

**Project : Multiple Drones Coordination**

**Problem Sponsor : Dr. Zhong**

**Meeting Date: 2024-12-05 9:10 PM**

**Group Members Present: Brenden Martins, Matthew Paternoster**

**This meeting was optional and available for anyone to join in case there was any help needed with anything.**

**Review of Demo Presentation Content:**

- **Brenden M.:**
  - Presented an overview of the placeholder 3D environment developed for the demo using Blender, Unreal Engine 4 (UE4), and AirSim.
  - Explained plans to transition to GIS-based mapping using USGS 3DEP and Global Mapper 26.0 for more realistic terrain in the future.
  - Highlighted the development of a rudimentary keyboard and mouse control scheme for drone navigation and acknowledged the existing conflict with AirSim's default controls.
- **Matthew Paternoster:**
  - Provided an update on the User Interface Subsystem, showcasing the interface's ability to allow users to monitor drone activity and manage operations.
  - Demonstrated real-time status displays for drones, mission progress tracking, and an interface mockup for future mobile accessibility.

**Discussion of Individual Roles and Responsibilities:**

- **Brenden M.:**
  - Will present the Simulation Management Subsystem, explaining how the placeholder environment was created and its role in simulating disaster scenarios.
  - Will demonstrate the environment in action, focusing on terrain features, navigation, and the current state of the control scheme.
- **Matthew Paternoster:**
  - Responsible for presenting the User Interface Subsystem, showcasing its ability to interact with the simulation environment and manage drone missions.
  - Will highlight the interface design, its integration with the simulation, and the features available for monitoring and controlling drones in real-time.

**Action Items:**

- **Brenden M.:** Refine the 3D environment demo and prepare an explanation of future plans for GIS-based mapping and control scheme resolution.
- **Matthew Paternoster:** Finalize visuals and ensure seamless integration of the user interface with the simulation for the demo.