# DAY 01: 16/01/2022

Developed a problem description for each class, a class diagram, and created a github for the project. Next step: Write pseudocode.

# DAY 02 17/01/2022

Started working on pseudocode. Good progress.

Re-structured the Simulation class and added some ideas for generating limbs based on the parent creatures.

Jumping power of the creature is a random number between the creature’s parents’ jumping power.

For each limb, the creature has higher probability(80%) of generating the same limb type as the parents if they both have the same limb type, otherwise the limb generation is random.

Other creature characteristics will be calculated smiarly

All of this is not final and I will have to perform tests and check if this approach succeeds in generating successful creatures.

Other limb, wheel and leg characteristics will be simulated similarly.

# DAY 03:

Pseudocode is good. Review it and see if anymore progress is needed. If not, START UP UNITY!

Started working a bit more on pseudocde. Mind is unclear so I will stop here, I believe most of my code is straight bs so I’ll do it with a clear head.

# DAY04(02/02/23) Continued pseudocode.

Completed pseudocde for back end: Leg and Wheel class completed. Also fixed up Simulatin class

Added mutations in the Creature class where the creature has a 20% chance of not following the parents’ path.(This is simply done using Math.rand and the value can easily be changed). Decided hat it is not necessary to have this on the lower classes as well

Next time: Start working on Unity. Must have Stuart something t show by next week!!!

# DAY05(06/02/23)

Palayed around with Unity a bit. Made a simple platform and saw how wheels can work. But didn’t get much done tbh.

Next time:

* Find ou how creatures can actually move
* Backup my shit

NEXT NEXT TIME:

* Start generating creatures

Unity to do list:

To do:

- Make very simple environment DONE

- Find out how to simply generate a single creature. Maybe using scripts too

- Find out how to generate multiple creatures that dont interact...

- Make creatures actually move( legs move, wheels move)

- Find out how to pass on data from generation go generation(scene to scene?)

-probaly like you would do on eg a mario game

- How do we follow the best creture?

# Day06(12/02/2023)

Lots have changed. Have figured out how to implemented movement in Unity. With cars its actually not that bad. There is a txt file for some notes.

I will now focus souly on cars, and will need to create a new environment for testing. Genetical aglrotihms will:

* Change speed? But MUST have a max
* Change wheel size? But must have a max
* Change wheel location? But need to figure out some values, eg transform and wheel joint connected anchor
* Change wheel number? But will have a max

Next time:

* Create a simple environment
* Figure out transform and stuff
* Generate a SINGLE creature with random values