

Midway Milestone Presentation: FlexiVoice

Esther G. & Rachel J.

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

Problem/Solution Overview

- People want to be flexible in how they interact with their smart devices
- Our app allows you to:
 - Keep track of your devices
 - Define your own commands
 - Share information about your devices with others

Overview of Talk

1. Heuristic Evaluation Results
2. Overview of Revised Design
3. Prototype Implementation Status
 - a. Completed Items and Future Plans
 - b. Wizard of Oz/Hard-Coded Points
4. Prototype Demo

Heuristic Evaluation Results

Issues

- Exiting out of popups and menus easily
- User has to memorize commands to change them
- User has to enter command changes for different devices manually
- Too many buttons on history page
- “OK” button confusing at end of tasks

Issues

- Didn't fix:
 - No way to search for a command or recipe by device
 - Edit/delete button for existing commands

Overview of Revised Design

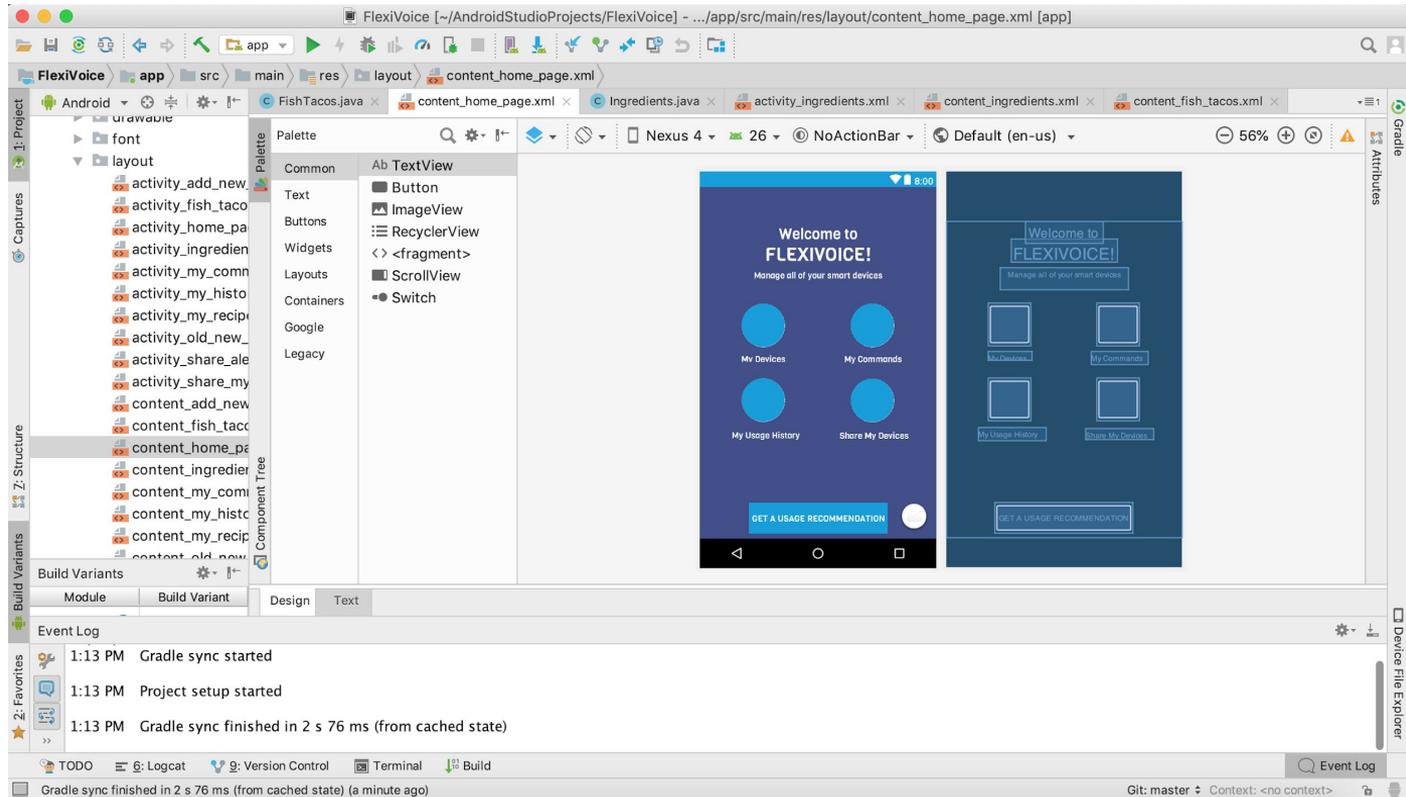
Changes

- **Ease of use:** reduced number of buttons on history page
- **Efficiency:** Can choose multiple devices while changing a command
- **Recognition not recall:** Added dropdown of preset commands
- **System status:** “OK” buttons are now “Home” buttons so their function is clearer

Prototype Implementation Status

Tools Being Used

Android
Studio



Implemented Features

- Home page UI
- UI and click-through scenarios for all tasks
- Pictures, icons, and back button for all tasks
