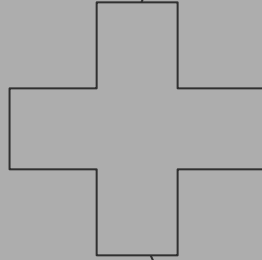


Project Ingredients

ChatGPT

- Creativity
- Reasoning



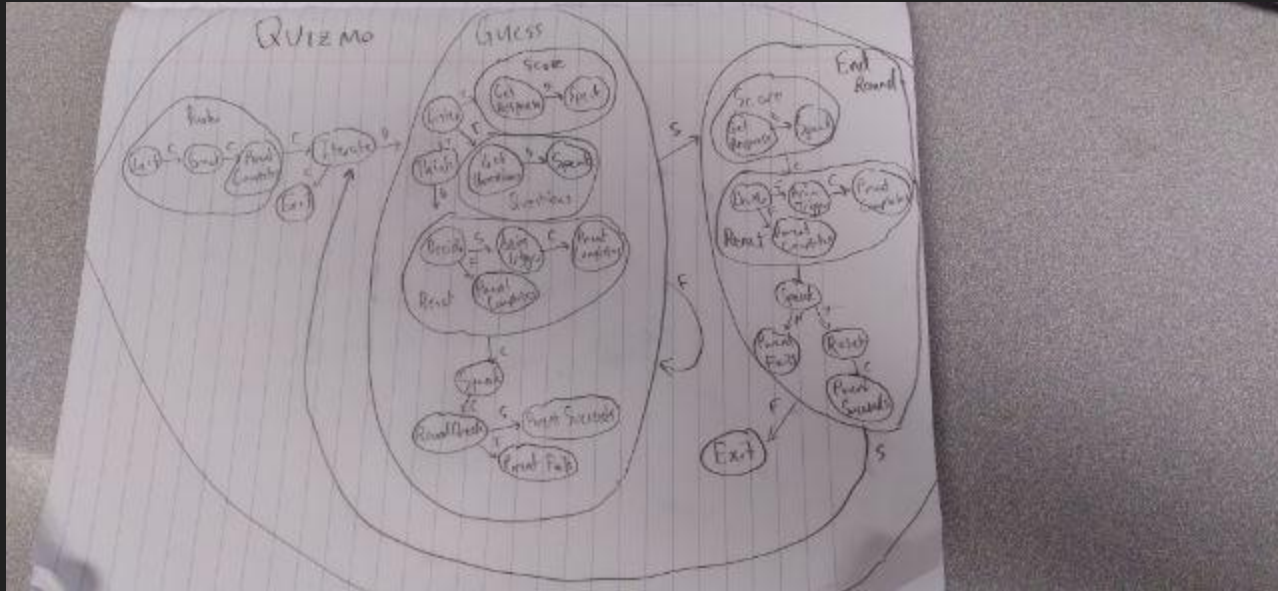
Cozmo

- Expressiveness
- Physical Movement

20 Questions with a Twist

- The classic game with Cozmo animations added in!
- Cozmo emotionally reacts to how the game is going
- Project by Thomas Rich

