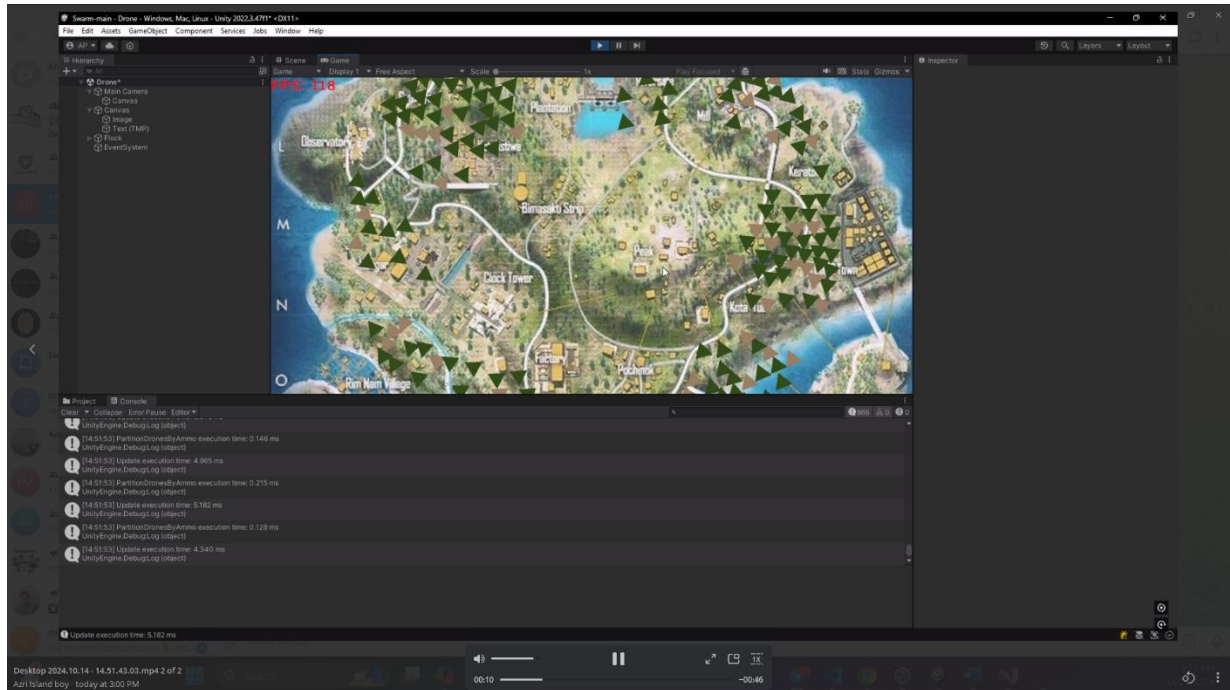


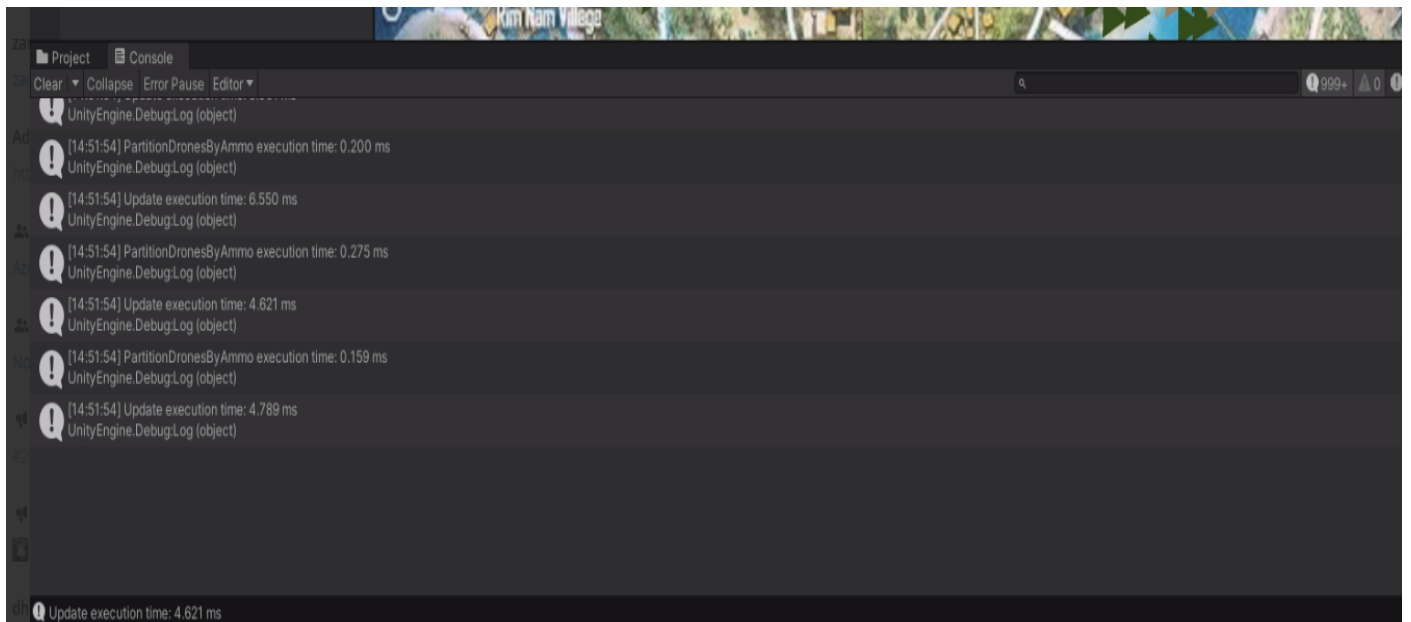
Drone Application

The chosen application for the drone swarm is in a military context. The code will partition the drones into two groups based on their ammunition levels. Group 1 will consist of drones with a high number of bullets, while Group 2 will include drones with lower ammunition. In this simulation, the threshold is set at 50 bullets: drones carrying fewer than 50 bullets will be assigned to Group 2, and those with 50 or more max 100 will be placed in Group 1.



The image below shows a simulation of the drone swarm. Drones in Group 2 (with fewer than 50 bullets) are shown in green, while Group 1 drones (with 50 or more bullets) are represented in light brown. The code randomizes the bullet counts, potentially changing the drones' colors based on their new group assignment. The FPS shows 104 FPS.





At the consoles shows the runtime.

PC Specs for test:

CPU: Intel i5-11300H

GPU: Nvidia RTX 3050

RAM: 16GB

Storage: 500 GB SSD