

# FlexiVoice

Low-fi Prototyping & Pilot Usability Testing

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# Overview of Talk

1. Mission and Interface
2. Prototype and Task Flows
3. Testing and Results
4. Suggested Changes and Summary



# Mission/Value Proposition

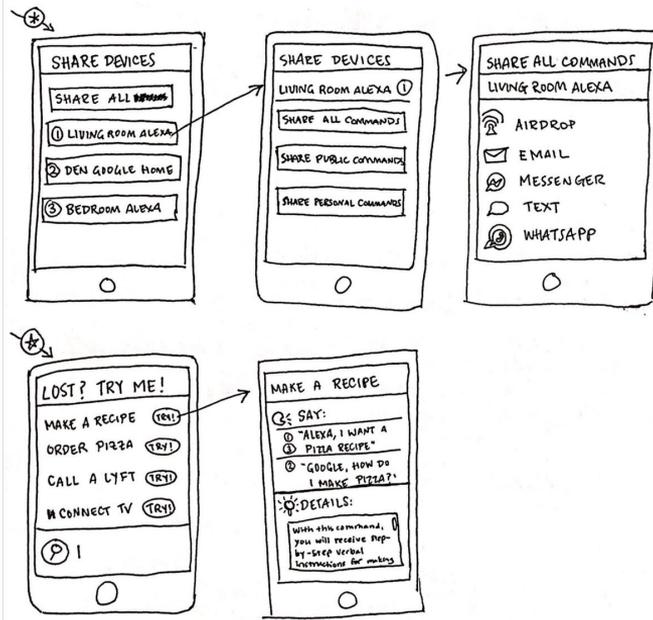
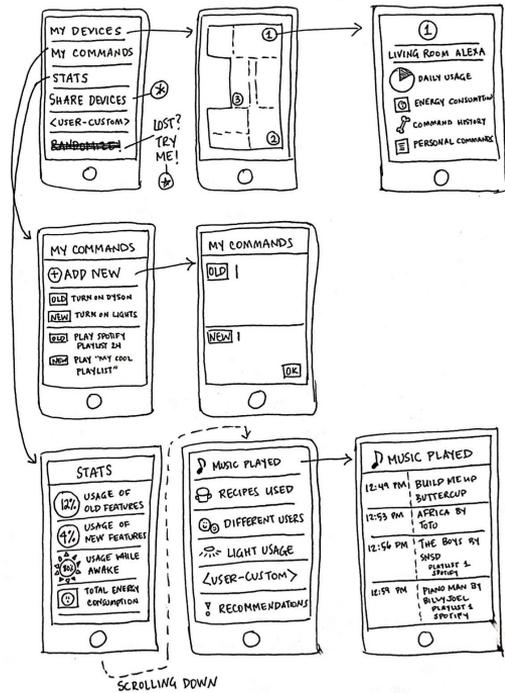
- “Make voice interaction work for you!”
- Make voice interaction easier to manage, track, and customize
- Help guests communicate properly with others’ voice assistants.

# Interface and Rationale

- Phone app over smart watch
- Visual interaction, complex tasks that require many steps
- Larger screen, more computing power
- Widespread use of smartphones, including interviewees
- Group members don't own a smart watch

# Prototype

# Prototype Structure



## Tasks & Task Flows

1. Add a new personalized command to your Google Home, changing it from "Google, turn on my Apple TV" to "Google, turn on my TV"

