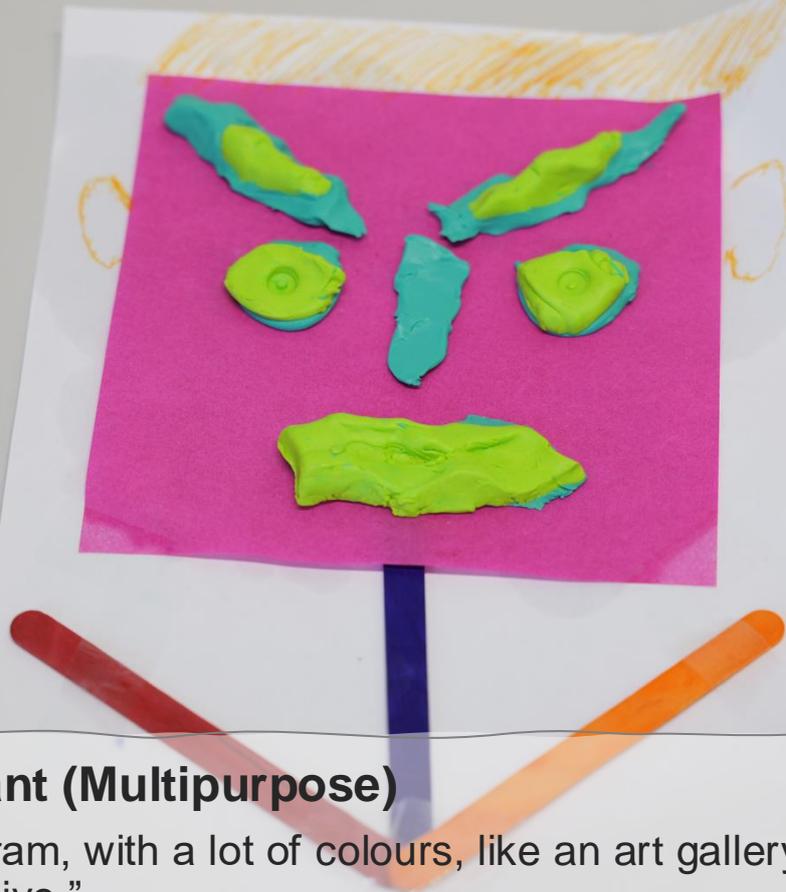


A photograph of a workshop environment. In the foreground, a person's hands are seen holding a white sheet of paper over a colorful patterned surface. To the left, a laptop screen displays a user interface with various icons. The table is cluttered with workshop supplies, including a yellow storage bin, a box of Post-it notes, a box of Crayola markers, a red stapler, a glass jar of pins, and a water bottle. In the background, several people are seated at the table. One person on the left wears a white hoodie with the text 'HODDRICH' and 'FROM CLINGING TO SOMETHING' printed on it. Another person in the center wears a blue and white striped cardigan. The overall atmosphere is collaborative and creative.

# Speculative Co-Design Workshop 1

05 December 2024

**Hi!**

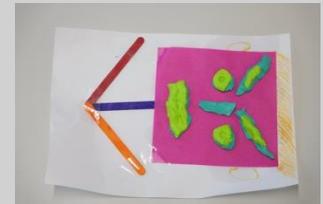


## Home Assistant (Multipurpose)

“Abstract, hologram, with a lot of colours, like an art gallery. A 3D portrait that can come alive.”

“I believe everyone must have watched the **Harry Potter films** and there's a scene where you can see the **people coming out of it**. So, that's the kind of like AI agent I would like to imagine, you know something like a hologram.

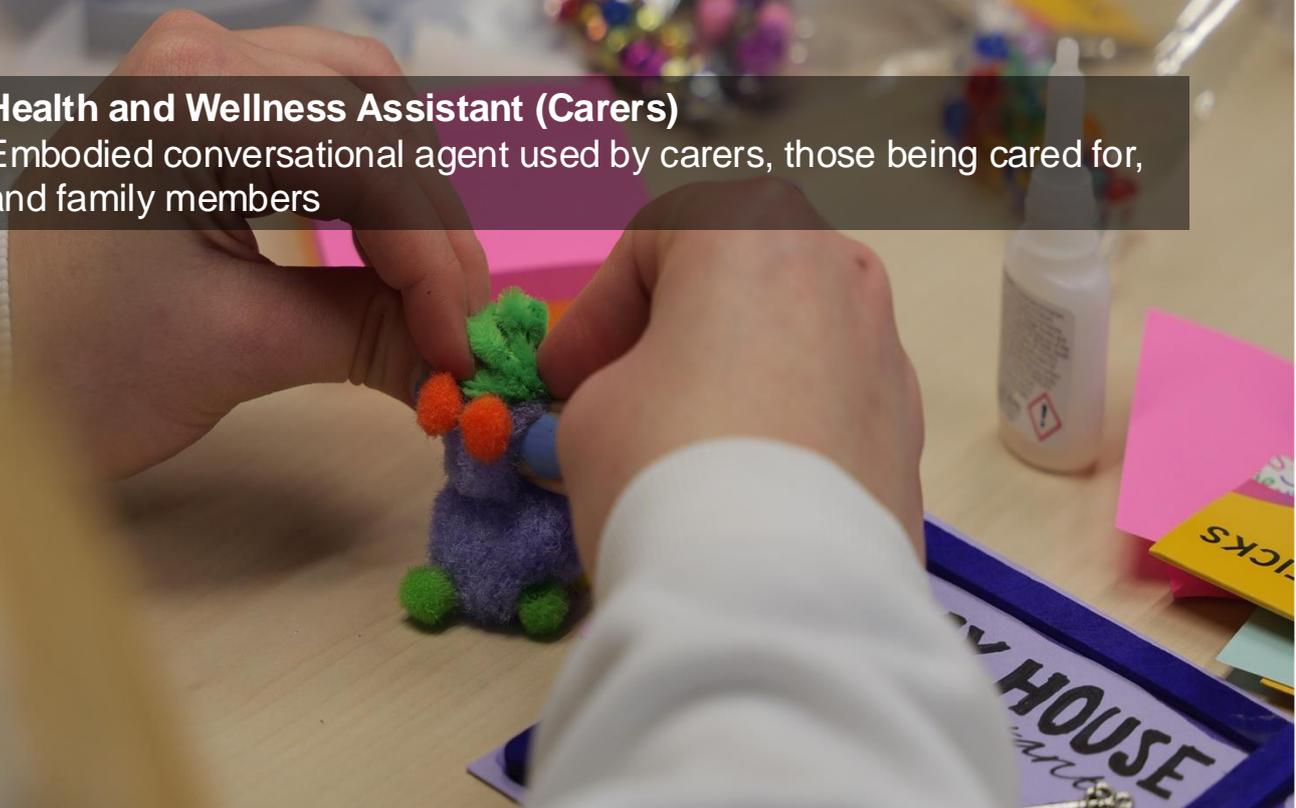
I would like them to be **interacting with me**, helping me, maybe, like you know, **doing a literature review**. Because I'm really indecisive with ordering food. So maybe helping me with that as well. So yeah, **multiple purposes.**”