Quizmo State Machine Diagram



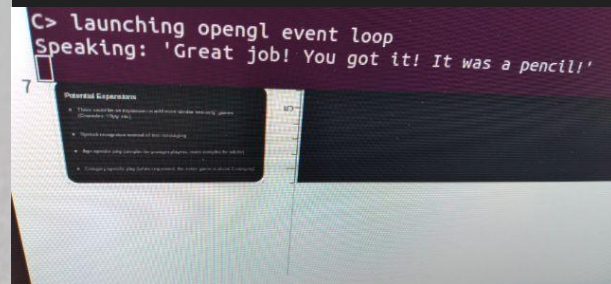
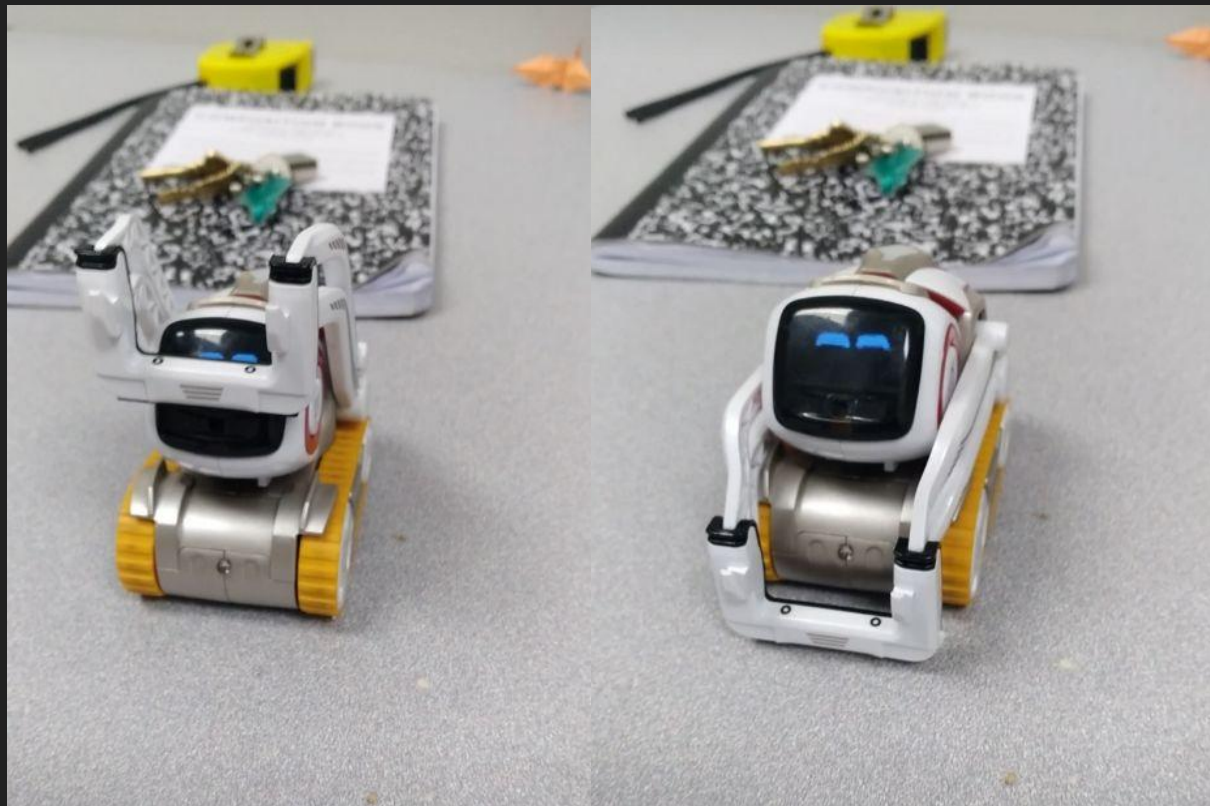
Problems

- GPT isn't great at switching who is guessing after a round
- Cozmo should react to the game as it's progressing, not randomly
- What's a question, what's just conversation?
- How do we know when a game ends?

