

README

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GIT url: <https://github.com/HorizonStrider/Critter.git>

There are four(4) new classes (Critters) made for this project.

To store the Critters, it was divided between two groups: population, which is the current amount of critters that are used for the time step, and babies, which are excluded from the current time step. The data structure were arraylists for both, and we simply used the provided lists.

The four Critters are as follows:

Critter1 is a Critter that chooses a random direction to move in. Once it chooses that direction, it either runs if it's on a cordial direction and walks if it is on a diagonal. Every time it has an encounter Critter1 has a 1/4 chance of winning.

Critter2 is a Critter that will choose a random direction upon its creation, then forever walk in that direction. Every time it wishes to fight, Critter2 will, with equal probability, decide whether or not it wants to fight or not.

Critter3 is a Critter that will either run or walk. However, it will only run if it has engaged in a fight with another Critter. If it has and Critter3 is still alive for the next time step, then Critter3 will run. Critter3 will always want to fight.

Critter4 is a Critter that has a "weapon". It will always walk in a random direction during the time step. Every time it does so, it changes the state of its "weapon". Fight depends on the state of the "weapons" — if the weapon is drawn (true) then Critter4 will fight. Otherwise, the Critter will not fight. However, Critter4 is honorable and will not attempt to flee in the fight method.

A possible quirk of the program is how the program interacts with certain commands. For example, if the user inputs in "Critter4 make", rather than output "invalid command: Critter4 make" it will instead output "error processing: Critter4 make". The current interpretation is that this is a prasing error, as it attempts to parse make but cannot due to the make being in the wrong position.