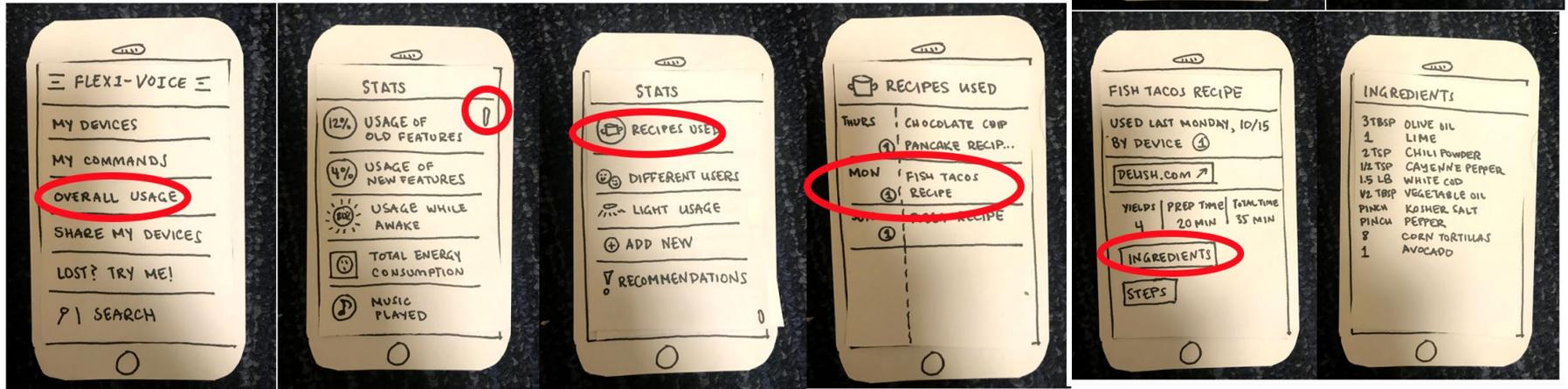
# Tasks & Task Flows



# Tasks & Task Flows

2. Look up the ingredients in the recipe you used the Living Room Alexa to make last Monday

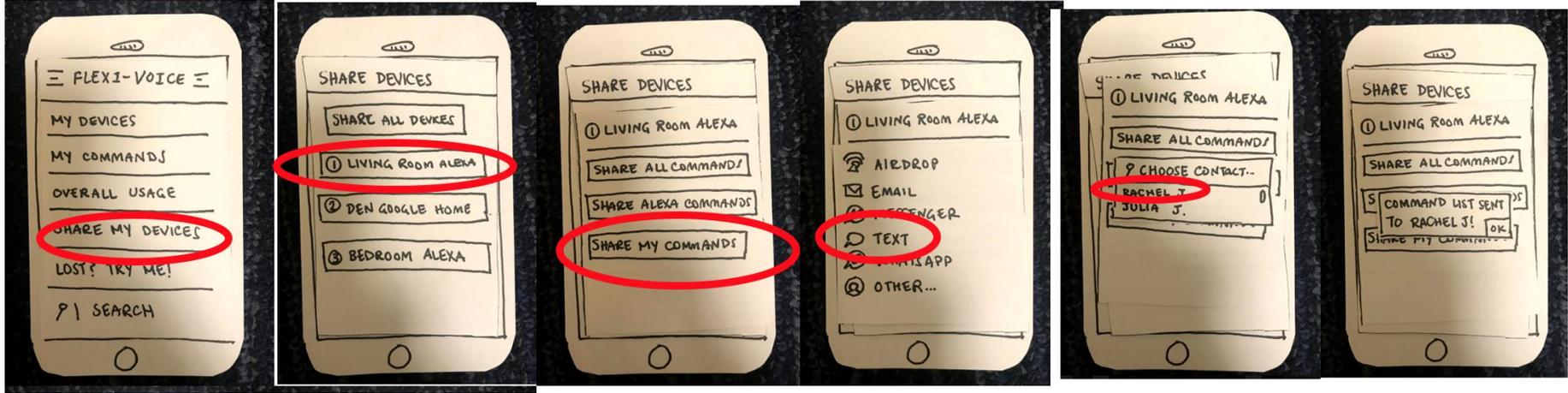
# Task & Task Flows



# Tasks & Task Flows

3. Text your personalized commands list for the Living Room Alexa to someone named Rachel J

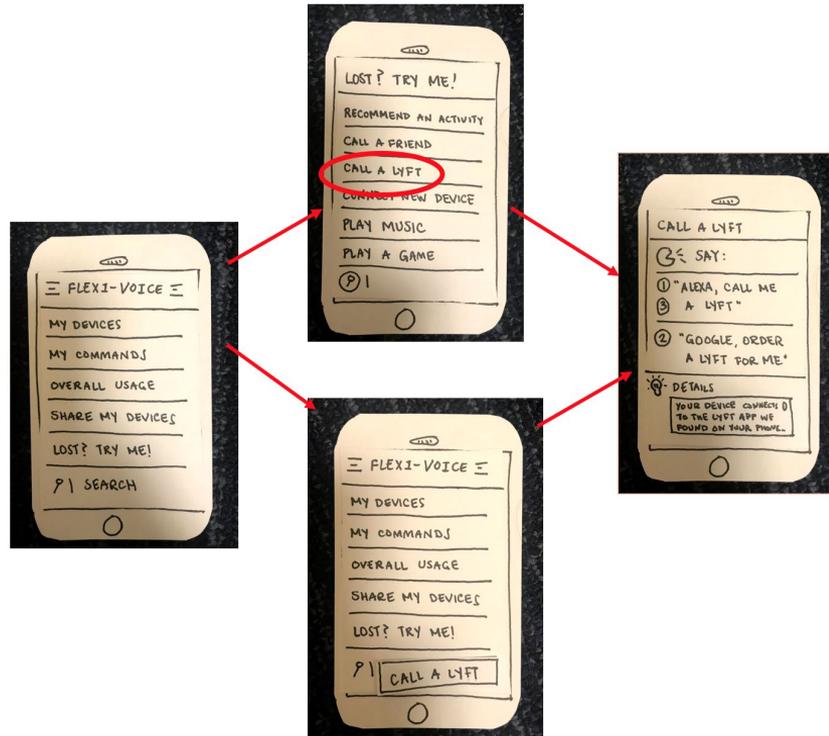
# Tasks & Task Flows



# Tasks & Task Flows

4. Look up how to call a Lyft

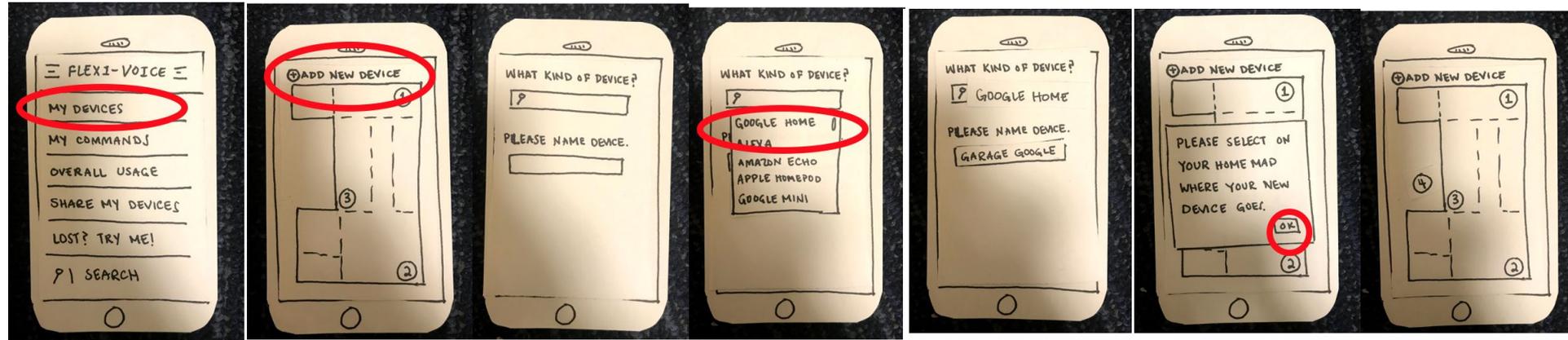
# Tasks & Task Flows



## Tasks & Task Flows

5. Add a new Google Home to the app and name it "Garage Google"

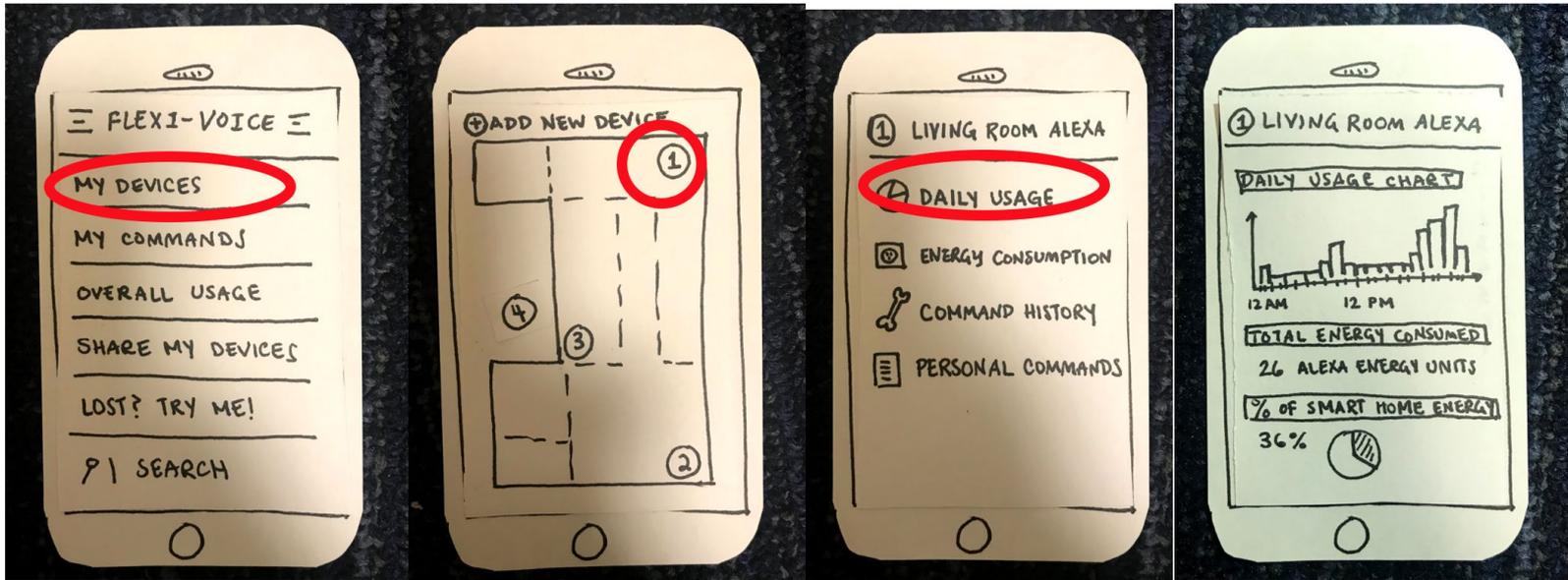
# Tasks & Task Flows



# Tasks & Task Flows

6. Look up the daily usage for any Living Room Alexa

# Tasks & Task Flows



# Usability Testing

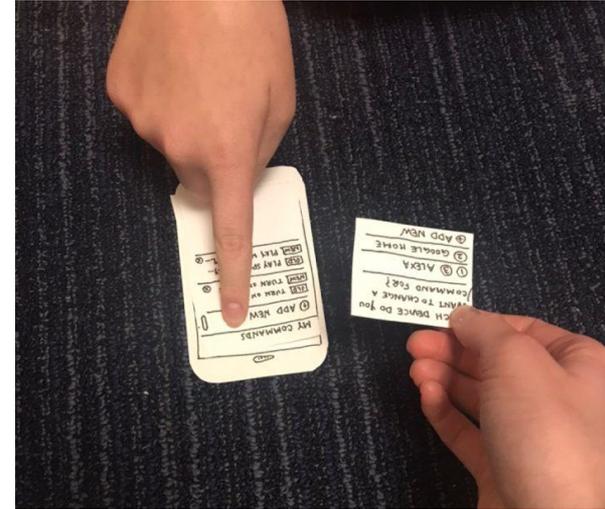
