Write-up for Advanced Class Development

Group 3: Hopper

Advanced Classes:

DataTracker:

DataTracker currently works as a vector of numbers and can add or remove numbers as well as return statistical data from it regarding the mean, median, min, max etc…

We will add the functionality to be able to track mode and variance. We will also update the functions so they are templated and can handle more than just numbers.

Additionally, DataTracker will be able to identify if either the prey or the predator has won by establishing when either "team" has overtaken more than 80% of the board.

Circle:

Speed change of circle when in proximity to enemy pred/prey

Individual characteristics of each circle (speed, size, color, energy, etc..)

Circle energy, circles start with 100 energy, this ticks down every second, as milestones are reached (70,50,20 etc..) the circle gets slower. If it reaches zero, the circle doesn't move and energy regenerates until it reaches 100 again.

Condition for predator to populate, consumes a certain amount of prey then bumps into pred