

Prototyping the conversational experience

Design the user experience for conversational interfaces

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Questions

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#K100

Steffen Blümm



Technical Lead iOS / CUI

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CUI Team

- Team @ adorsys

Julian Wölk, Martin Bauer, Isabella Thürauf, Mona Kögel

- Project-Team @ Furtwangen University, Digital Media Faculty,

Germany

Sarah Siebold, Kathrin Altherr, Melinda Braun, Oliver Schwamb,

Daniel Birkicht, Jannik Culig

Prof. Patricia Stolz



**Frankfurt,
Germany**

since 2017



**Nuremberg,
Germany**

since 2006

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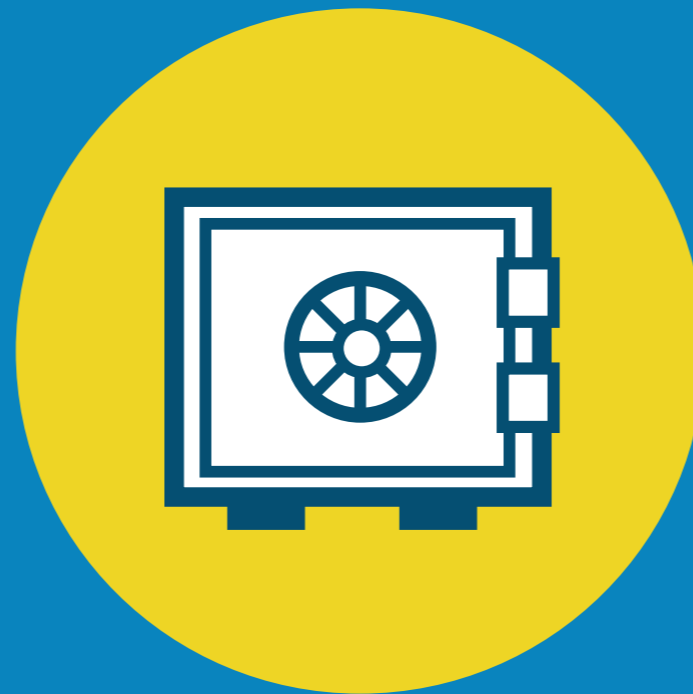
Our business



Agencies



Health



Finance



Industry

Why Conversational Interfaces?

Motivation

Fill in the data

Recipient

Please fill in the recipient

Amount

Usage

Repeat

Fill in the data

Recipient

Amount

Usage

Repeat

Fill in the data

Recipient

Amount

Usage

Repeat

Please fill in the recipient!

OK

Motivation

- A short time saving can go a long way
- Take the people from where they are and assist them
- Allow to collect information without having to leave the context

Approach

- What are the beneficial use cases?
- Strictly conversational
 - No *hipster wrapper* around a CLI
- Multi-modal
- Do not kill it by bad UX engineering

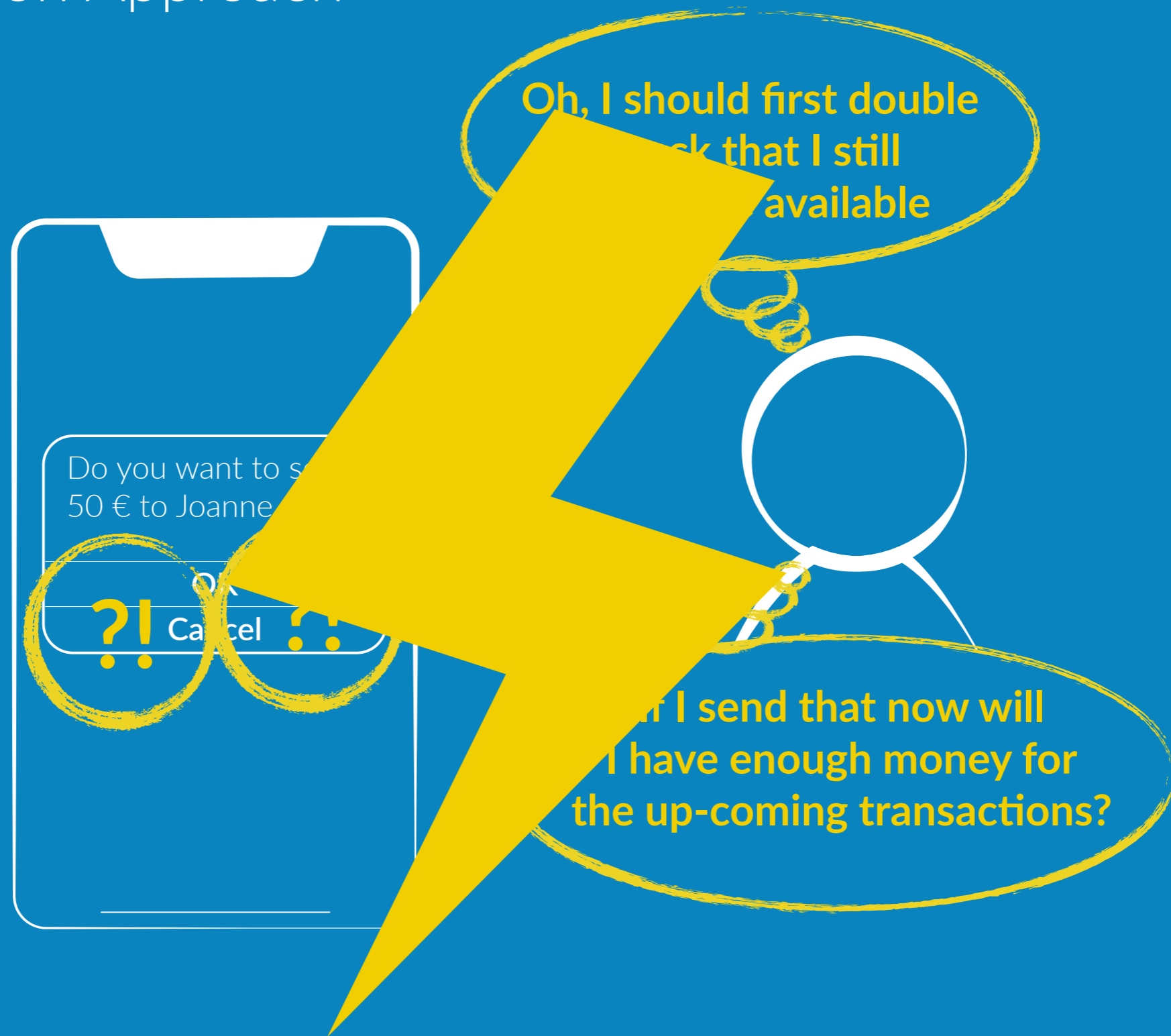
GUI vs CUI?

GUI – a dialogue with the user!

