PROJECT HARMONY

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Overview

- Problem & Solution
- Contextual Inquiry
- Task Analysis
- Tasks
- Design Sketches
- Summary
- Questions

Problem & Solution

Problem

Solution

I wish I can figure out how to approach someone!

We'll tell you!

Contextual Inquiry: Customer Background

- Tom
  - Faithful Father
- Philip
  - Awkward Transplant
- Anna
  - Boeing Engineer
- International students and researchers

Contextual Inquiry:
Questions as the Apprentice

- Can you show us how you decide whom to ask directions from this group of people?

- Can you describe how you perceive yourself socially?

- Can you show us how you would reflect on that interaction?

Contextual Inquiry: Observations

- Large range of ability to determine moods of others

- Self-consciousness is coupled with lack of confidence

- Easily described scenarios, but hard to put into practice

- Many want to learn how to improve their social skills
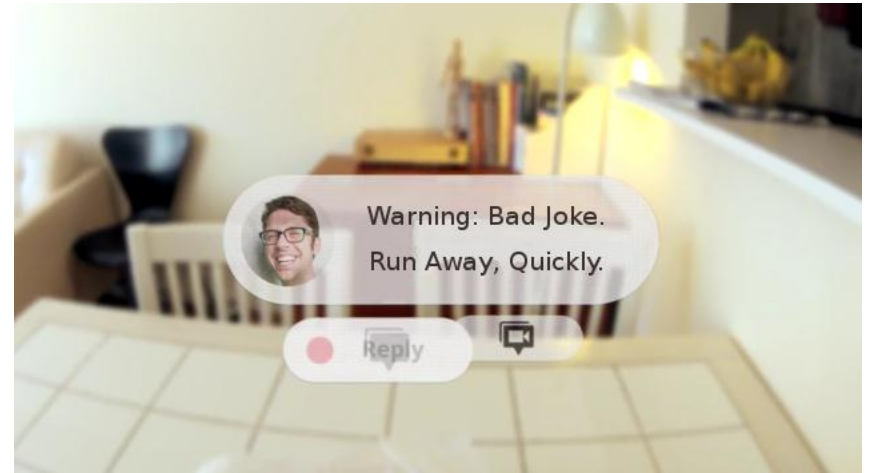
Task Analysis:
Customers

- Those who want to improve social skills

- Those unfamiliar with locals' mannerisms

- Those nervous in social & public situations

Task Analysis:
Existing Tasks

- Determine someone's mood

- Decide whom to talk to

- Review interactions to learn from them

Task Analysis:
Desired Task

- How can we improve ourselves?

- Take notes in real time on interactions to review later

Simple Task

Before

- Decide whom to sit next to on the bus

After

- Find the friendliest person to approach

Moderate Task
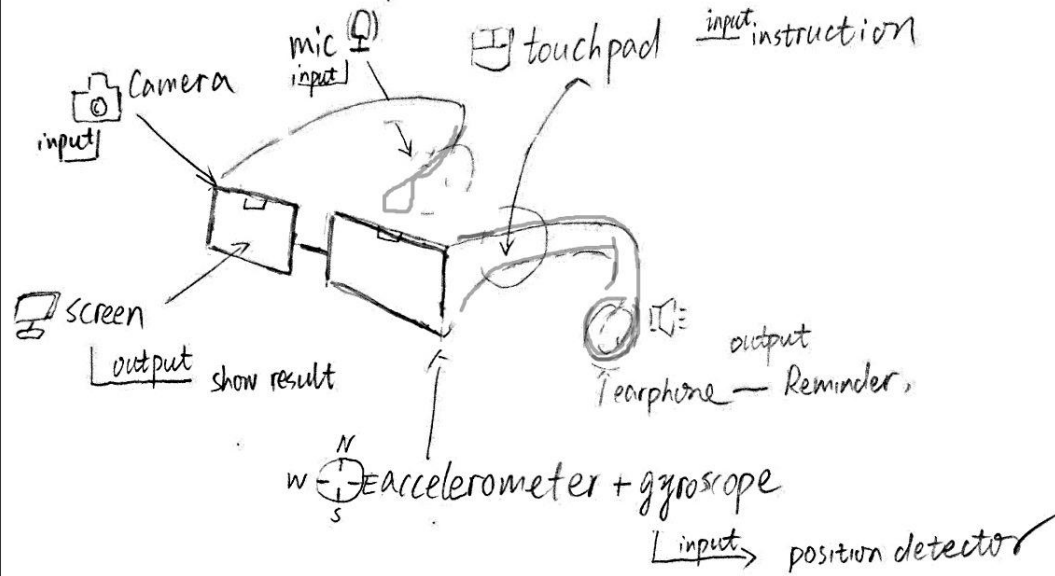
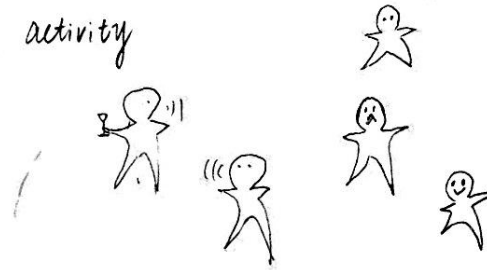- Identify general feelings of another to oneself

