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Summary

Built a group and conducted research to set topic of a project we should conduct.

What SWATTER completed this week:

- Narrowed down candidates could be a topic. The topic is development of application to detect dangerous drones and follow up.
- Set our target dangerous feature which is a kind of dangerous drones have. Target feature is that dangerous drones have heavy payloads and make different sound.
- Set a research point to determine a drone whether it is dangerous or not with expected sound according to appearance.

Things to do by next week

- Research to determine whether a drone has payloads or not.
- Research to determine the kinds of payloads.
- Research to determine weight of payloads using sounds.
- Research to increase accuracy with images
- Research about correlation between Acoustic UAV payload detection and Object Detection of Image.

Problems or challenges:

- Determine the kind of payloads.
- Determine weight of payloads using sounds.
- Accuracy of determination.

References

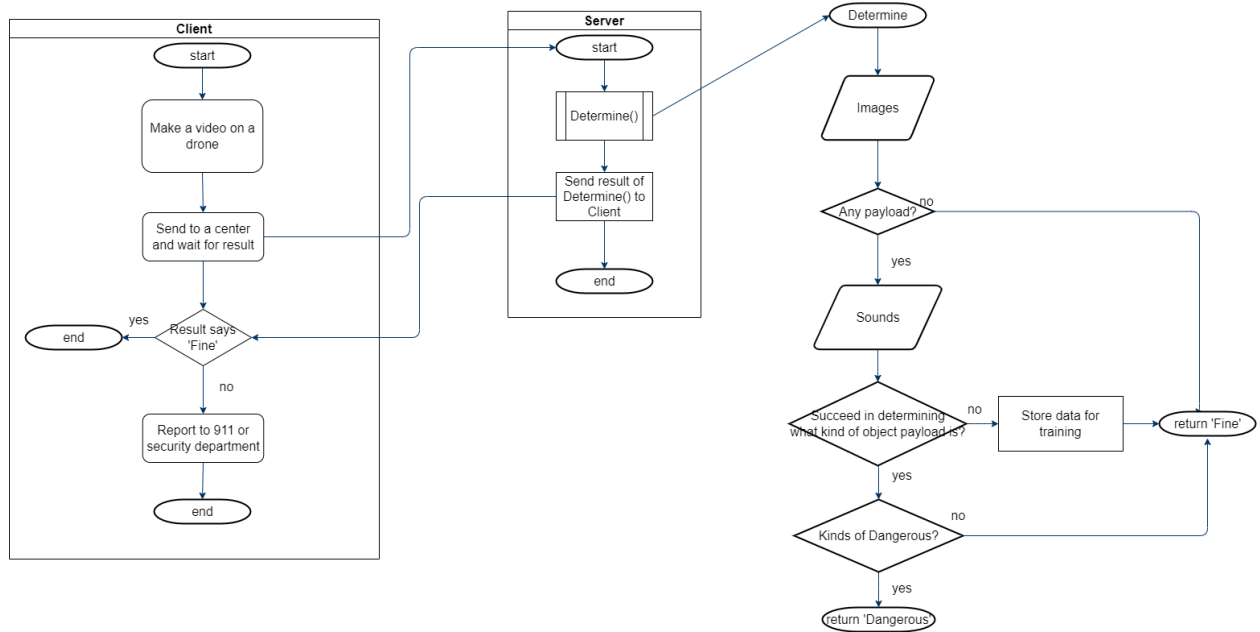


Fig. 1. Flowchart of System

[1] Yaqin Wang, *et al.* "A Feature Engineering Focused System for Acoustic UAV Detection." 2021 Fifth IEEE International Conference on Robotic Computing (IRC), 2021.