GRÜT
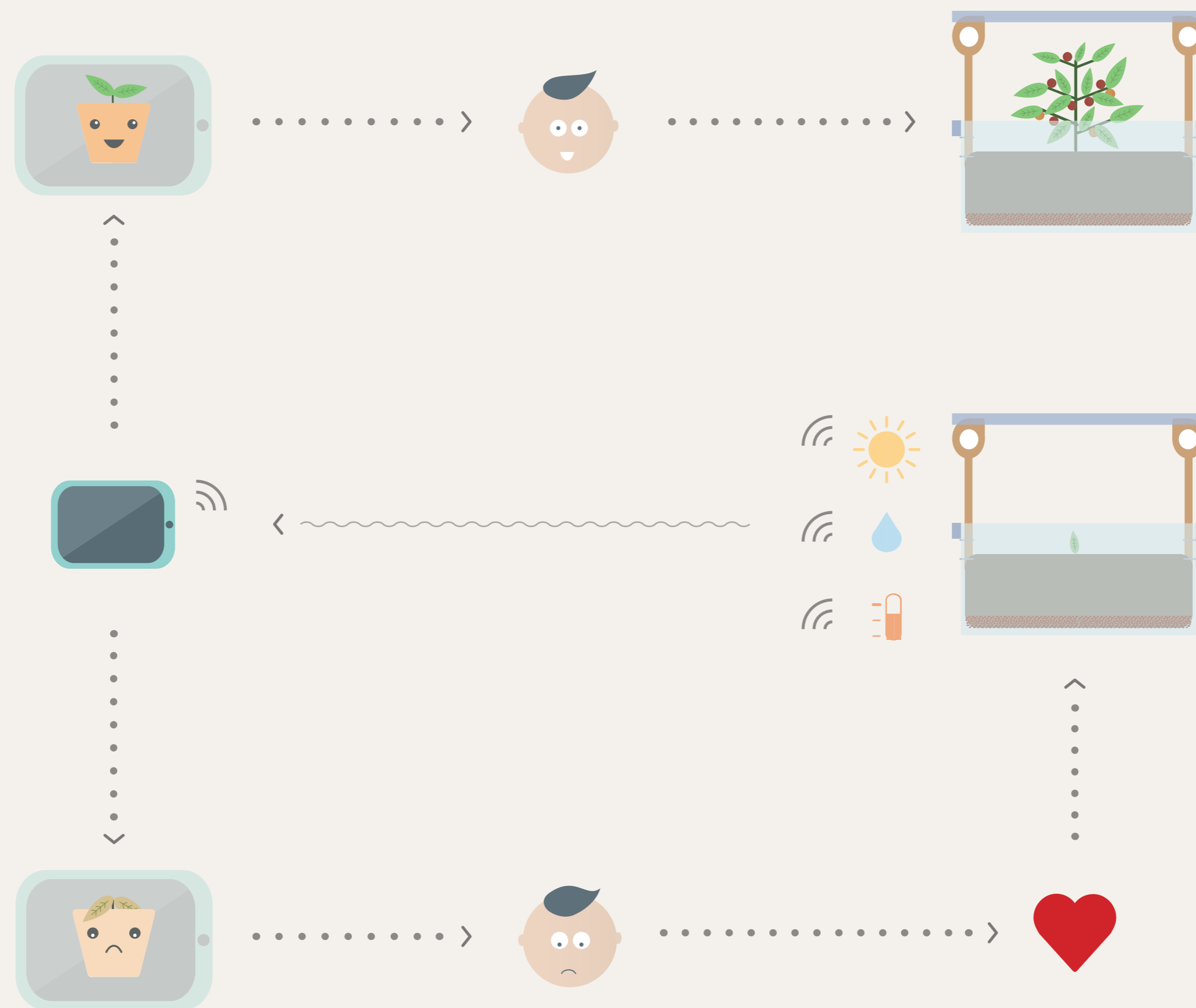
An interactive gardening kit for kids

A solution for food waste

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Research Question

How can a digital application, connected to sensors change consumer attitude towards food waste?

Keywords

food waste, food cycle, sensors, data transparency, awareness, urban farming, gardening, diy

INTERACTION FLOW

ABSTRACT

In this poster we propose the concept Grut, a sensor kit connected to a digital application that helps children grow their own plants.

By making it easier for children to grow their own plants we hope that more children in the city will come in contact with homegrown food and as adults, make more conscious choices regarding their food consumption and in turn reduce food waste.

The sensors are attached to the soil near the plant and send data to a database. The app determines the condition of the plant based on the data that the sensors gather. Depending on the condition of the plant, the app will give the child advice on how to best take care of his plant.

CONTEXT

In Holland, 31% of edible food is wasted (Circle Economy, 2014) by the consumer attitude (FoodDrinkEurope, 2014).

To put this into perspective, in 2013, the Dutch consumer has wasted a total of approximately 2.5 billion euros (Rijksoverheid).
The resources that have been put into growing the food are also wasted, which in turn has an impact on the environment. (Circle Economy, 2014)

Research has shown that by attending school gardens, children gain more respect, knowledge and appreciation for nature and food (Passy, Morris, Reid).

CONCLUSION

As a solution to this social issue we propose Grut, which makes it easier for children to grow their own plants. Based on our research we have concluded that children who are more active in gardening, grow up with a better sense of responsibility towards the enivornment.

The solution consits of a sensor kit, a box (optional) and an app.
The sensors measure the condition of the plant (water, light & temperature) and send this data to the app.
The app then evaluates the data and gives the child feedback and advice how to properly take care of his plant.

FUTURE ITERATIONS

Currently we have a basic prototype of the application. In the future we want to work further on the topics listed below

• Making the website responsive

• Acquire a database with the conditions for each plant

• Flesh out the checklists and advices

• Experience a full cycle of the plant with the application to iron out bugs

• Develop the personality of the avatar

• Explore the possibilities to involve food waste more

References

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