

Write-up for Main C++ App Development

Group 3: Hopper

Our main function will use the 5 classes we made to make a game of predator-prey. The game will have multiple circles (will use the circle class) bouncing across the game field (will use the surface class) at random with some marked as predator and some marked as prey. If a predator circle collides with a prey circle, then the prey disappears or “dies”. If the prey circle collides with a prey circle, another prey circle appears. If a predator collides with another predator, they bounce off of each other and nothing happens. The circles will have different colors to depict whether they are predator or prey. They will also have different speeds depending on if they are predator or prey. The prey will also speed up if it is within a certain distance of a predator. Additionally, the circles will have an energy level that decreases over time. The game will end once the circles present are 80% one “team” (will use the datatracker class). The score will be displayed at the bottom of what percent of the circles both predator and prey are.