GUI Interaction Approach

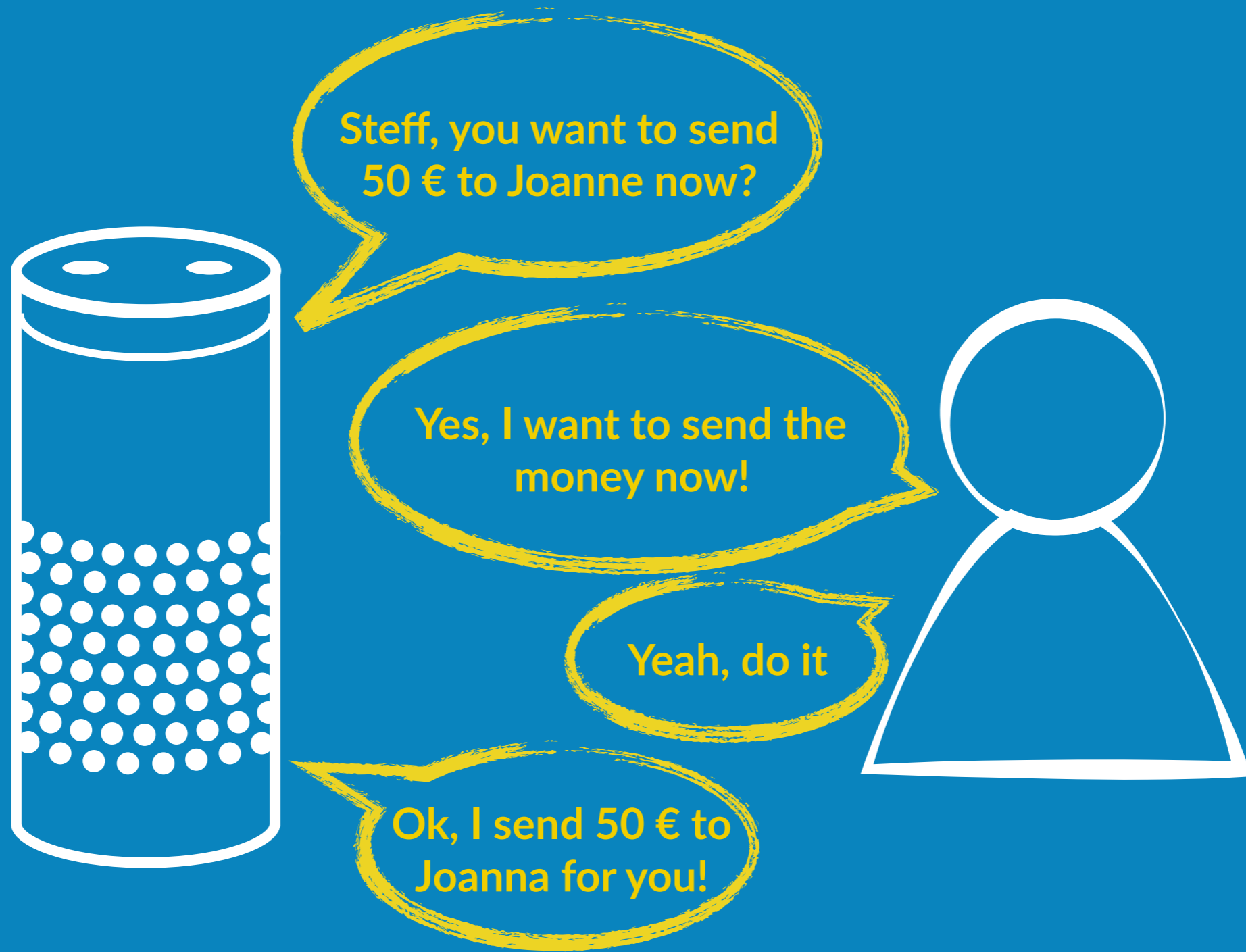


GUI Interaction Approach



How to design the conversational user experience?

