## Improvements made

- 1. Drop (1 point)
  - a. Drop was implemented
  - b. It is also possible to drop many items, or drop using The inventory number, or drop the item in hand
  - c. Using the library nlu-snips for parsing
- 2. Inventory maximum size (2 points)
  - a. Max of 20
- 3. Stacking items (2 items)
  - a. In both inventory and when objects are dropped in the ground multiple items are represented with parentheses.
- 4. Random world (3 points)
  - a. Uses pandas dataframe to represent an x and y axis with individual cells representing a block in the mine
- 5. Bigger world (2 points)
  - a. The map is 25X25, and can be changed with a sinking variable at the top of the screen
- 6. Command abbreviations (1-3 points)
  - a. This one is difficult to evaluate. Because the game is built off of natural language processing, several items have intended synonyms
    - i. North can be represented with
      - 1. Upwards
  - b. That being said, an unknown number of synonyms can exist. To see some example inspect the .yaml
- 7. Helper? (4 points)
  - a. Create an autonomous character(s)
  - b. This is more a technicality, but the parser technically understand the individual and is canonically a robot named
- 8. Loot (3 points)
  - a. Mining triggers drops such as diamond, gold, silver, and iron
- 9. Weapons (2 points)
  - a. Mining requires a pick axe
- 10. Healing items (2 points)
  - a. There are two healing categories
    - i. Energy
    - ii. Health
  - b. Items heal one category of another
- 11. Choose your own (?)
  - a. Natural language parsing.
  - b. While the tool is powerful when it comes to synonyms and autocorrect, several "utterances" are available without the library
  - c. Asking for the 1st item
  - d. I want to apologize for the dependencies for the snips library. It does require visual studios and rust.

- 12. Choose your own (?)
  - a. Normally distributed randomness
  - b. Aside from 4 random functions that are used to generate uniform or weighted distributions
- 13. Choose your own (?)
  - a. Ability to drop and pick up multiple of the same item
  - b. Example "drop 2 apples" and "pick up"
- 14. Choose your own (?)
  - a. Human like typing?
  - b. Intro and logo both use the function hum type

Point Accrued: 22, 24, ?

Unfinished code you can find:

## Inventory number to item:

I didn't sketch out the outline and example dialog interactions, like I normally do. As a result this code is atypically cluttered. Take parsing inventory number to item. That could have been reduced to one function, instead I reused code several times which makes "drop" and "pickup" bloated.

## Buy, Sell, and store:

I had a plan to make it so that the store would maintain prices for a round until the player moves or the map is updated (by dropping or picking up). Accomplished using the hash function to set a random seed.

## More ways to lose health:

I was going to implement a coal dust inhalation feature where upo inhaling coal dust you need an inhaler or you lose between 3 and 7 health a round