The Fnargs Game

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The game



The game

Based on Guess Who

- Yes/no questions
- But with cute aliens
- Played against the computer

The Fnargs

- 50 unique fnargs
- Distinguishing characteristics
- Each has its own name

Goal of the game

- Guess the computer's fnarg before it guesses yours

Technicalities

Simple game

- Used Speechstate
- Only two main game states; userTurn and computerTurn

RegExp based

- Gives me more control over the game's behavior
- BUT this means very long and messy functions for interpretation of user utterances

Shuffle function solves everything!

- Shuffle cards
- Random choice from predefined array for variation in computer utterances

Challenges

...or maybe not everything

- When reentering a state, the function is not (always?) called again
- Solution: assign to context...
- ...and shuffle and reassign each time
- Same problem with using Math.random() in guard conditions

Weird bugs

(a drawback of including randomness)

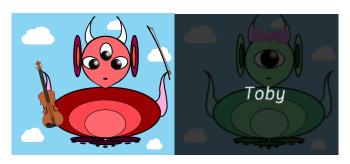
- "Unable to read properties of undefined"

Challenges

Displaying images

- The fnargs...

...and their names!



Relation to course content

- What was useful?

Everything...

but mainly:

Guard functions

- Let me place a lot of the messy code outside of the actual machine
- Double negated strings

Promptcounts

- Helps with the variation in computer utterances

History state

- For help state to be accessible from anywhere in the state machine

Relation to course content

Statecharts

- Worked very well with game format
- Made generalisation easier
- Did not take up too much space in the code, made it easier to overview

Input from peers

- Peer reviews were too early in the process
- Discussed with classmates and friends along the way

Ethical concerns

- Not really (at least now that I use aliens and not people)

Relation to course content

So, in general:

All of the advanced dialogue management stuff

(The Xstate docs were also really useful for that)

Future work

Fix the weird bugs

Include a confidence threshold

More social chatter in between rounds

Expand randomness options for utterances

- Possibly: weighted randomness over probability distributions
- Fun with speaker register, politeness etc

Thank you!