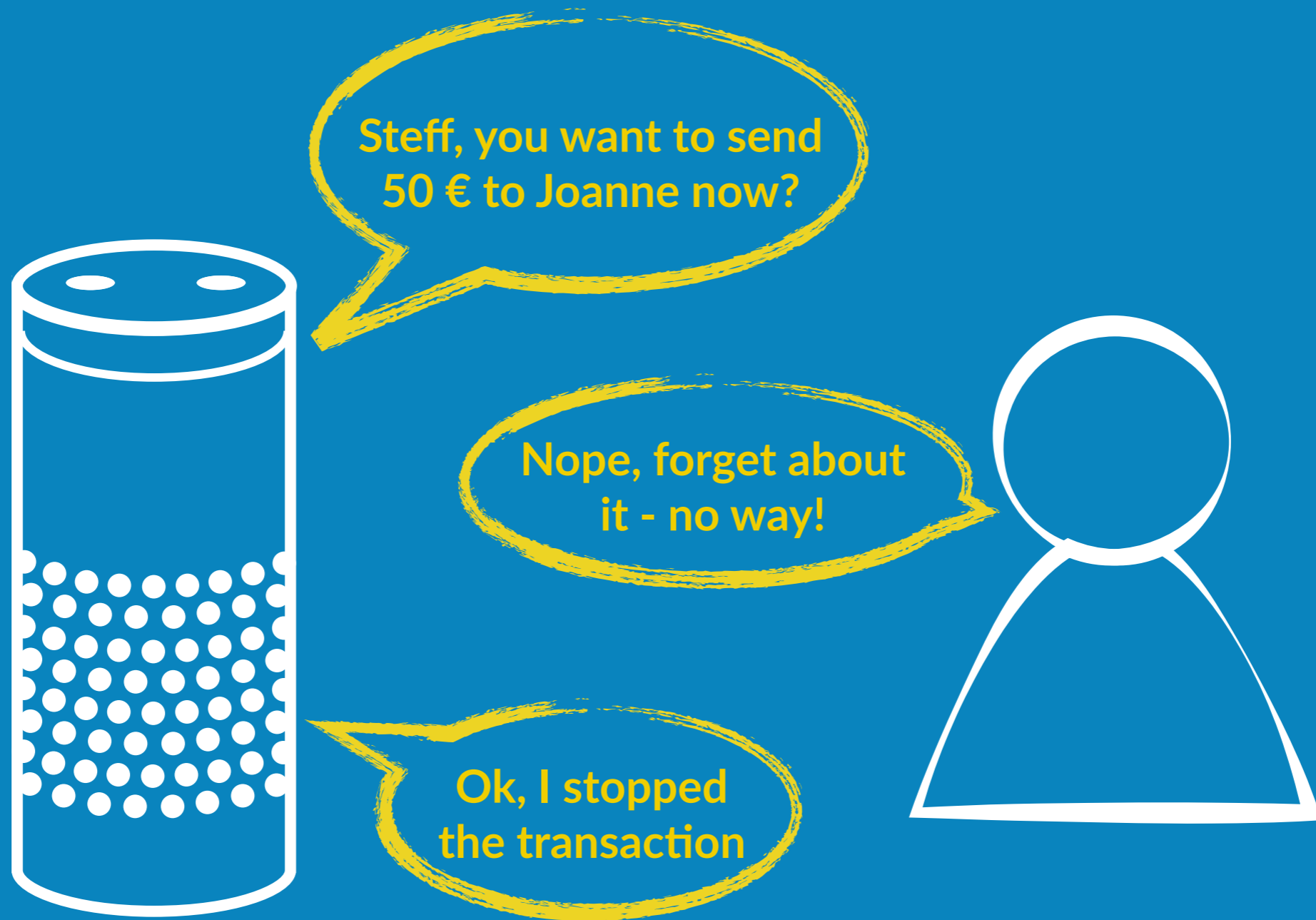
CUI Interaction Approach



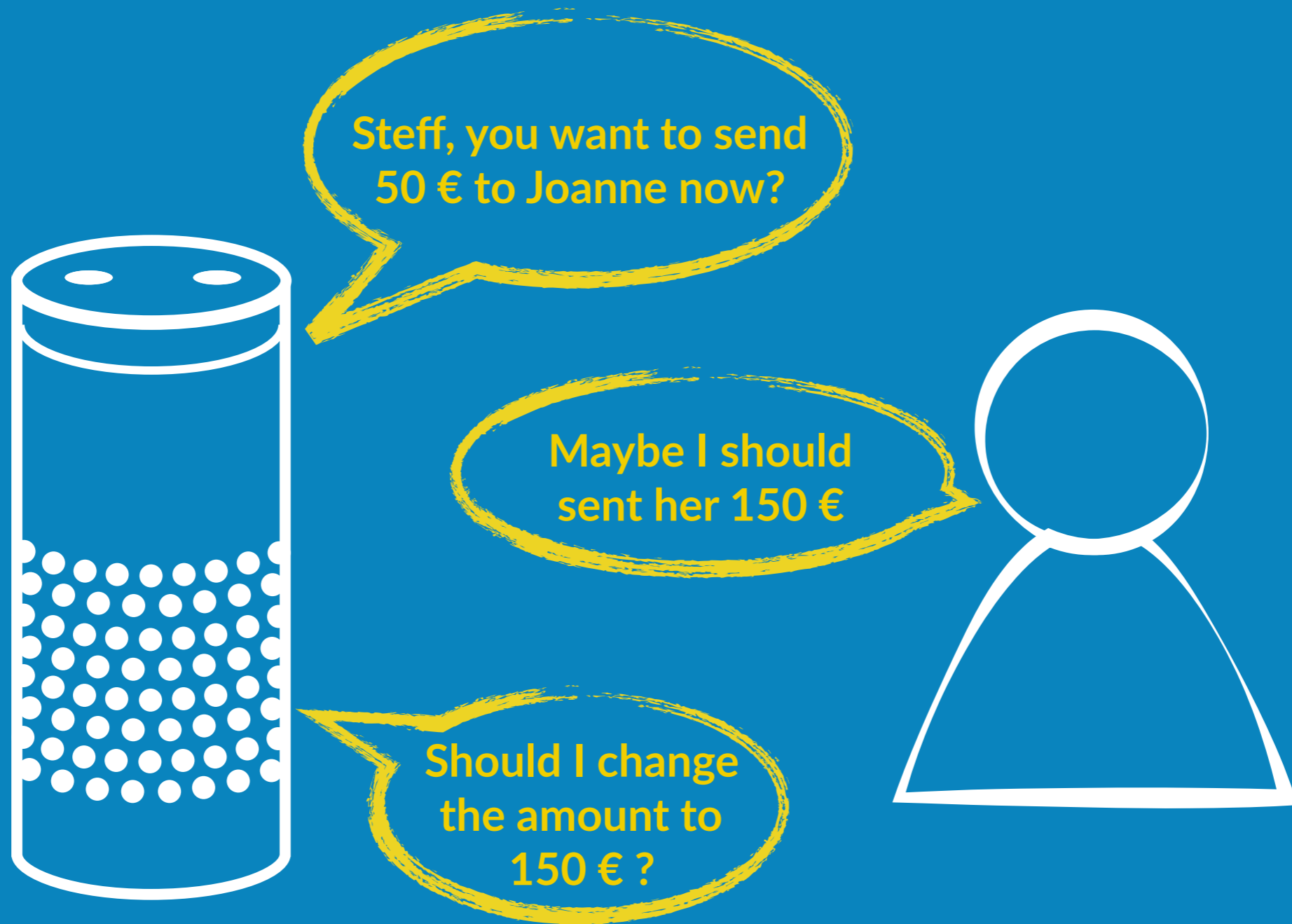
CUI Interaction Approach



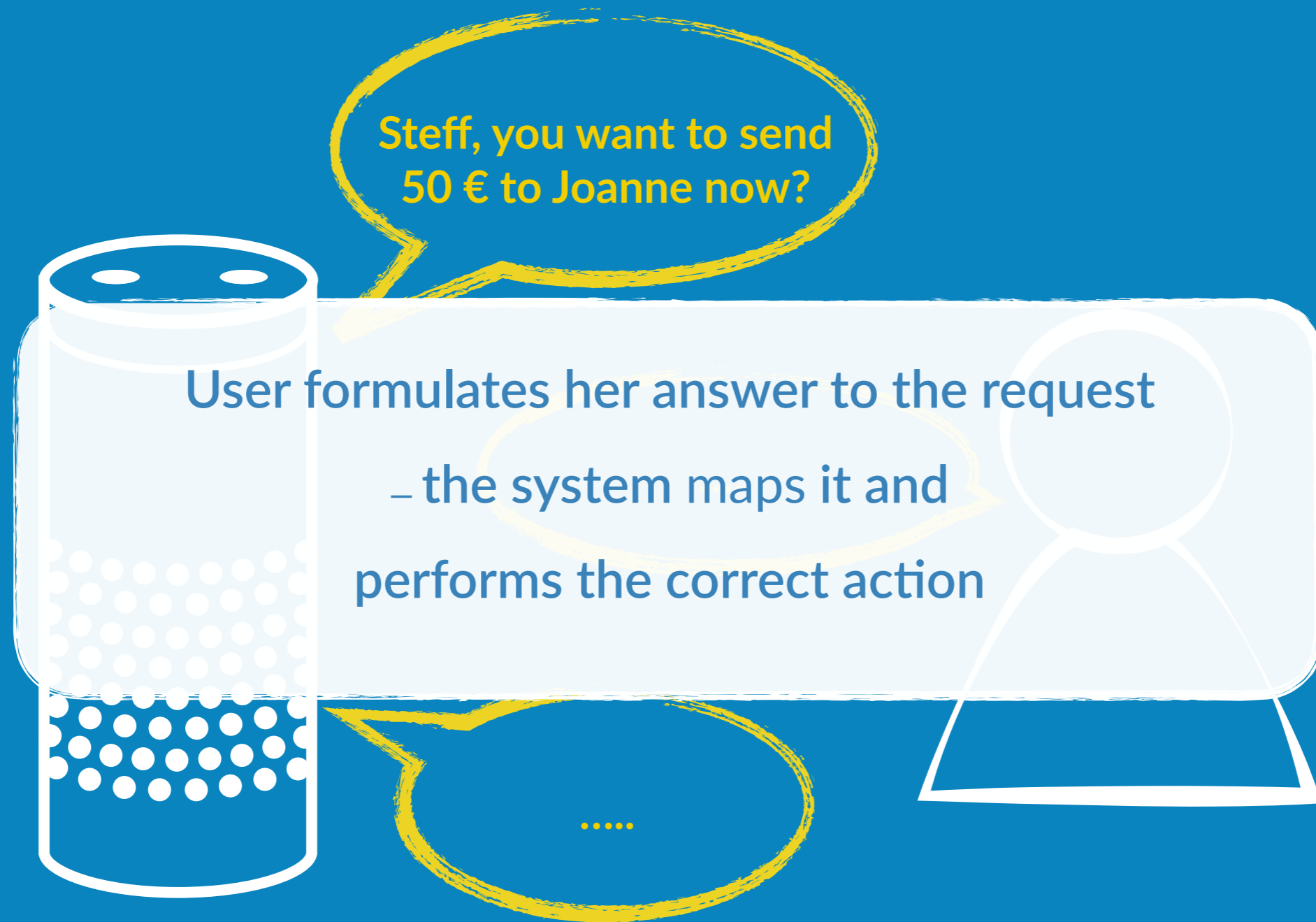
CUI Interaction Approach



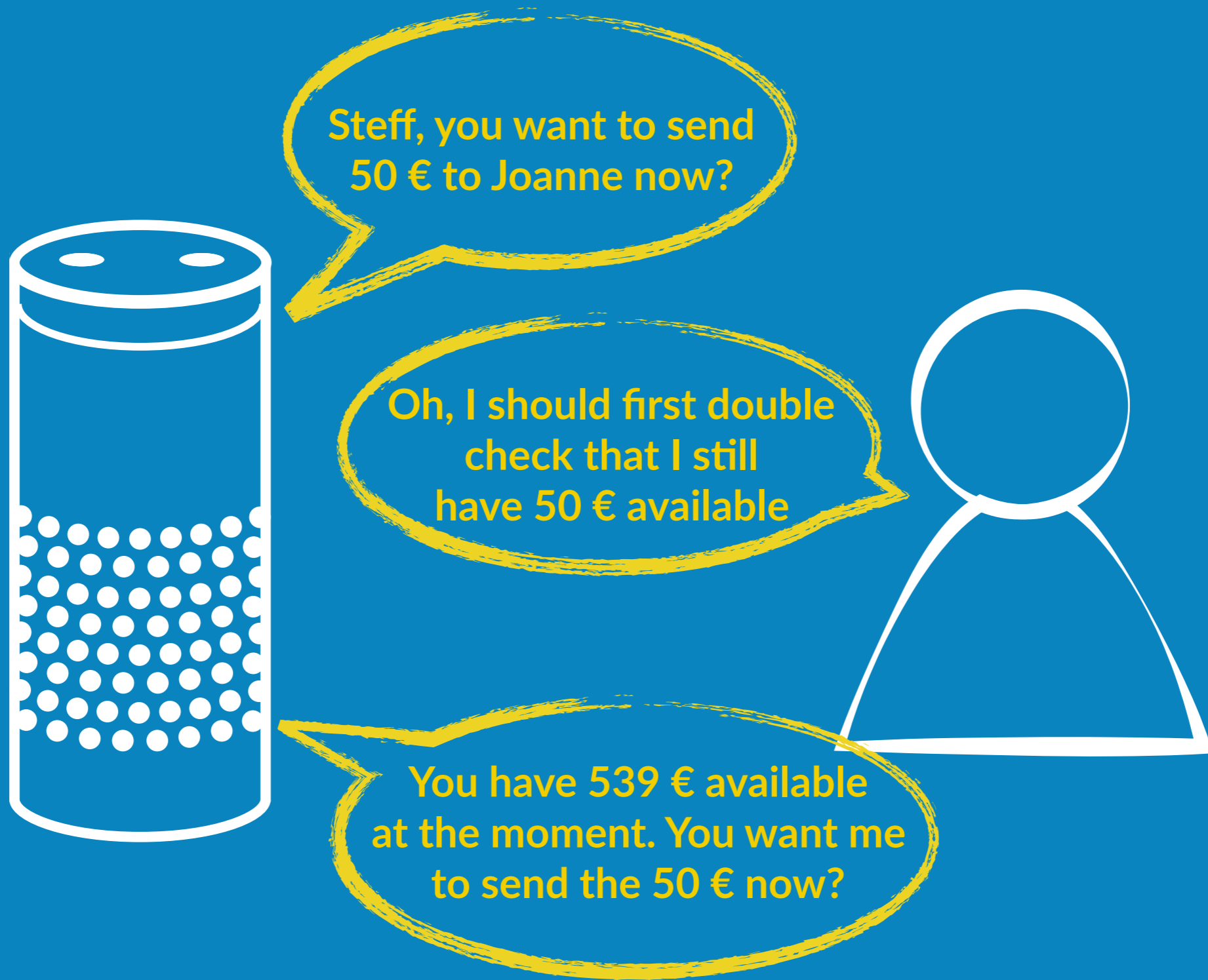
CUI Interaction Approach



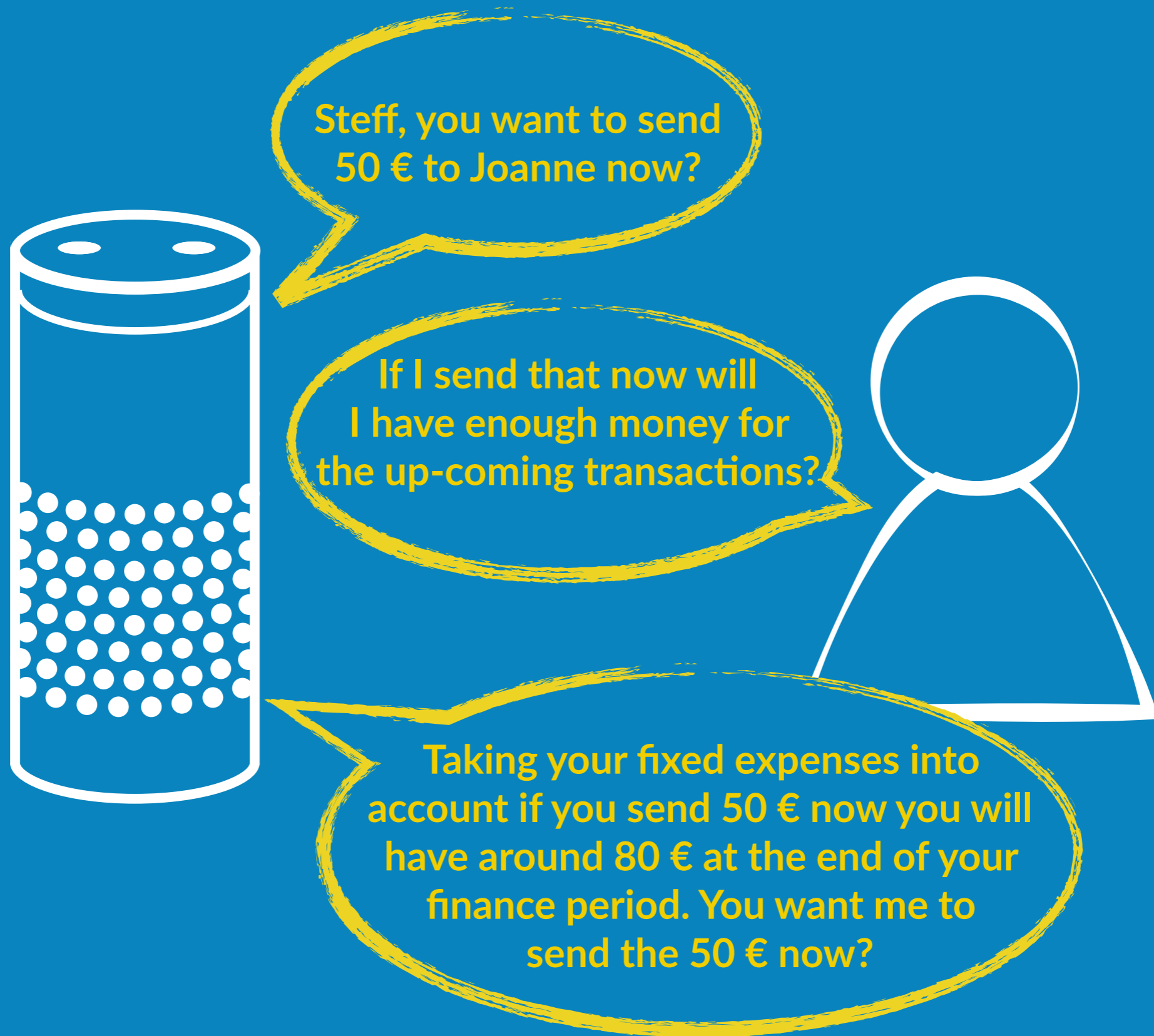
CUI Interaction Approach



CUI Interaction Approach



CUI Interaction Approach



Design Principles

- Forward navigation
- Less friction
