Conversational Agents for People with Cognitive Disabilities
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People with cognitive disabilities use conversational agent technology in typical ways (music, weather, …)

Applications created by caregivers can be more consequential:
- meds reminder allowed a person to move to independent living
- morning routine reminder eliminated the need for daily assistance

**BUT** lay caregivers *do not feel able* to set up these kinds of applications.

“Alexa is a magic box we can’t open.”
--parent caregiver

Cognitive Walkthrough analyses of Alexa, Apple Homekit, and Google Home for a sample use case all point to likely problems for lay caregivers.

**Example:**
Controlling a lamp by command and by schedule require different approaches… *but* Google assistant requires a command when creating a scheduled operation.

**Remedy?**
- Create *Wizard tool* to guide configuration process
- Use Problem-Centered Design process
- Design alternatives:
  - NLP
  - problem tree
  - editable declarative representation
  - full automation of configuration process, or guidance for user actions?

Generic Reminder—(You want reminder by voice)

- What is your reminder message? [ ]
- What time should it trigger? [ ]
- Is this a repeating reminder?
  - Should it be played everyday?
  - Should it be played only on weekends?
  - Should it be played only on weekdays?
- Custom?
  - Please select the days it should be played.
  - Is this one-time reminder?
  - Please select the date for the reminder.