Report

Predator/Prey Simulation

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# Overview

# Tasks

1. Your simulation should have at least five different kinds of acting species. At least two predators, at least two non-predators. You can either treat plants as if they’re always available, or simulate their growth/death.
2. At least two predators should compete for the same food source.
3. Some or all species should distinguish males from females. For these, they can only propagate when a male and female meet - meaning they’re within a specified distance to each other.
4. Keep track of the time of day. At least some creatures should exhibit different behaviour at some time of day (e.g. sleeping at night)

# Challenge Tasks

1. Simulate plants. They grow at a given rate, but do not move. Some creatures eat plants. They will die if they don’t find their food plant.
2. Simulate weather. Weather can change, and it influences the behaviour of some simulated aspects. For example, grass may not grow without rain, or predators cannot see well in fog.
3. Simulate disease. Some animals are occasionally infected. Infection can spread to other animals when they meet