 - Richer, multifold context
 - Less cognitive load
- Multi-modal interaction
- Design the personality

Know your user!

Know her mental model!

Prototype the Conversational Interface

Why prototype?

Why prototype?



Why prototype?

Please send 50€ to Joanna.

I want to sent Joanna 50 €.

Sent 50 € to Joanna

Send Joanna some money.
*How much you want to
send to Joanna?*

50€.

Why prototype?

- How people formulate something depends
 - On their character
 - On their mood
 - On the situation
 - On the context

Prototype the Conversational Interface

When to test?

When to test?

- After you did your User Requirement Engineering

e.g.



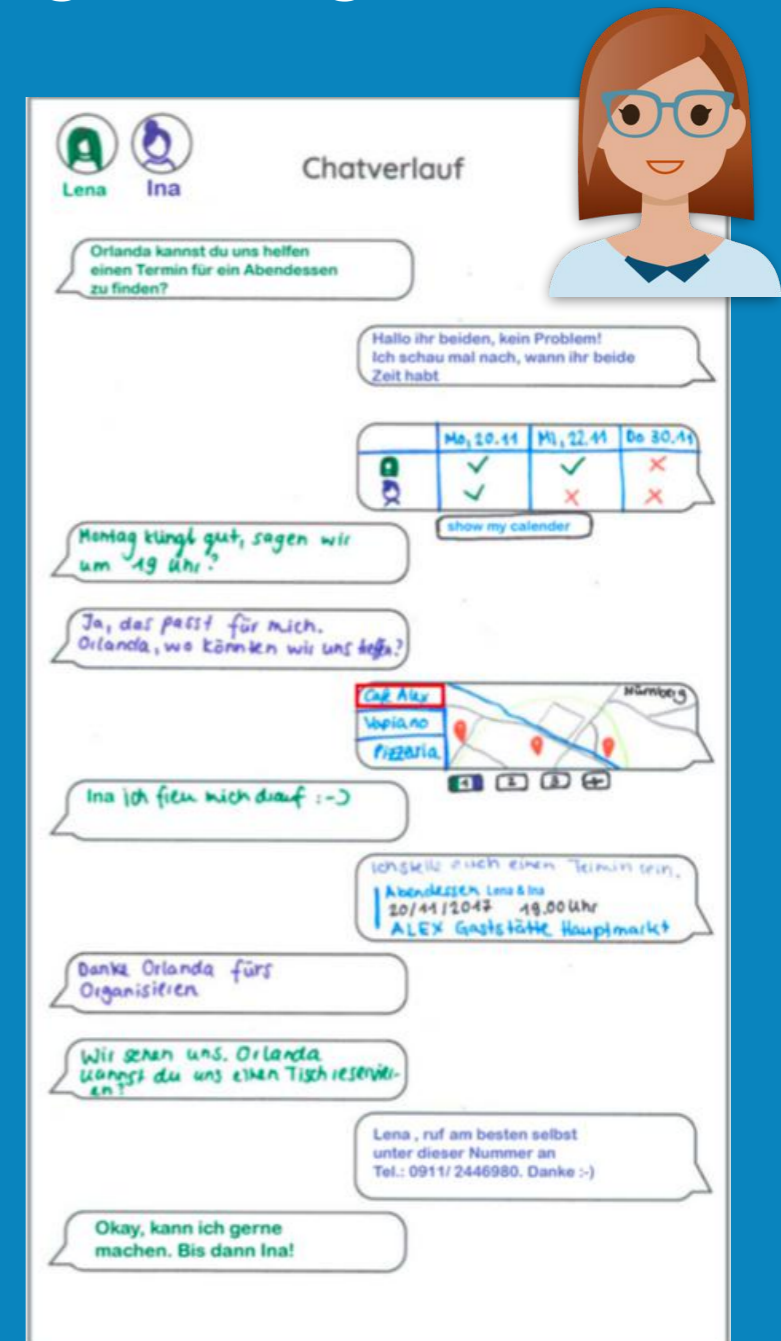
Surveys



Interviews

- Starting in the Design phase

e.g. Persona, Storyboards



Storyboards

When to test?

- Test early
- Test iteratively
- Fail early
- Fail fast
- Learn and improve

Prototype the Conversational Interface

How to test?

How to test?

