Note: this is just meant to be a sketch of a few diff ideas and a possible direction for an InfiniteRegen.AI v2. It is not a full design. Please give constructive feedback!

Inspirations

- 1. https://www.spore.fun/blog/wtf
- 2. https://x.com/howdymerry/status/1872394291135533497

What?

An Regen Al Agent swarm that evolves towards creating the best mechanism designs.

If done well, this completely automates the traversal of the design space of Gitcoin's mission ("Fund What Matters") with 24/7 Al Agents that are always on exploring the design space. Eg Fund What Matters Better Faster Cheaper.

How?

Invest in automation so that we can explore the design space 24/7...

- 1. Building on InfiniteRegenAl v1
 - a. (Agents that understand what the top KOLs know)...
- 2. Design a base designer Al Agent that can
 - a. design a mechanism (QF, Retro Funding, etc)
 - b. and launch it in the form of a webapp.
- 3. Make it very easy to score mechanisms.
 - a. Eg make a sandbox where devs can test whether that mechanism works by having a separate set of "tester Al Agents" that use the mechanism.
 - b. Then score each experiment on some objective function that measures ththeeir outcomes.
 - c. We'd need to figure out how to make a sandbox that represents the real world as much as possible. Perhaps by just giving it basic game theoretic elements (principal agent problems, moloch trap type dynamics, like in the <u>evolution of trust</u> can be a start. If we want to get more advanced, perhaps we train it on the governance forum of various DAOs to rival the more real world dynamics.)
 - d. It is possible that the design space has many diff objective functions (eg QF is really good at democratic funding, retro funding is really good over long term, deep funding is really good at dependency funding). If this is true we'd have to create different petri dishes with different heuristic functions for the AI Agents to maximize in each.
- 4. Rank the agents and the mechanisms they create.
 - a. Put the agents into a sandbox where they are continuously designing mechanisms, deploying them, launching rounds, and getting them scored.
 - b. Kill the worst ones, and promote the next mechanisms to iterate on their mechanism designs.

5. Profit! We've now automated the discovery of new mechanism designs for funding what matters.

Personas

- base designer Al Agent
 - Has regen KOL knowledge
 - Can design mechanisms
 - Can build webapps
- tester Al Agent
 - Knows how to use the webapps created by tester ai agent
 - Has some heuristic its trying to maximize (likely its own profit or community mission)
 - Has testnet tokens
- Scorer Al agent
 - Scores mechanisms built by base designer agent 1-100 on the basis of how much it maximized some heuristic ("funding what matters" to start)