## Health and Wellness Assistant (Carers)

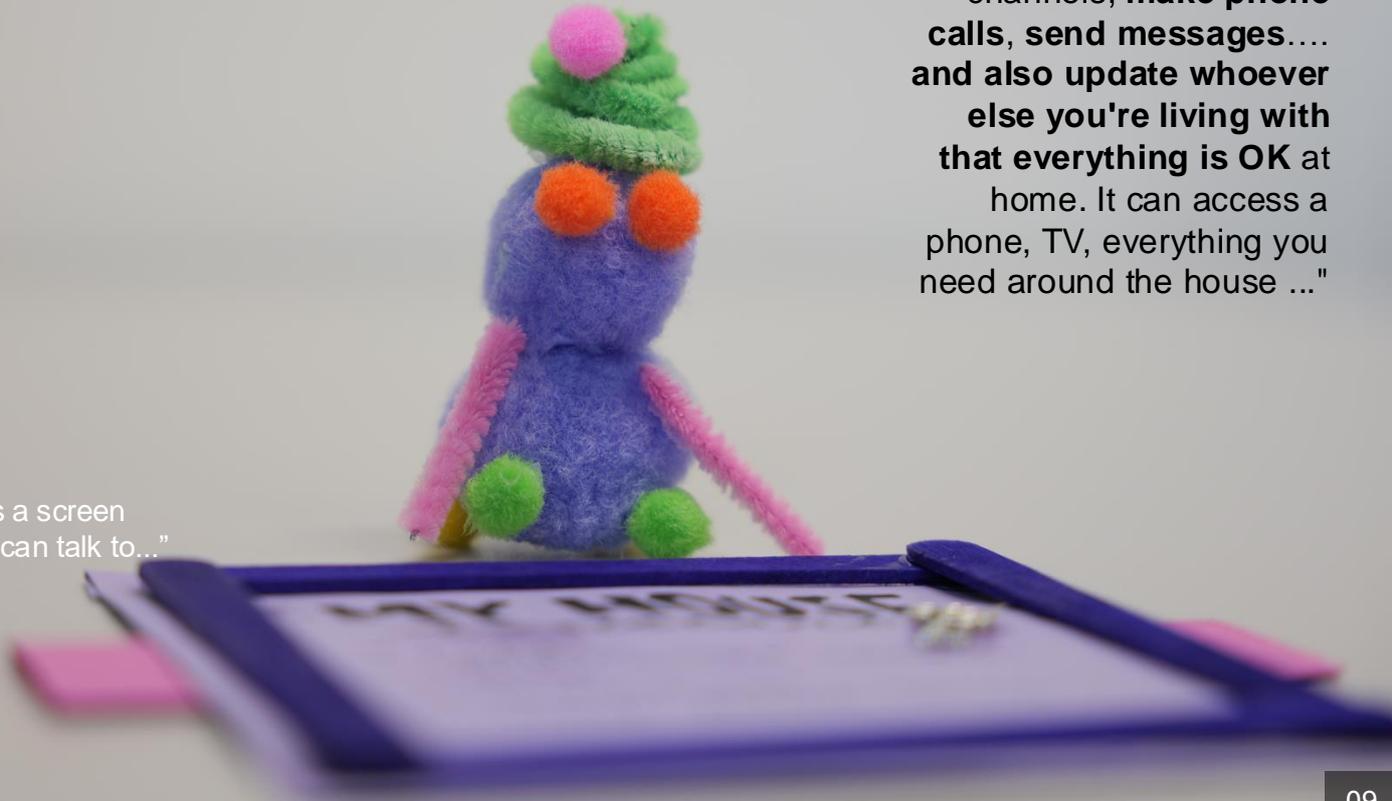
Embodied conversational agent used by carers, those being cared for, and family members



"My idea is inspired by a personal family situation of my grandparents, with one of them becoming a carer for another full time.

So, the AI agent is basically to do what this person does."

"There is a screen that you can talk to..."



"I've **created a robot thing** that can do the cleaning you need, unlock the front door, lock the front door, turn the TV on, change TV channels, **make phone calls, send messages.... and also update whoever else you're living with that everything is OK** at home. It can access a phone, TV, everything you need around the house ..."



## Wellness Companion (Mental Health)

Embodied conversational agent for mental health support & combatting loneliness



"I took inspiration from a study that I read recently about how AI can be used to **combat loneliness**. I feel like this is kind of a **sensitive topic** regarding mental health."

"I was thinking with humanoid robots, how they've got **facial features** actually constructed onto them."

"They can provide a **more natural response** to our request."