Difficult Task

- Teach someone how to react in social situations in real time

Camera
input!

mic
input!

touchpad

input instruction

screen

output

output show result

earphone — Reminder.

output

$W \bigoplus E$ accelerometer + gyroscope

input, position detector

target customer

In new enviroment.

or In social activity

who should I talk with?

people who are less socia adept
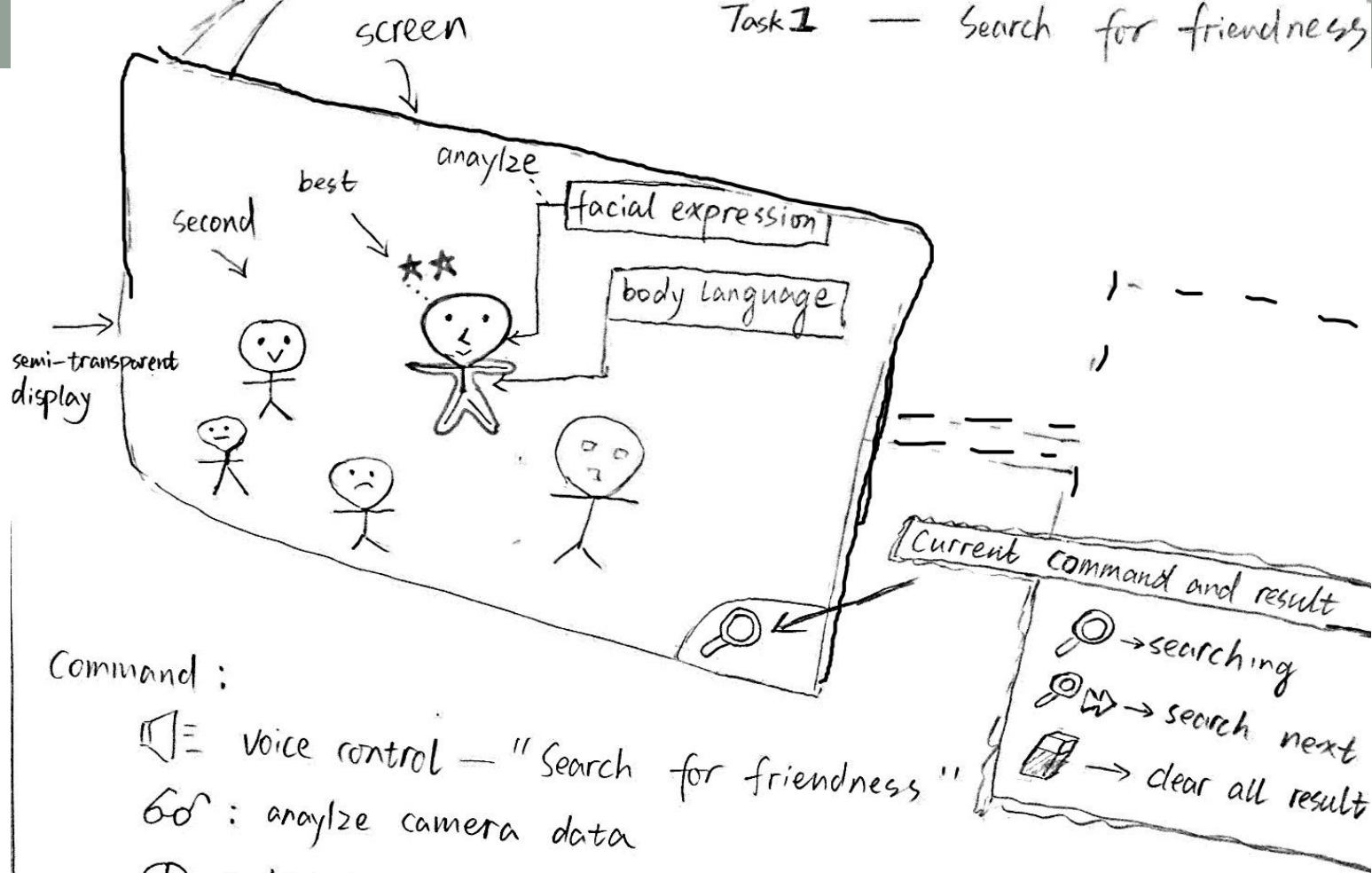
→ look for help

or

→ want to meet friends

? How to monitor my social performance

? How to remind my impolite manners.

