Team No. 16

Team Members: Brian Jones, Finn Dobbs, Jacob Swearingen, Joshua Bull, Ryan Boyce

Project Name: Resource Management Simulator

Project Synopsis:

- Simulating maximum efficiency in the consumption of resources, reducing the necessary resources needed to maintain a modern society.

Project Description:

- This project aims to anticipate the increases in available surveillance and computer capacity in society to provide better, more efficient ways of living. This project is an introduction to an economic system that predicts individuals' actions and manipulates autonomous vehicles to provide resources at certain locations at certain times. As climate change and other factors which lead to economic uncertainty become more prevelant, information technology can serve as a means of organization and distribution to maintain stability. The end result of this project will be an AI program that can deal with uncertainty in the actions of individuals and make decisions in order to provide for them. Our project will involve us trying to create a central AI that can handle and use this information to optimize the resources of a given society of simulated individuals and "fulfillment centers", a metonym for the full factory-sale-delivery industry. We are aiming to use OpenGL to display in real time resources being delivered by drones to and from individuals.

Project Milestones:

Milestone	Estimated Completion Date
Design project architecture	10/12/20
Build object hierarchy	11/09/20
Simulate individuals' needs	02/15/21
Simulate all-knowing computer	03/29/21
Simulate drone delivery system	04/26/21
Build graphics interface	05/10/21

- Gantt Chart included separately

Project Budget:

- Estimated cost: $0.00
- Special Training:
    - OpenGl needed for graphics integration
    - Machine Learning