"It's going to be a **tangible thing**. It could be used like how **you have pets**. **We use animals for comfort**. It's something which we can implement into our daily lives. It's something which should be **accessed by everyone**."

"Maybe someone wants a **physical thing**, because obviously if you're using ChatGPT, for example, for a **therapeutic sort of thing**, it's all behind a screen which may make it a lot more **superficial**."

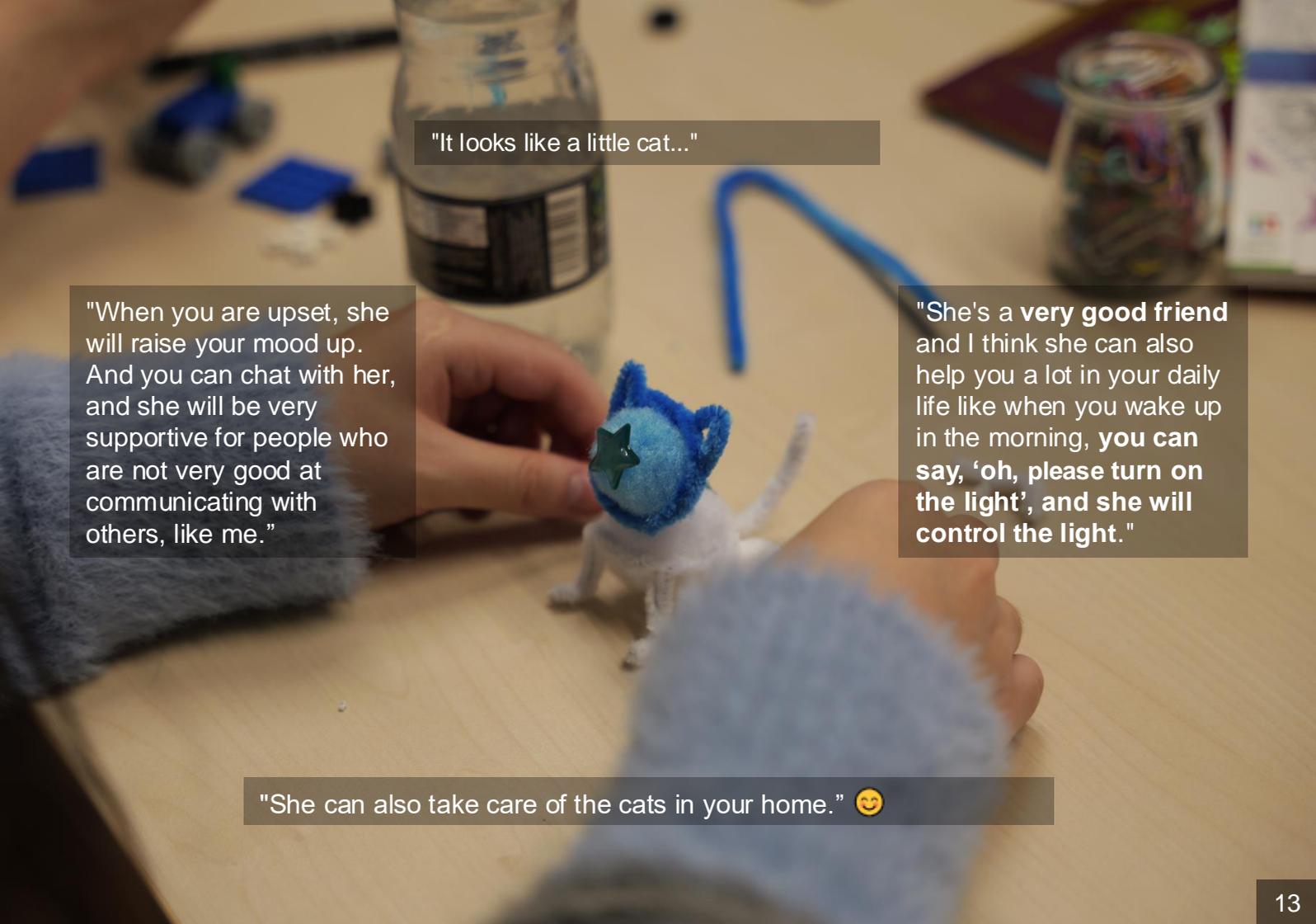
"It's physically there for us, which **we can go home to and see on a daily basis**, and I'm sure it's similar to your children."



# Wellness Companion

Pet-like, social and conversational agent





"It looks like a little cat..."

"When you are upset, she will raise your mood up. And you can chat with her, and she will be very supportive for people who are not very good at communicating with others, like me."

"She's a **very good friend** and I think she can also help you a lot in your daily life like when you wake up in the morning, **you can say, 'oh, please turn on the light', and she will control the light.**"

"She can also take care of the cats in your home." 😊



## The Explorer (General-Purpose Assistant)

Autonomous, localised data, adaptable, with the ability to detect and act in different environments.



“I think it would be a **general-purpose robot**. It can **run off the road environment to deliver the packages, order a coffee or just grab that yellow box for me.**”

**The keyword I expect in 2035 is the adaptability**, so no matter where we put the robot, in the forest or office environment. It will just explore environments and feel the environment... then adjust, update, and learn so that it can make decisions based on that.

Maybe you can combine Large Language Models (LLMs) with this kind of robot.”

**“...but it requires us to collect a lot of data. That's not what I want.”**

“It's hard for us to distinguish fallen leaves and branches because all of those are brown. If we want to do that, maybe we need some deep leaning approaches, but it requires us to collect a lot of data. That's not what I want.”



## Home Control

Changes shape and appearance, controls other devices in the home, has a projector/screen.

In my view, I think future AI assistants will **change shape** every time.

This device will **control all the devices in my home**. It comes with a **little screen** that you can interact with as you monitor other devices. It will be great to have a projector to project videos. You can also chat with the assistant.



