

# Find the cat

Final project for LT2216: Dialogue  
systems VT25, University of Gothenburg

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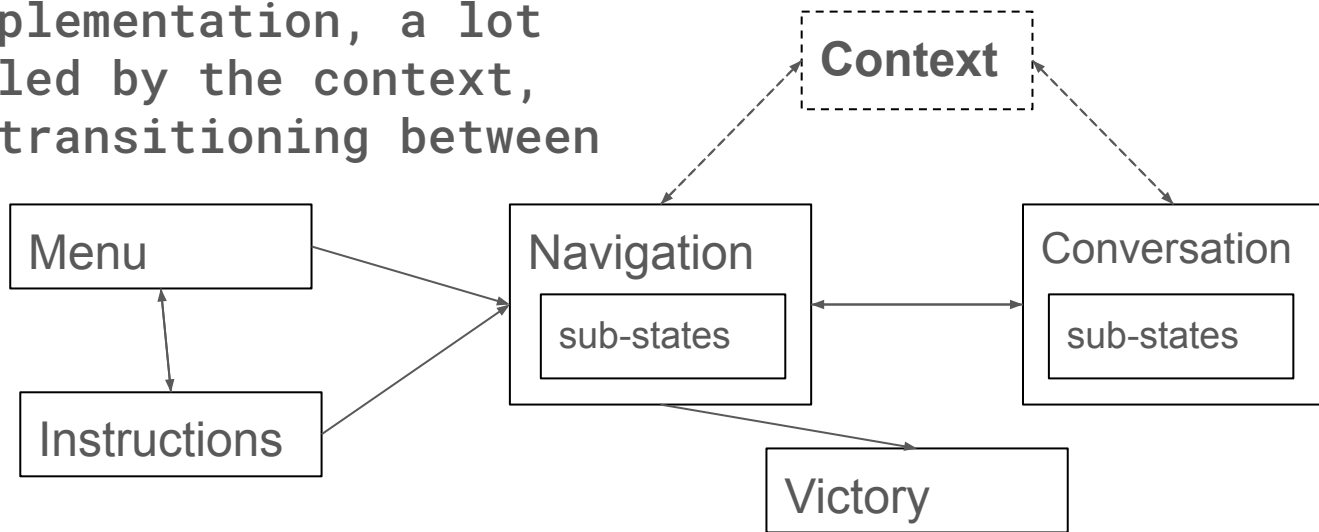
# The game

- A text adventure, but voice-based
- Goal: find your cat which has run away
- The player navigates between different places and talks to people who might know the direction the cat went.
- Each iteration of the game presents a random layout of rooms, the attributes of the cat, the path the cat took and whether a person is in a given room.

# Technicalities and implementation

- Framework: XState + SpeechState
- Azure to get ASR, TTS and NLU
- TypeScript to handle utility functions such as generation of rooms, cat path and people
- Some HTML+CSS for images

In my implementation, a lot was handled by the context, such as transitioning between rooms.



# Challenges and difficulties

- Generating the world
- Dealing with different types and finding suitable data structures
- Randomness
- Dialogue challenges, such as initiative and turn-taking (not all of these were solved)

# The game in relation to course contents

- Implemented in StateCharts
- Most helpful parts of the course was the more practical parts: tutorials on XState, SpeechState and NLU usage
- Because of the randomness, another framework might work better for some things
- Development process: world generation -> integrate into statecharts and add character dialogue -> add persons, places, images, voices, etc.
- Possible ethical concerns: the usage of photos of people -> ideally draw original graphics instead

# Future work

- More naturally flowing dialogues with the characters, including slightly off-topic conversations
- Random answers each time
- Characters recognising the player if they have already talked to them
- A more flexible narrator/command receiver
- More variety in surroundings and characters

# Time for a demo!

## Find the cat



Click the button to start

idle