- Implement it and test it
- Use NLU-Tools to test it
 - Dialogflow
 - Sayspring
 - flow.ai
- Wizard of Oz

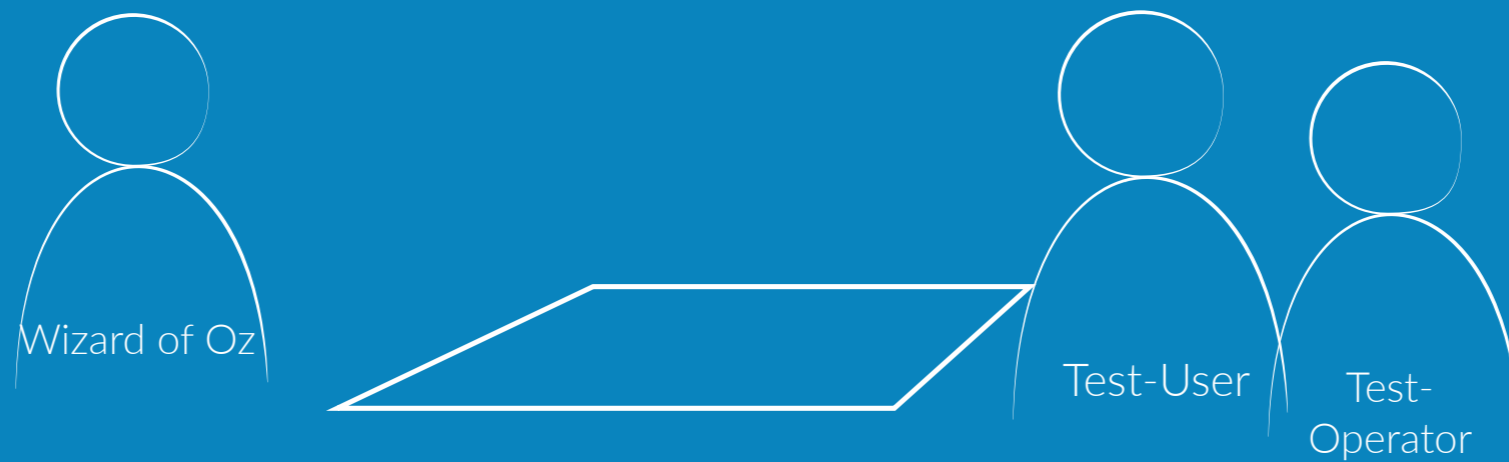
Test with early implementation



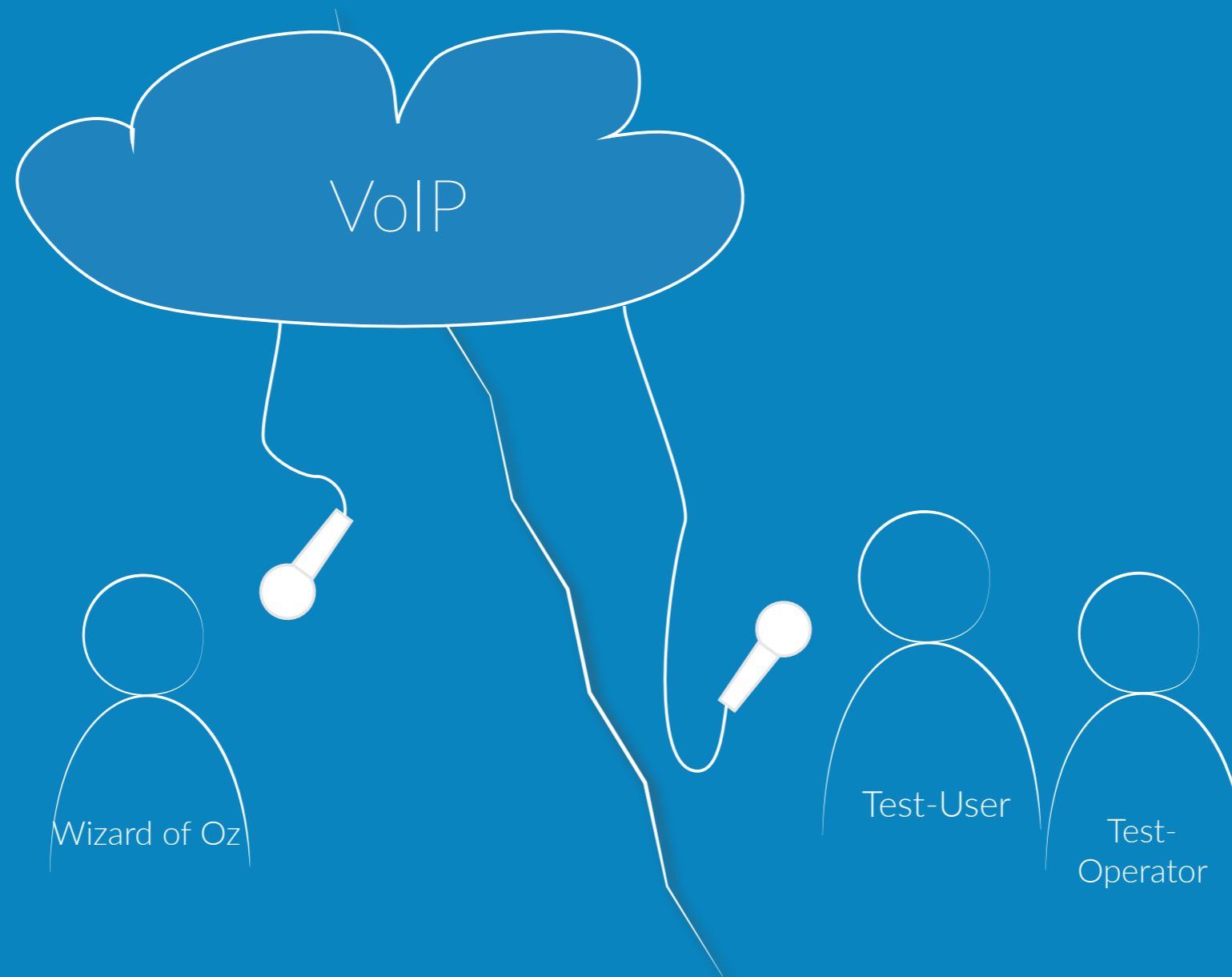
How to test?