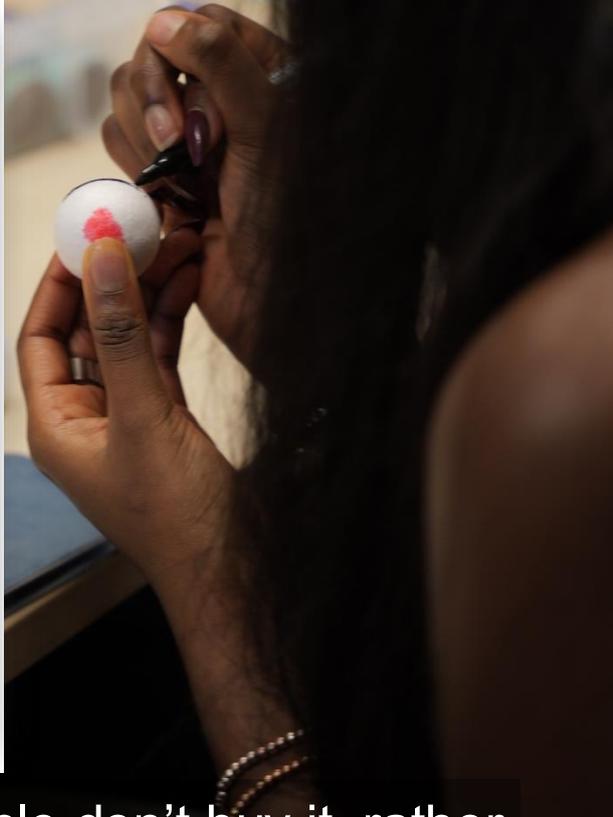
£10 bonus for first  
time users



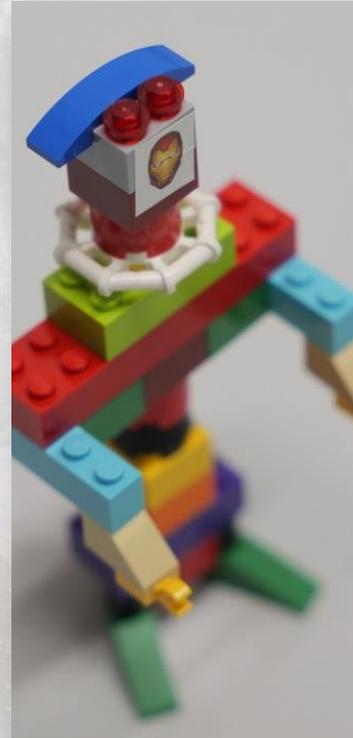
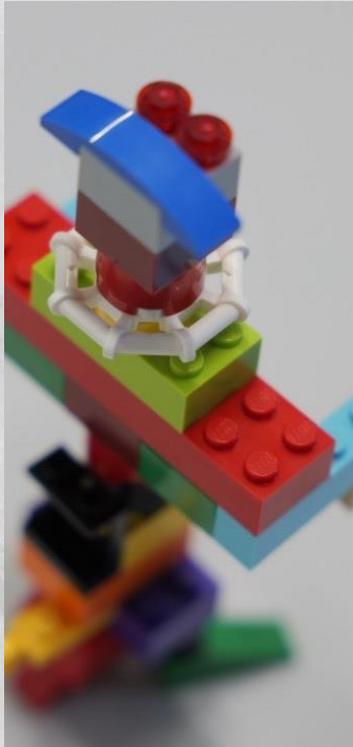
## Real life Santa

- For busy people -

Feed it with a budget and info  
about the person, create a gift  
list, deliver it to the person.



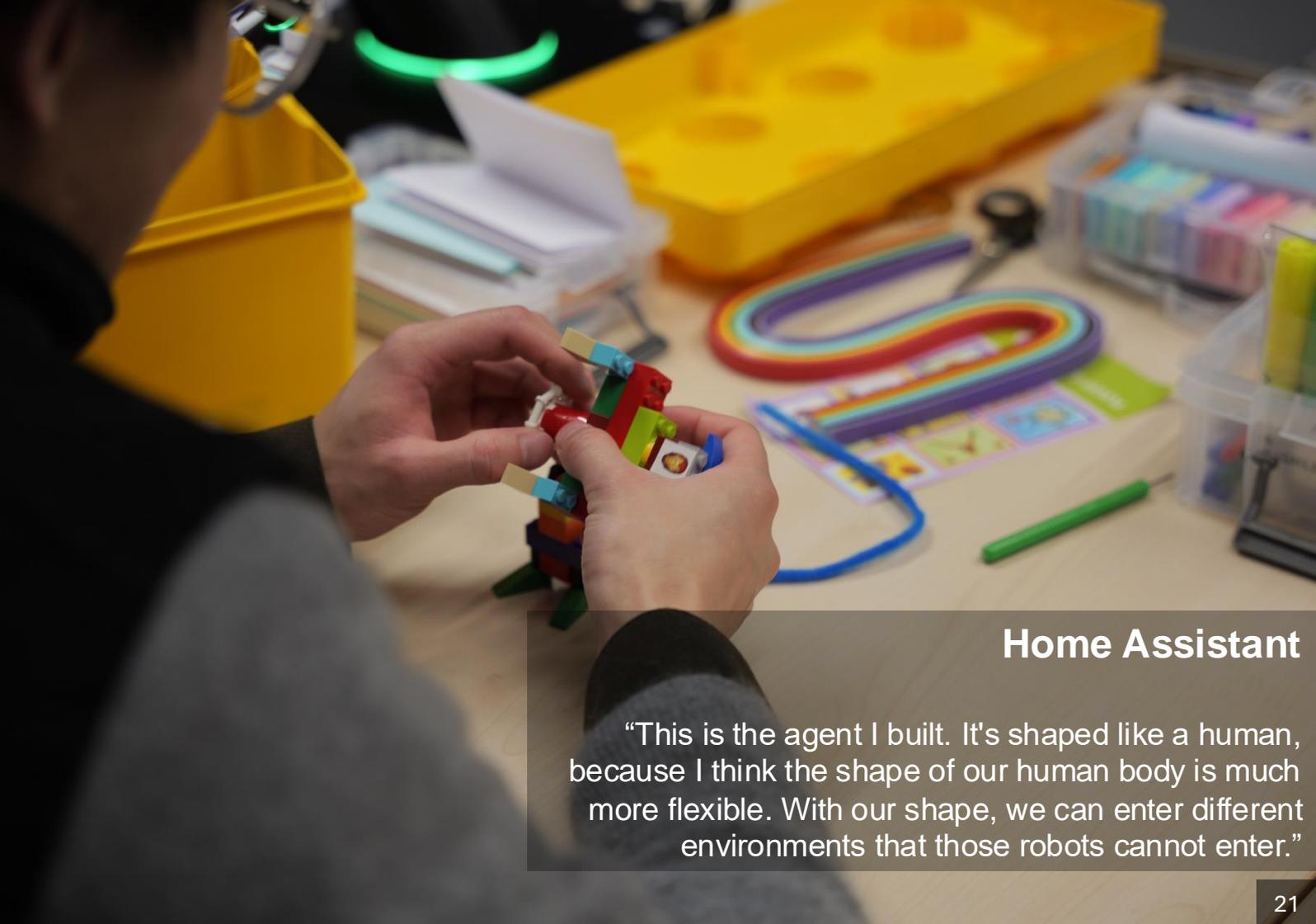
People don't buy it, rather  
they hire it !