? How to reduce nervicoursness

screen

anaylze

best

second

facial expression

body language

semi-transparent display

Current command and result
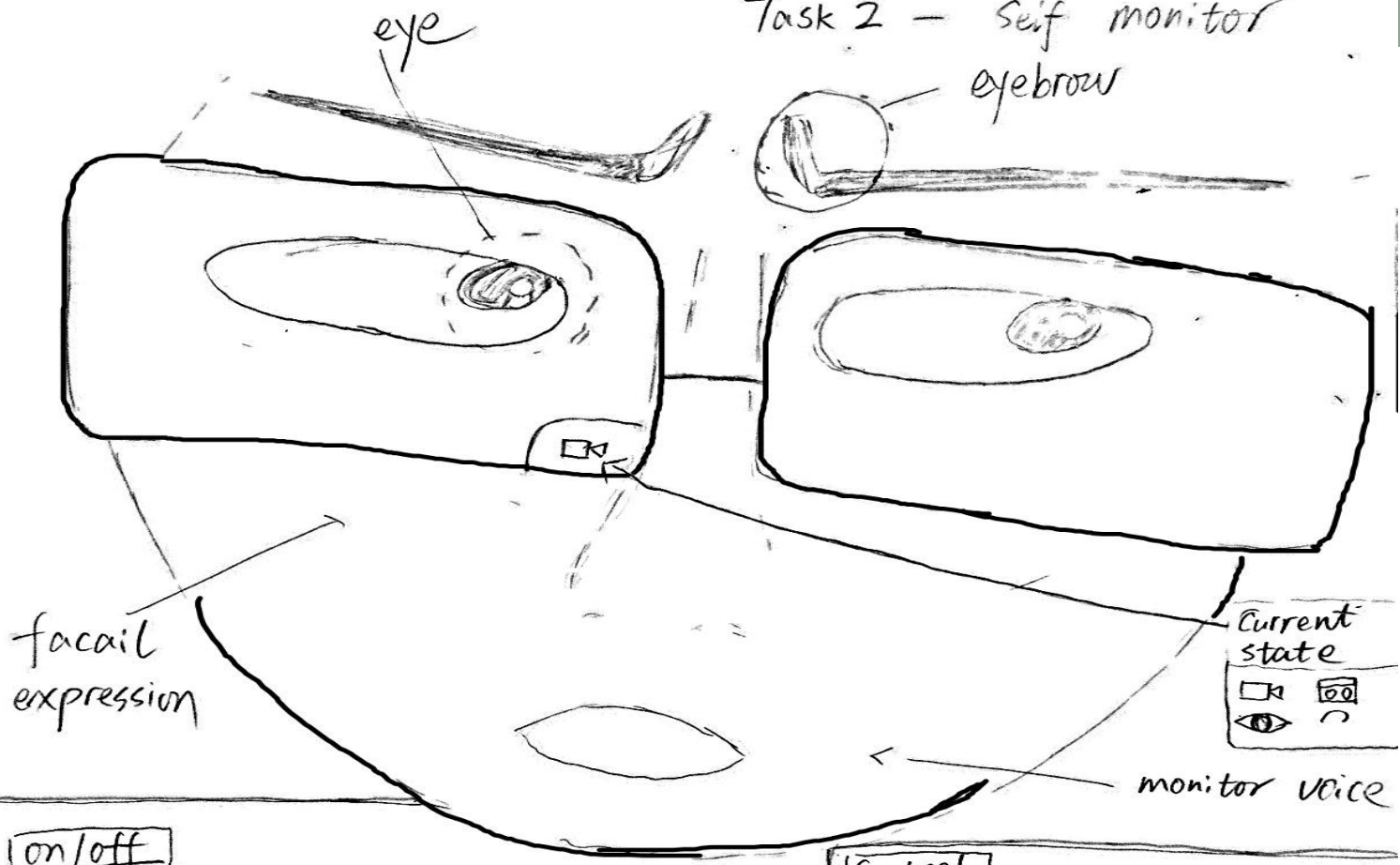
→ searching

→ search next

→ clear all result

Command :

🔊≡ Voice control — " Search for friendness "

👓 : anaylze camera data

⊕ : highlight + tracking most friendly people

option : 🎤   Voice control — "next", highlight + tracking second friendlies people

— "exit friendness", quit searching

— "clear searching"

eye

Task 2 — Self monitor

eyebrow

facail expression

Current state

□◁ 🔲

👁 ⌒

monitor voice

on/off

🎙 : "self monitor on/off"

⊞ : touch to turn on ⋂" , off ⋂⋂"

Control

🎙 : "voice record"

"video record"

voice reminder

🔊☰ : "raise down your eyebrow"   " slow down your voice"

earphone "look at people's eyes"   " keep smiling "

" well done "

glass

social performance anaylsis

voice 🎤 ; see eyebrow

new screen

voice

X ✓

new screen

have tips

?