# Participants

- A retired, former video game market researcher
- A retired, former software technical writer
- A Stanford undergraduate student



# Methods

- Procedure:
  - Overview of app, consent form, description of task, completion attempt, feedback
- Test Measures: ease of use, intuitiveness of the task, whether labels make sense



# Results

- Overall we received positive feedback
- Task 1: Older participants did not understand “command.”
- Task 2: Overall Usage is a bit vague; liked Search option

# Results

- Task 3:
  - Confused about function of Share My Devices
  - Difference between the Alexa Commands and My Commands
  
- Task 4:
  - $\frac{2}{3}$  completed easily
  - Call A Lyft -> button or label?

# Results

- Task 5:
  - All initially clicked on the map
  - Couldn't find garage
- Task 6:
  - All clicked on Overall Usage
  - Didn't realize specific usage in My Devices



# Suggested UI Changes

- Overall Usage -> History
- Unclear meaning of Command -> Glossary
- Click Add New Device -> Click room on map
- Share My Devices -> Share My Commands
- Better indicate button vs. label

# Summary

- Goal: help people be flexible in smart device interaction
- Phone app with tasks for sharing devices, calling a Lyft, checking usage, etc.
- Results: some labels vague; map screen unclear

The background consists of several overlapping, semi-transparent geometric shapes in shades of teal and lime green. The shapes are layered to create a sense of depth and movement, with some appearing to be in front of others. The overall effect is a modern, abstract design.

Questions?