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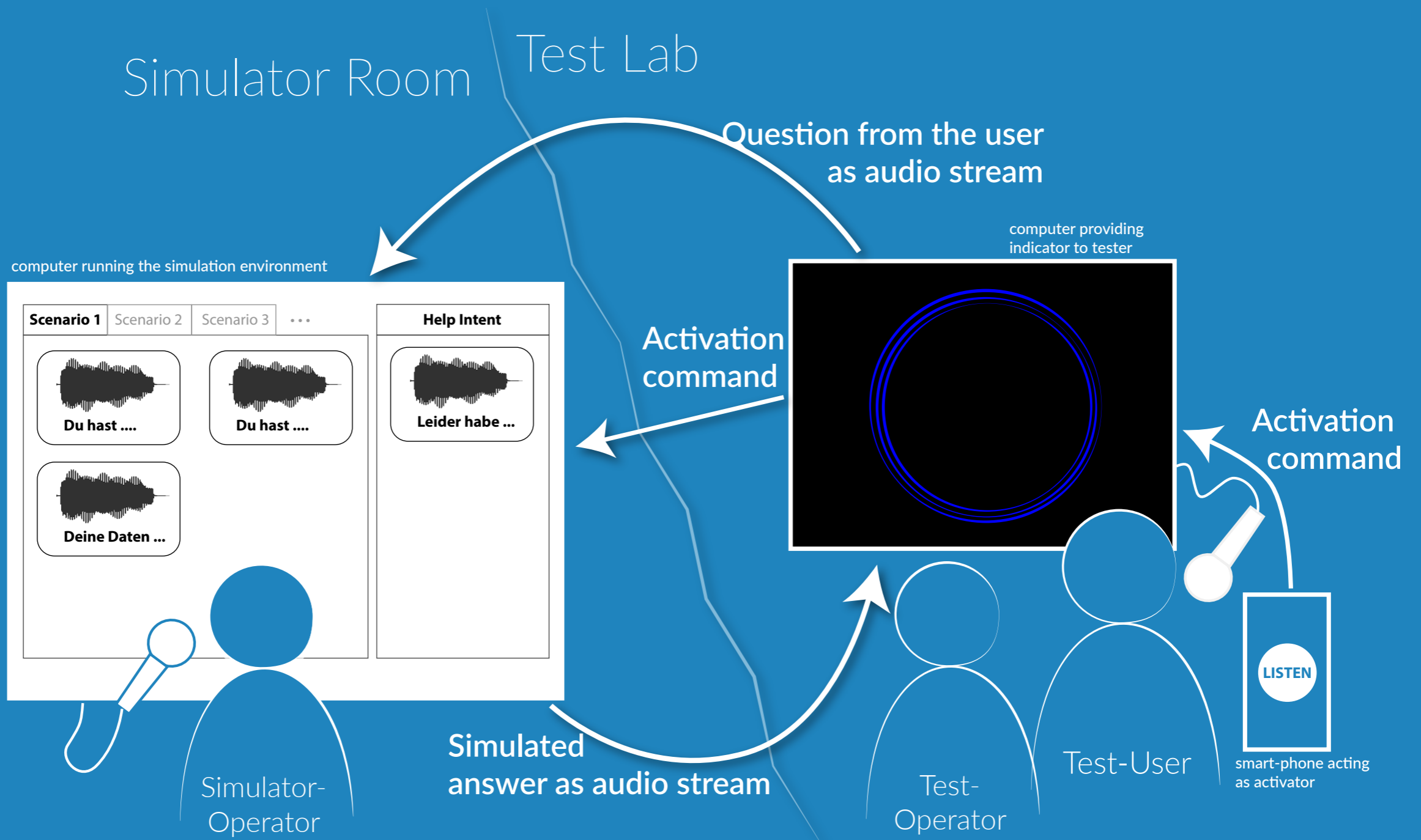
Wizard of Oz: Simplest Setup



