Perplexity Site Update

< 2023 Status

- Goal: Incubating engine for exploring a microworld with ERG
  - Explored DELPH-IN and ERG
  - Built Private Perplexity 1 on Prolog
  - Prototyped approaches to using it for natural language interfaces
  - Built 5 games

< 2023 Status

- Success: users are amazed by the building and playing experience
  - Evaluating success by entering games into Interactive Fiction Competitions
- 5 games built:

Game	Result
The Cave	Playground for testing
Atomic City	First game attempt, didn't compete
Kidney Kwest	Competed Sept 2021: 67th out of 70
Baby on Board	Competed May 2022: Two awards: "Best glimpse into IF Future" "Technical Achievement"
Headlights	Completed Sept 2022: 66th out of 70

User Feedback

“The main feature of the parser seems to be that it understands full sentences. I didn’t see any clear benefits of that”

“In practice, I found myself falling back on the stock parser commands more often than not, although it was liberating to be able to say things like ‘go to the living room’”

“… not smart enough to make the output easily understandable. The Perplexity engine is still really rough, but each game has been better than the last one.”

“it’s certainly possible that some very different game exists or could exist that would actually make use of its purported ability to parse things like ‘what color is the rock I am holding’”

Current Status

- Goal: Build an open-source library for using DELPH-IN to build natural language software interfaces
- Building open-source Perplexity 2 on Python
  - https://github.com/EricZinda/Perplexity
  - More rigorous solver
  - Much more approachable developer interface than Perplexity 1
- Writing extensive file-system tutorial and reference docs
  - https://blog.inductorsoftware.com/Perplexity
- First application is an ESL exercise in collaboration with Luis
  - Built entirely by intern Will Min (sophomore undergrad)
  - Exclusively used documentation to get up to speed
- Next app will be a game with a more conversational approach