- Wizard of Oz and hard-coded features for all tasks

Unimplemented Features & Plan

- Voice Interaction scenarios
- Time permitting: search functionality, hamburger menu on all pages except home

Wizard of Oz Techniques

- Share My Devices
 - After clicking on contact, the app shows that you've sent a text to this person
- Create New Command:
 - Old and new command fields get filled with example commands
 - After saving, the app shows that you've created a command

Hard-Coded Data

- This week's usage on main screen (to show a week's usage stats)
- Device list (so it would look like the person has devices)
- Old & new command fields (to show an example of a command pair)

More Hard-Coded Data

- Sharing History (to show what sharing history looks like)
- Contact List (so user can continue to next screen)
- List of recipes and related stats (to demonstrate the search for recipe history task)
- Voice: only a few commands allowed

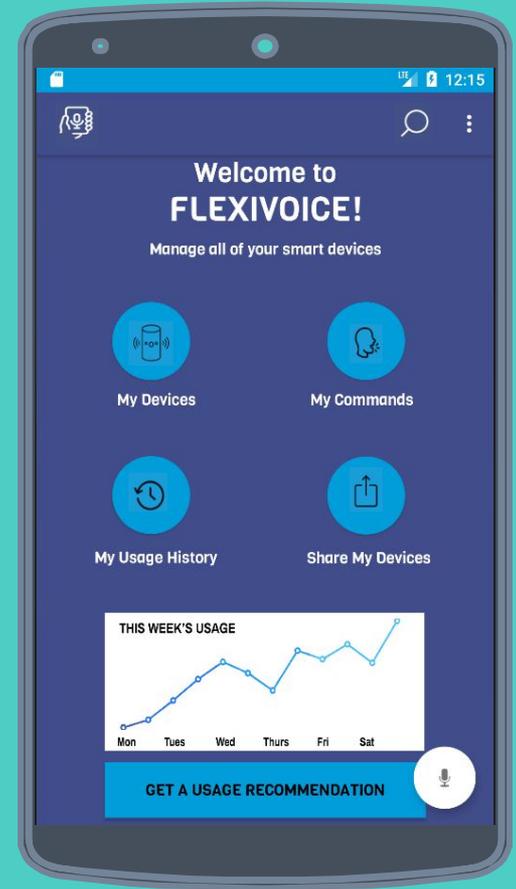
Issues/Questions

- UI is only optimized for Android with 5.2" screen (Nexus 5X)
- How to do voice interaction in Android



Demonstration of Prototype (Android)

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



Summary

- Changes were made to the prototype to increase usability and make the app easier to understand
- Prototype was implemented on Android
- Three tasks were implemented, VI to be added
- Hard-coded data:
 - Weekly usage
 - Command fields
 - History
 - Contact list
- Optimize for actual phone