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AI for Games

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Architecture for Assignment

This Assignment consists of a Follow Path Steering class, a Path Pooling class, and a Path Smoothing class. The Follow Path class is used in order to allow the boids to steer through the assignment. These boids are given a Follow Path steering type and then are assigned AStar which in turn finds the path for each of these boids and returns the smoothed path through the Path Smoothing class. The Follow Path consists of an Arrive and Face variable that is used to make the boids arrive and face the nodes that they are to follow. In our Path Pooling class, we have a Store Path function and a Get Path function. The Store path is given a start node, and end node, and a path that it is used to store it inside of a map that we have in the class. The Get Path function is used to check whether the path has already been found based on a start and end, and if it has, it returns the path for the boids to follow. The Path smoothing class that we have is used in order to smooth the path that we give it. It does this by finding the path of the boids through the Find Path function. It then smooths the path using a Raycast function that we made. The Raycast function sends out rays for each and every node until it hits a wall, it then records the node before that hit wall and stores that node. It does this for every node until the end of the path is reached.

Who was in charge of what?

Kelly was in charge of transferring over the files from our previous assignment. She also did the Follow Path steering. Karim and Kelly worked on both steering patterns together.