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IGME 202, Section 5

Assignment: Flocking/Following

This project implements various flocking behaviors including separation, cohesion, and alignment to keep a flock of bird together as they chase down a giant floating piece of bread. Meanwhile, a turtle in the river below moves from stone to stone as it follows a pathfinding/following algorithm. Objects are weighted and have max speeds to make the scene interesting, and the birds avoid large “storm clouds” (dark spheres) as obstacles.

User responsibilities: The user can switch between four cameras: a main view, a view of the follower, a back view of the flock, and a front view of the flock. Additionally, the user can press L to show and hide debug lines for the follower’s path, the flocks’ average position, an the flocks’ average direction. The user may press R to randomize each bird’s position and cause the flock to have to regroup.

Known Issues: The birds can fly through the terrain if the bread spawns behind it.

Requirements not completed:

All requirements were completed as per the rubric.

Sources:

* Simplistic Low Poly Nature, by ACORN BRINGER on the Unity Asset Store.
  + Link: <https://assetstore.unity.com/packages/3d/environments/simplistic-low-poly-nature-93894>
* Boule Bread, by EMPTYBOX on the Unity Asset Store.
  + Link: <https://assetstore.unity.com/packages/3d/props/food/boule-bread-152054>