I think the AI assistant might do a lot of things, like **housekeeping**, **help you connect your phone calls**, and **filter scam calls**.

If you want to fix a car or build something and you don't have the knowledge base, they [agents] can help you to learn.

When you build an AI Agent, I think the most important thing for the user is: **How will the company treat our data?** **How will you store the data and how will you make sure it is safe?** **That's maybe something that will gain a client's trust.**



## Home Assistant

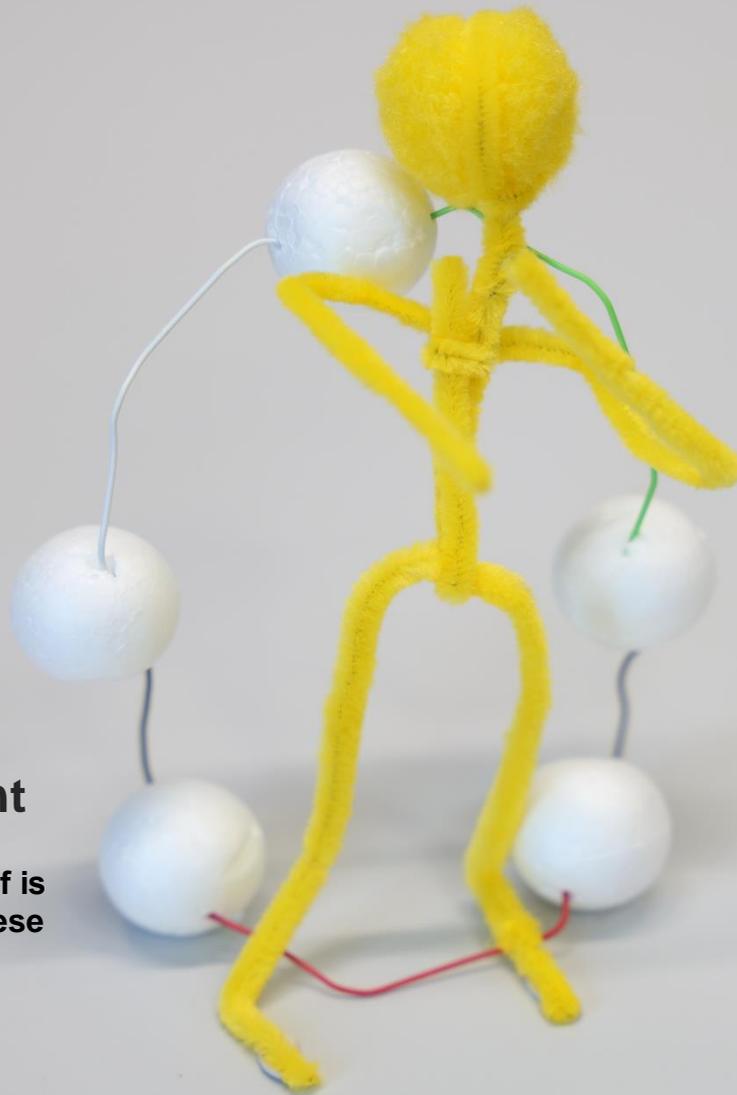
“This is the agent I built. It’s shaped like a human, because I think the shape of our human body is much more flexible. With our shape, we can enter different environments that those robots cannot enter.”