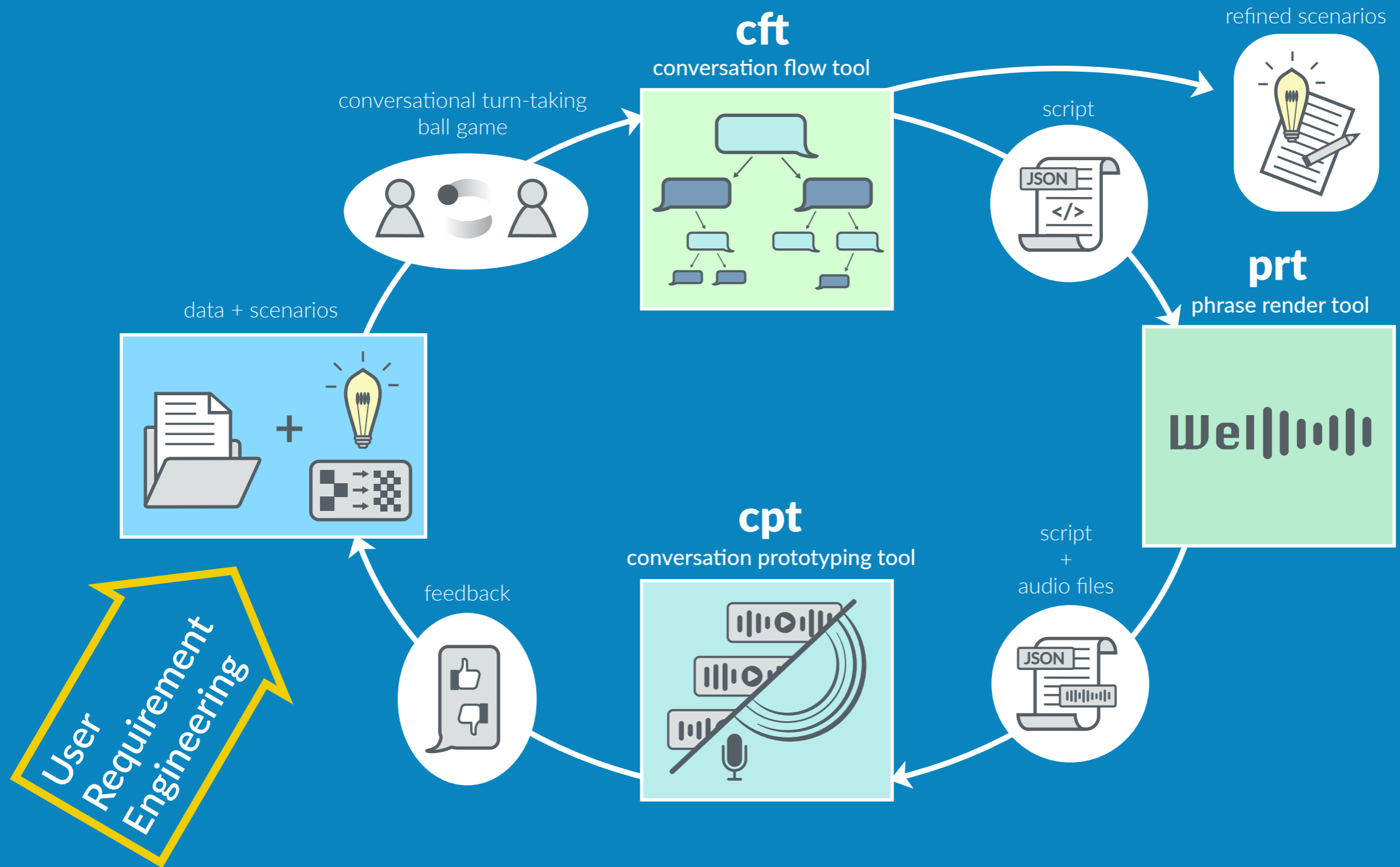
Wizard of Oz: Adapted Setup



cpt - Conversation Prototyping Tool



CUI Design: Prototyping Cycle



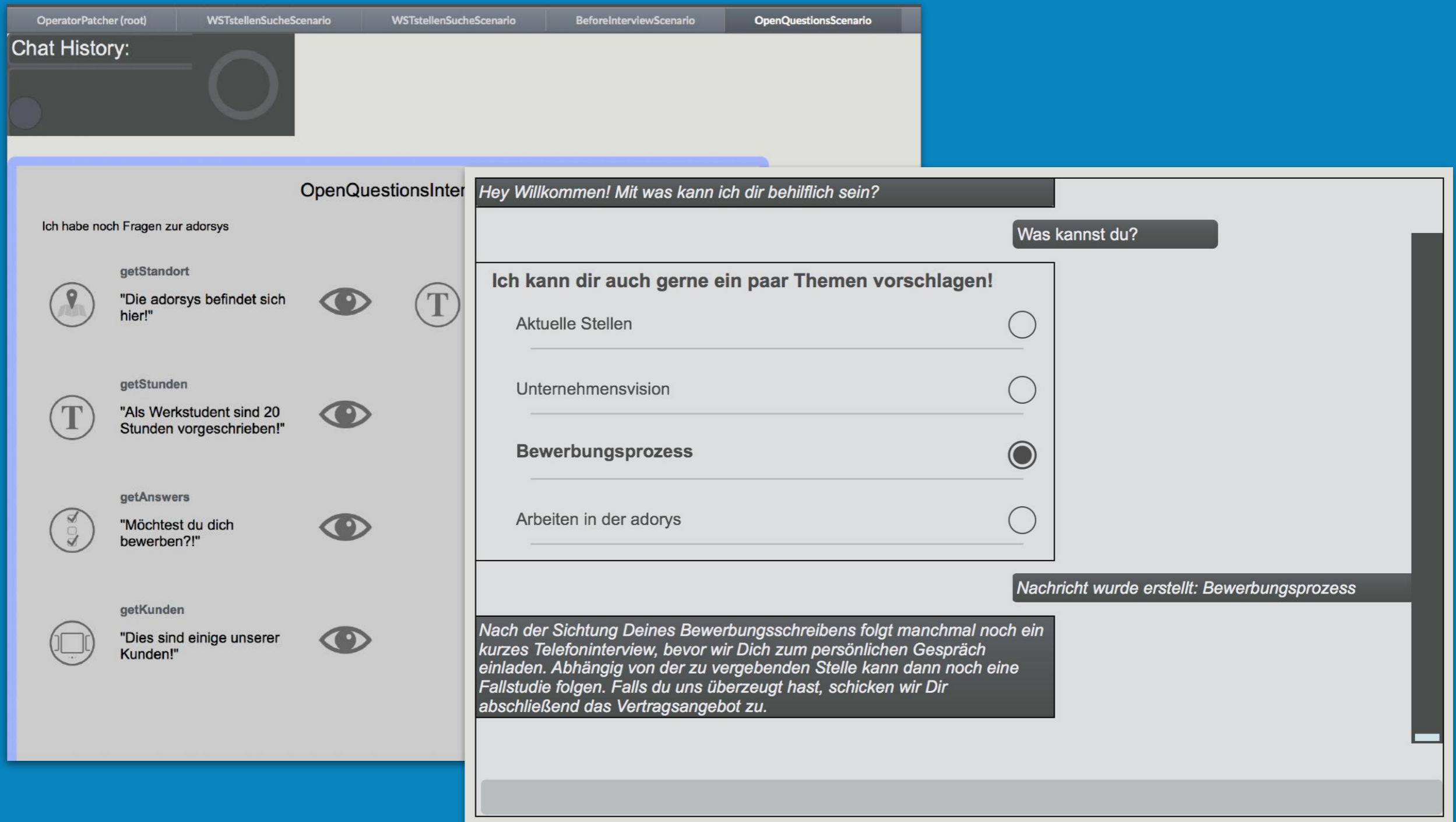
VUI Prototyping: WOz Operator Interface

Tablet Prototype: WOz Operator Interface

The interface is organized into several key sections:

- Navigation Bar:** Contains tabs for different scenarios: `cui.simulationPanel (root)`, `AccountInfoScenario`, `NephewVacationScenario`, `PartnerAnniversaryScenario`, `CarScenario`, `SellingBikeScenario`, and `TransferIncomesScenario`.
- Global Elements:** Includes a `GLOBAL` label, a `ROOM` button, and a `CUE` button, along with a `Comment` field.
- balanceIntent Panel:**
 - Text prompts: "Wie ist Kontostand?", "Wie viel auf Konto?", "Was auf Konto?", "Wie sieht Konto aus?", "Was macht Kontostand?"
 - Interactive elements: `ROOM` button (Balance: "Dein Kontostand beträgt 4600 73 Euro"), `CUE` button.
- budgetBeforeIntent Panel:**
 - Text prompts: "Wie ist Budget für {month}?", "Wie sieht Budget aus?", "Was bleibt von Gehalt übrig?", "Was bleibt mir"
 - Interactive elements: `ROOM` button (Budget: "Diesen Monat hast du noch 4460 Euro zur Verfügung"), `CUE` button; `ROOM` button (MonthlyBudgetFromSalary: "Abzüglich der Fixkosten hast du monatlich 1626 Euro zur Verfügung."), `CUE` button; `ROOM` button (FixedCosts: "deine monatlichen Fixkosten belaufen sich auf 1401 Euro"), `CUE` button.
- goalIntent Panel:**
 - Text prompts: "Lege Ziel {name} an", "Lege Sparziel {name} mit {interval} {amount} zum {startDate} an", "Sparziel anlegen", "Überweise {amount} {interval}"
 - Interactive elements: `ROOM` button (Name), `CUE` button; `ROOM` button (StartDatum), `CUE` button; `ROOM` button (Betrag), `CUE` button; `ROOM` button (Intervall), `CUE` button; `ROOM` button (EndDatum), `CUE` button; `Reset` button; `ROOM` button (GetNameAndStartDate: "Name und Datum für den Start des Auftrages?"), `CUE` button; `ROOM` button (GetAmountAndInterval: "Zahlungsintervall und Höhe des Betrages?"), `CUE` button; `ROOM` button (GetName: "Annina Wie soll das Ziel heißen?"), `CUE` button; `ROOM` button (GetInterval: "In welchen Abständen möchtest du Geld zurücklegen?"), `CUE` button; `ROOM` button (GetStartDate: "Ab wann möchtest du den Auftrag starten?"), `CUE` button; `ROOM` button (GetEndDate: "Bis wann soll der Auftrag laufen?"), `CUE` button.

Chat Prototyping: Preview



Considerations

- Know your users (or get to know them)
 - They do not formulate like you think they do
 - They do formulate like you want them to
- Find your own workflow and use the tools
 - Do not let the tools dictate the workflow
- CI - Continuous Improvements

Thanks

Questions?

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