Voice 🎤 : see voice

new screen

X ▶ ✓ ⏸

too quick slow

🎤 "play example" ⇒ 🔊

Voice 🎤 " tips"

?

"tips"

Voice tips

🔊 ① why you did wrong
② how to change

🎤 : "play record" ⇒ " 🔊 "

facial X ✓

" tips "

▷ ?
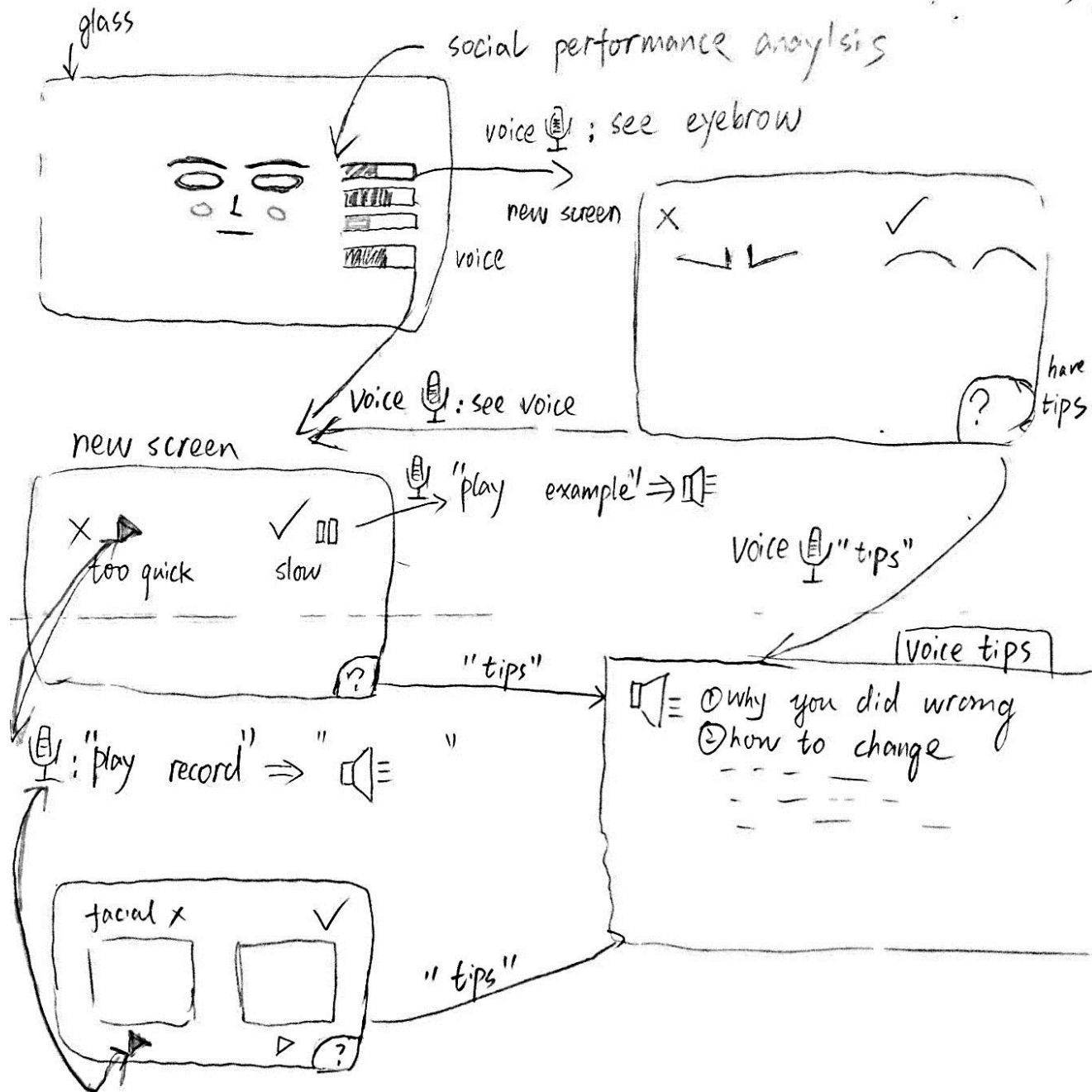
Summary

- Determining how to appropriately interact with others can be difficult

- Contextual Inquiry: Customers rely only on their inherent skills for social interactions

- Task Analysis: Everyday interactions could be impacted by giving customers access to this extra information

- Project Harmony will help customers gain confidence while learning to interact with others

Questions?