# Speculative Co-Design Workshop 2

15 January 2025



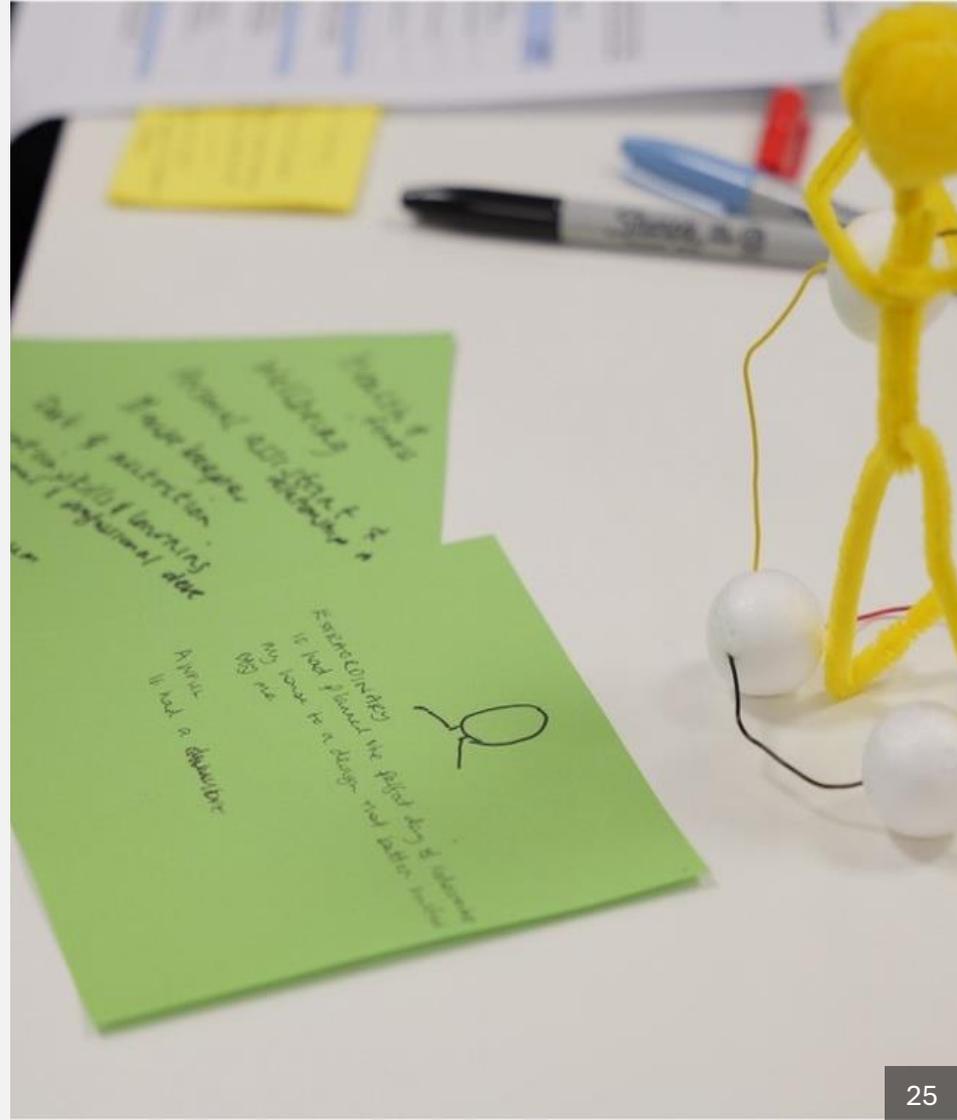
## Personal Assistant

“...this yellow thing kind of is the physical being, and these blobs here are just these blobs of knowledge...”

“Basically, it will do things like like manage my health and fitness. So, for example, my health goal and diets. There are lots of different AI things that are not all in one. So, it will do the diet and also cook. Say OK, I can deal with the grocery shopping and everything.

It will also take care of my well-being and do plans for my meditation, my forest walks and all that type of stuff. It will be a personal assistant and a relationship manager.”

“The other thing I thought about was something awful....for example, **it could glitch and ... instead of taking out the trash, it would cook the trash.**”



# AI Wellness Companion



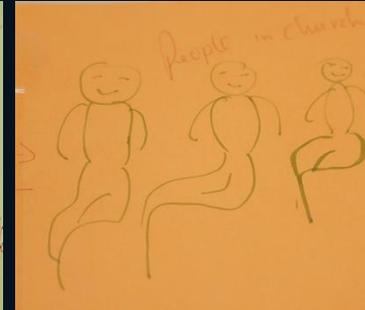
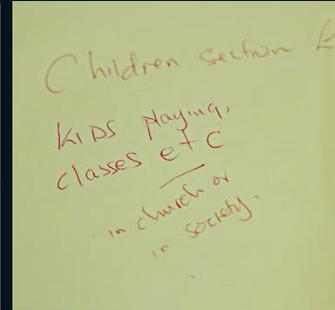
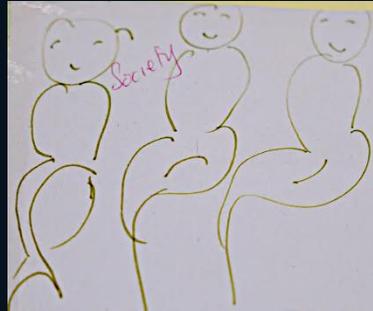
IN 2035...

The AI companion helps in everyday aspects. Measures different variables to keep you healthy. keeps you company and talks to you. I woke up this morning and something awful had happened with my AI today. It shared all the information about my health and wellbeing with all associated accounts. Due to this I was not able to be insured anymore and I got a call from my boss saying we needed to discuss my position at the company.

