

Voice puzzle

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How does it work?

- The player must solve a puzzle using voice commands only. The following should be indicated per turn:
 - The piece to rotate
 - How much to rotate (once, twice, three times/90, 180, 270 degrees)
 - Direction to rotate (clockwise/counter clockwise)
- Help and reset/stop
- Hard-mode
- Different images

Used technologies

- XState
- React/TypeScript
- HTML + CSS
- SRGS grammars

Course contents

The lab assignments gave a good basis to work on the project and some options on how to implement things like Rasa vs SRGS

Challenges

- How the voice recognition recognises utterances
 - 90 degrees vs 90°
 - once vs ones
 - center vs centre
- Player speaks too soon -> only parts of utterance are recognised
- Unrecognised utterance -> repeat what user said and ask again

Future development

- Instead or on top of the rotation pieces could be mixed and moved by voice commands eg switch piece ab with piece cd
- Bigger puzzles/more pieces
- Adding more room for error: allowing user to revert last move, deselecting a selected piece
- Fixing bug when image with search term is not found

Demo time...