CAN COZMO LEARN ANOTHER LANGUAGE?

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PROBLEM:

Cozmo currently does not support Asian languages, which limits accessibility for Mandarin, Cantonese, Japanese, and Korean speakers.

APPROACH

1. Modify Cozmo's thesaurus to support Mandarin (traditional)

2. Utilize Google Speech API and pywordseg to segment Chinese words (Chinese is not space-separated)

3. Create some basic Chinese commands using regular expression pattern matching for Cozmo to execute (almost like Alexa, Siri, Google, or Cortana)

INTERESTING ASPECT OF SOLUTION

In English, words are separated by spaces, which makes it easier to replace misheard words. In Chinese, there are no spaces that indicate individual words.
Using NLP to segment strings of characters into words

I'm better than all of you 💙

Web scraping: a new potential smart assistant (that is arguably cuter than Siri)
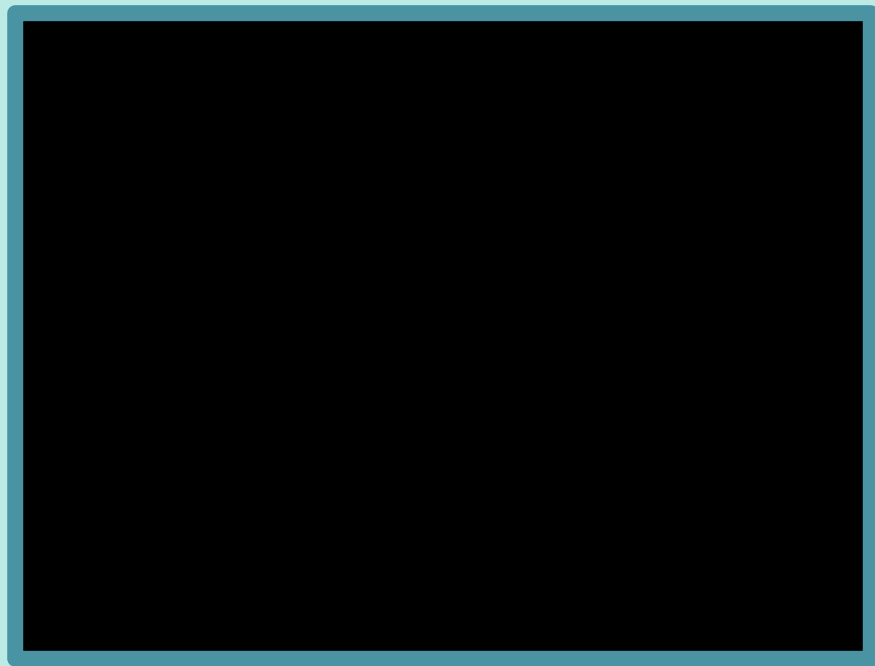
RESULTS

Pick up cube

Weather report

Calendar

Repeat

Translate

Take photos

Error

PROBLEMS + NEXT STEPS

Train our own Chinese NLP parsing model

Explore adding different/more complex commands + supporting multi-word commands by modifying the event and transition bases in cozmo_fsm

Add more languages

Auto-recognize the language spoken and respond correspondingly

Package the app into a desktop app or web app

THANK YOU! 🙂