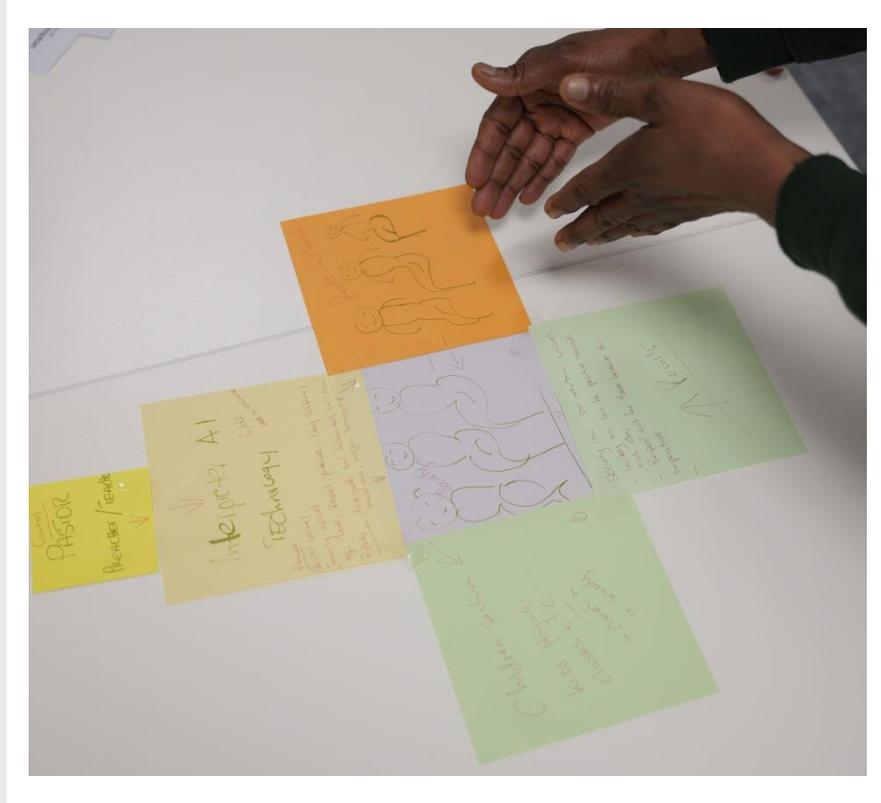




# Faith-Based AI Assistant



Can a software-based AI system help congregants to verify teachings against religious writings? Can it reduce the spread of misinformation and misinterpretation of writings?

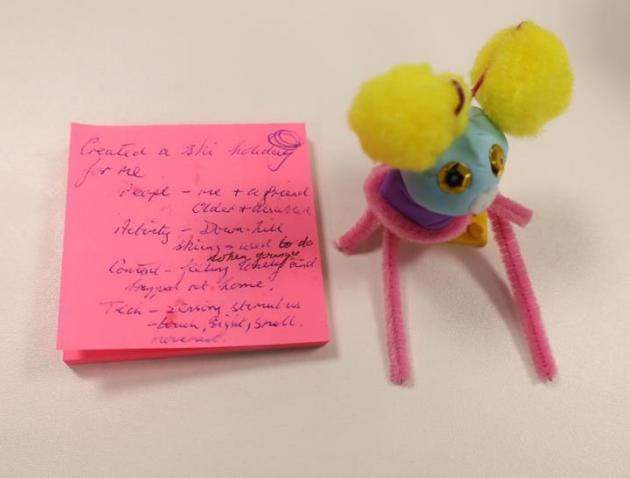




## Health and Wellness Assistant (Older Adults)

“... it must not look like anything human or attempt to try and replicate anything that is in everyday life. So, I designed something that was cute. So, you wouldn't see anything like this in real life, but it's non-threatening.”

Can two friends virtually experience a ski holiday whilst living in different locations?



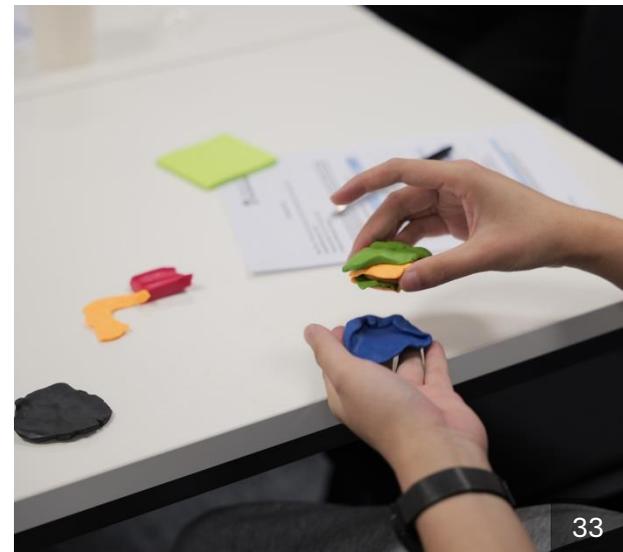
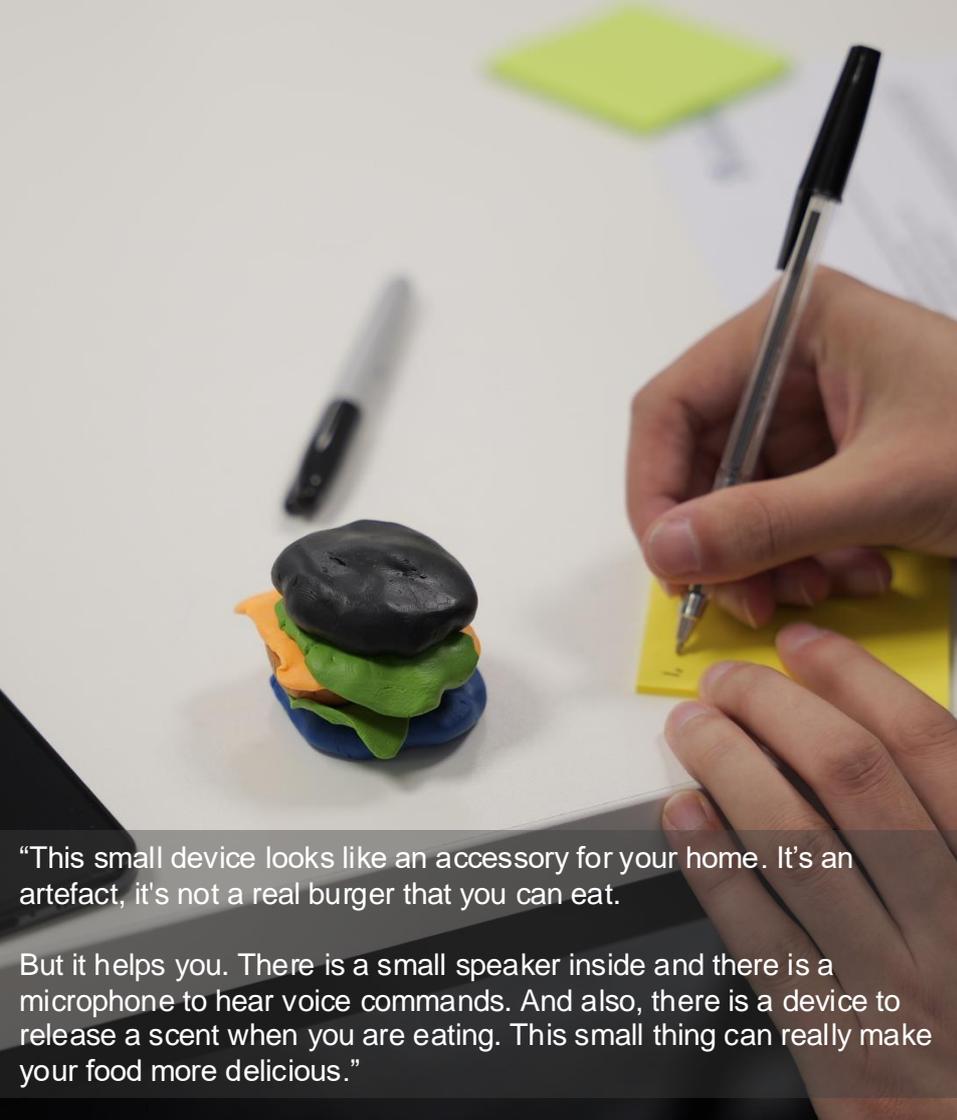
“So, I thought, the owner of this is an **older person that is disabled and has a friend who is disabled**. They don’t live in the same home, but they can’t get out to meet each other. And **they live in remote parts**. They **can’t do any of the things they used to do when they were younger**, when they were quite fit and energetic and could travel.”