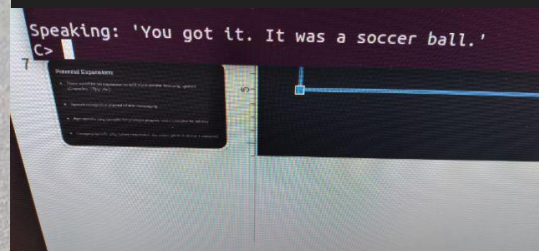
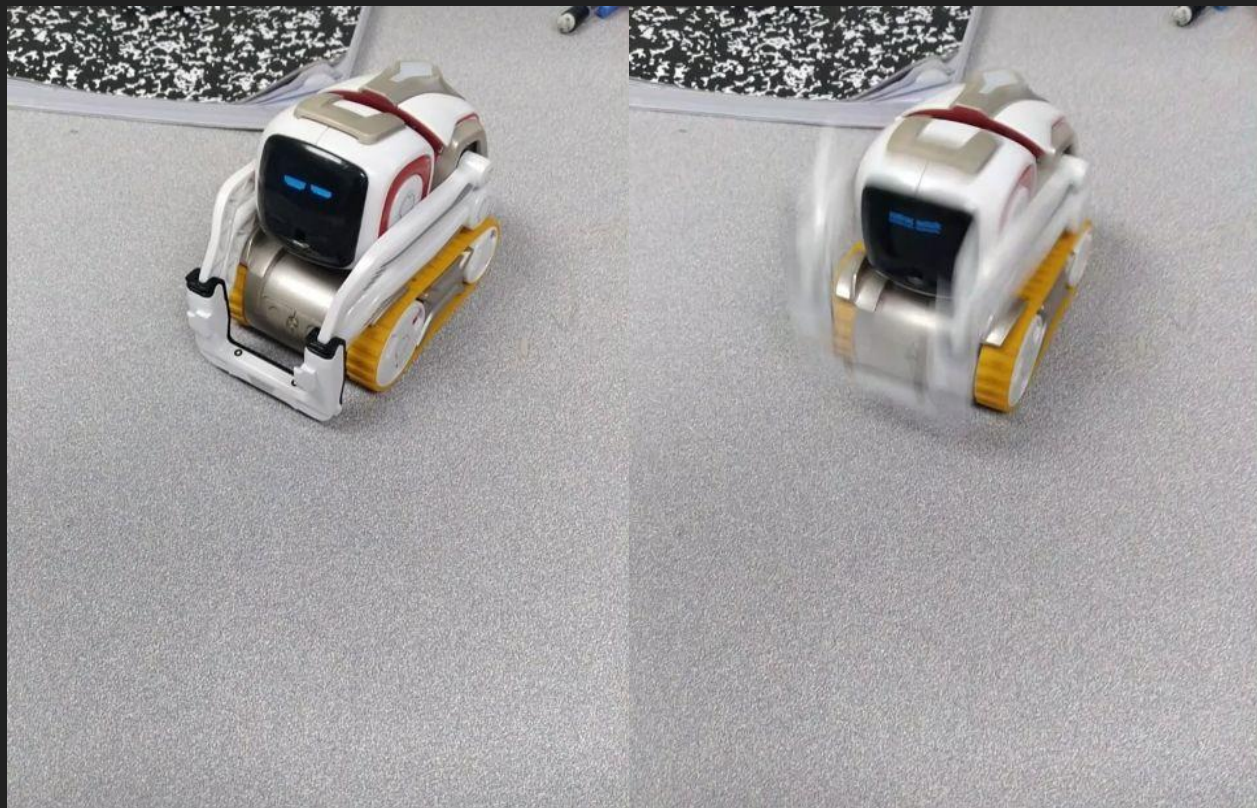
Solutions

- An explicit prompt naming the roles for the next game is fed into GPT automatically by a specialized node
- Cozmo's emotions are adjusted in another node, then an appropriate animation is chosen from a dictionary sorted by emotion and intensity
- A reaction doesn't occur every time; the probability of an emotion playing increases as the round gets closer to its conclusion
- Questions are detected and the question counter is only updated when it is definitively a question, not mere conversation
- Specialized node analyzes user inputs and GPT responses to see if the guesser won (easy to count to 20 if in guesser loses case)

Cozmo is Proud of You for Winning



Cozmo gets Over Competitive



Potential Expansions

- There could be an expansion to add more similar 'text-only' games (Charades, I Spy, etc.)
- Speech recognition instead of text messaging
- Age-specific play (simpler for younger players, more complex for adults)
- Category-specific play (when requested, the entire game is about 1 category)