Read Me for drone assignment

Full Stack Engineer

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Included Files

The three included files that are of importance are:

1. Client\_facing\_website.aspx
2. Drone.js
3. Drone\_server.js

Setup

Client\_facing\_website.aspx

This serves simply as the main site which the user can see, I included this .aspx file as I am more comfortable designing a UI/UX within the .NET framework as this has been my main technology of choice.

It receives updates from Drone\_server.js and checks for movement, if speed for any drone within the system and its coordinates have not changed for 10 seconds it will flag it in such a way that is noticeable to a user at a glance.

Design of the page is meant to be simple and easily identify each of the drones' location, speed and movement.

Drone.js

This is a mock drone, meant to simulate a drone connecting and updating its details with the frequency requested by the project requirements whilst using as few resources possible.

Will connect to the server (Drone\_server.js) and send through the data required by the project and disconnect so as to not be constantly connected to the server potentially over using resources.

Uses a set of 10 drone ID's as I assume the fleet of drones will be known otherwise a function can be implemented that registers new units, Velocity runs on a set 10 count loop where velocity will be a pseudo random number randomly set with a 50% possibility of it defaulting to 0 to simulate a drone getting stuck in a tree or any other possibility that could befall a unit.

Drone\_server.js

Drones connect to this server and transmit their data , whereupon it is separated from a single comma delimited string into three discrete variables namely, drone\_uid; drone\_speed and drone\_coord.

these variables are then sent to the client facing (Client\_facing\_website.aspx) site for further processing.