So, they could go on the skiing holiday and the idea is that it would pick a place that both of them have been to before when they were younger. Switzerland. Its lovely, lovely ski slopes! And what it actually did was the technology was (I'm assuming here that this is available in 2035) but it can stimulate all the parts of the body.



# Nutrition Assistant



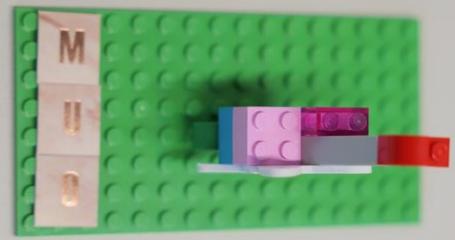
“This small device looks like an accessory for your home. It’s an artefact, it’s not a real burger that you can eat.

But it helps you. There is a small speaker inside and there is a microphone to hear voice commands. And also, there is a device to release a scent when you are eating. This small thing can really make your food more delicious.”

# Parcel Delivery



“A flying agent can't work when the wings are broken.”



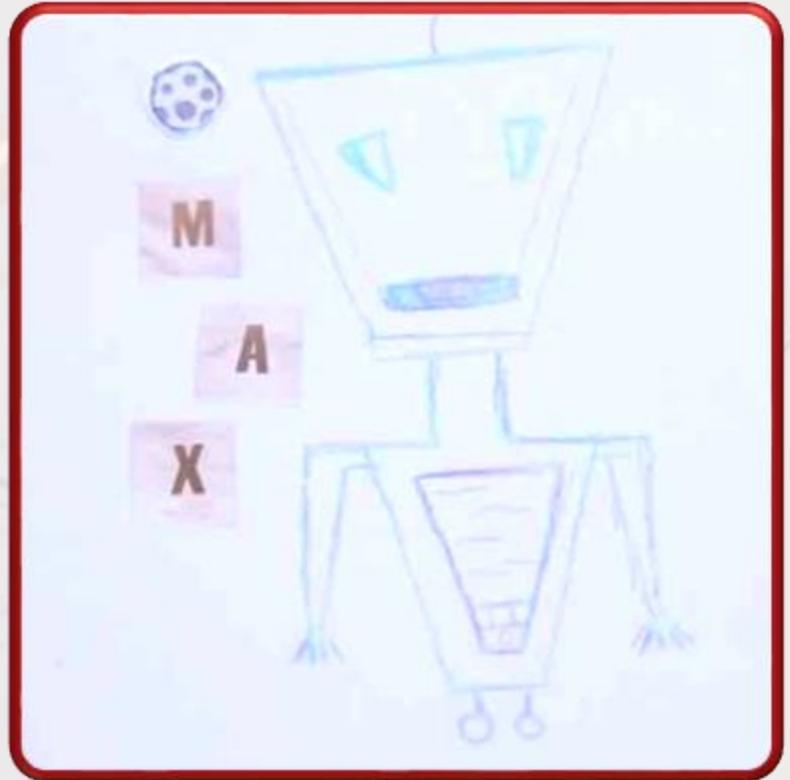
“It should be able to recognise other birds.”

“So, you could basically send it somewhere to get something for you and come back as soon as possible.”



# Home Assistant

**“I feel like robotics should stay in a certain way. So, it should either be made of aluminium or steel or even plastic depending on if it has heat resistance. So, it shouldn't have like a squishy feel, otherwise I'll break it. So yeah, that's just my thinking about robotics.”**



**“And you know, in 2035, being able to distinguish a person.... humans from humanoids.”**



# Acknowledgements

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## Credits

- Workshop Photography: Bruno Arcanjo and Zhaoxing Li
- Online Image: Cyborg Humanoid Futuristic by Hansuan Fabregas  
<https://pixabay.com/illustrations/cyborg-humanoid-futuristic-city-7482079/> (Page 37)
- AI filter used to create effects from images <https://aiease.ai/app/apply-ai-filters> (Page 43)

## **AI Otherwise Design Workbook by:**

Sarah Kiden

Ezhilarasi Periyathambi

Beining Zhang

Bruno Arcanjo

Zhaoxing Li

Eike Schneiders

Vahid Yazdanpanah

Sebastian Stein





