Drone Simulation System

Team 25

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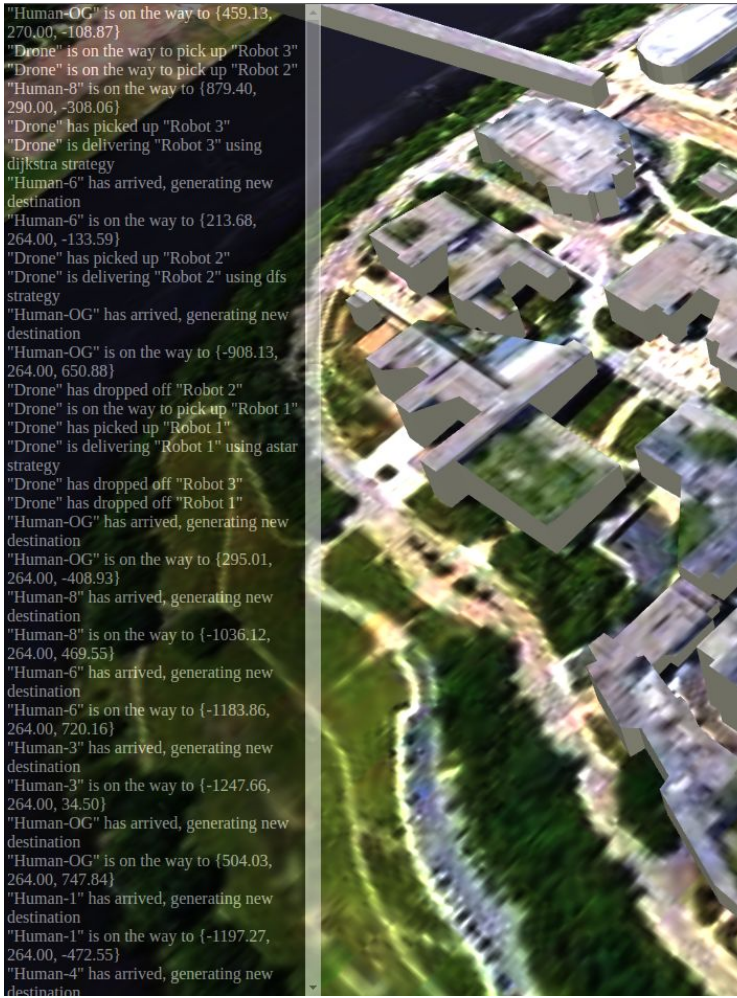
Feature 1 - Notifications

- Scrollable text bar
  - Receives events from backend
- Notifications from all entities
  - Comprehensive information
  - Easier debugging
- Observer pattern
  - Open to extension



Feature 2 - Data Collection

- Singleton pattern
  - Shared access of data collection class between entities
- Collects data on drones and robots throughout the simulation
  - type, id, position, destination, speed, available, pickedUp, delivered, strategy, totalTime
- Exports data as CSV
- Includes script to find longest time a robot had to wait for it’s trip
- Allows user to create an experiment with desired amount of Drones, Robots, and search strategy
- Further analysis from data possible
  - Find minimum number of drones needed for X robots, while minimizing time to get them to their destination

Demonstration