

# 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!

