

# Bucket O'Fishies



A simulation of schooling and  
predator-prey interactions

# Objectives

- ☐ Create an interaction simulation
  - With fish (what else)
- Demonstrate predator-prey interactions
- Randomized and path based movement
- Relative position recognition
- Object oriented (fish)

# Interactive World

- User interaction is required to start program...

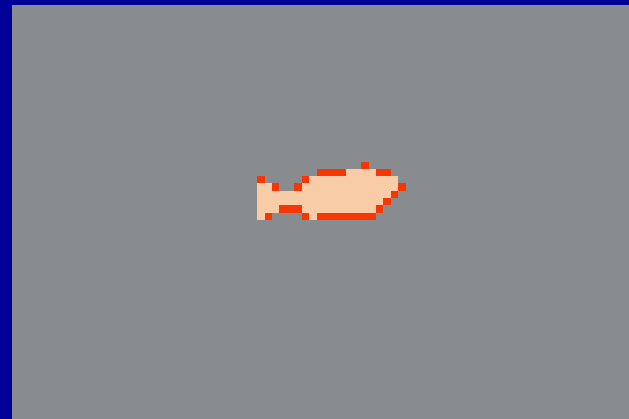
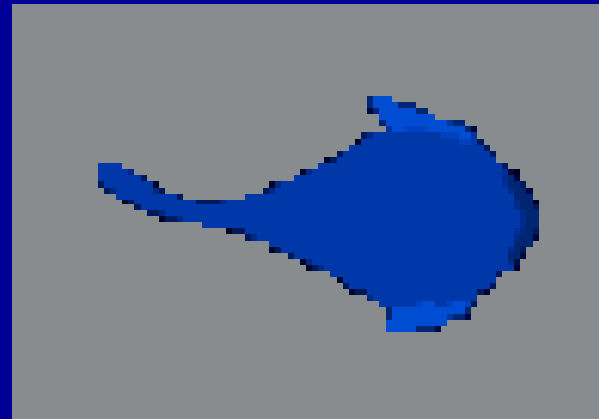
okay is a start button.

**Bucket O'Fishies**

start

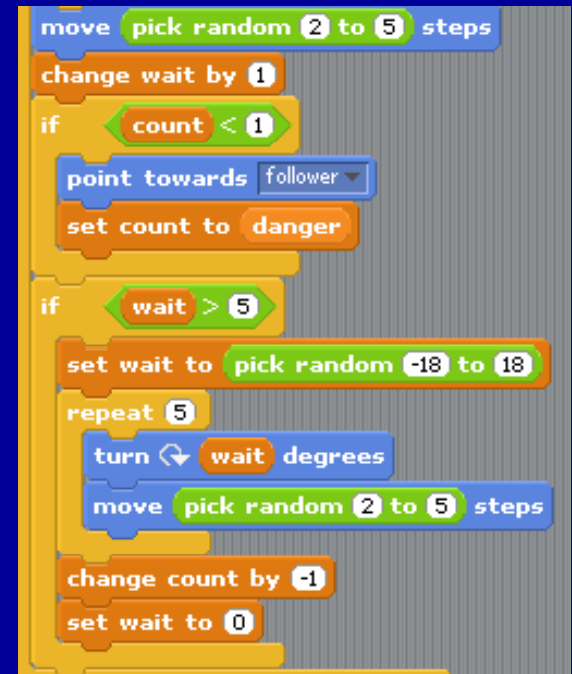
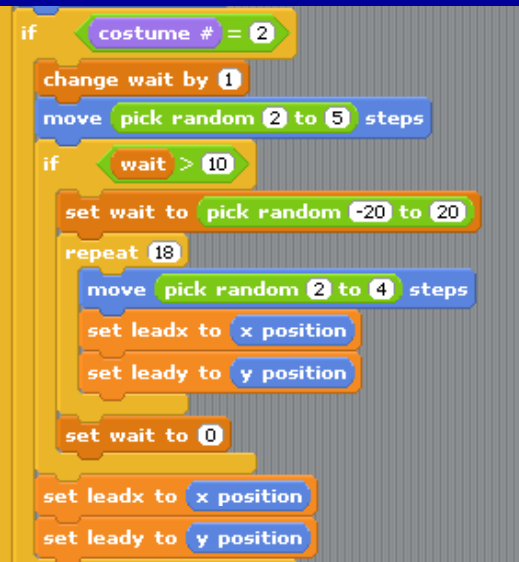
# Predator-Prey

- Predator
  - Large blue fish travels in straighter path than prey
- Prey
  - Agile, able to avoid predator, sometimes



# Randomized-Path Movement

- Left
  - random leader movement
- Right
  - Occasionally follow
  - Bum movement

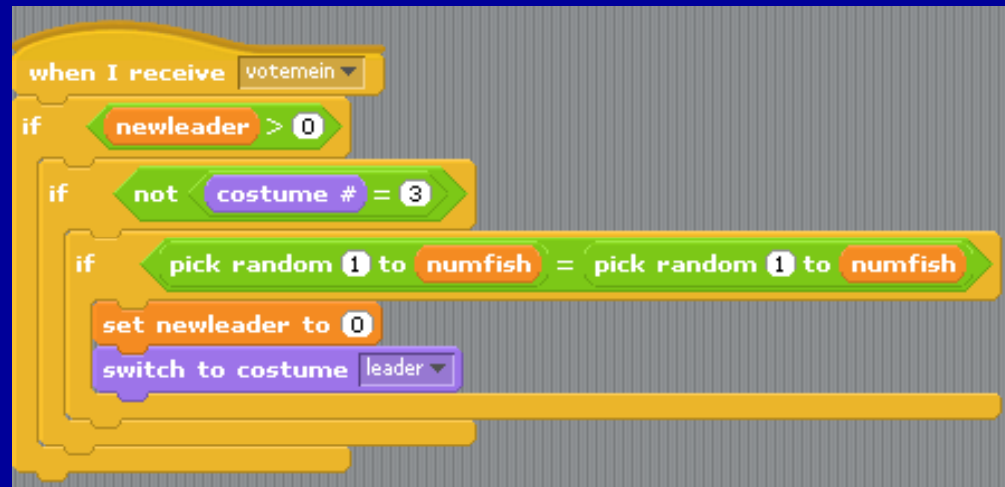


# Relative Position



- Returning the relative direction of the current leader
- Based on “*side project*” soccer game...

# Objective Fishies



- Fish are programmed to be individual
- Each one is capable of being the leader
- Bluefish target respective to follower sprite

GO.