August-10-2020 | FlyUC
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P1 UAV Controls Guidelines

Purpose

The purpose of this document is to document and plan the future implementations needed once the hardware is connected and the electronics system is in place.

Component Details

The purpose of *UAV* is to autonomously navigate through a set of given waypoints.

To meet the overall & subsystem requirements, the things needs to be done are:

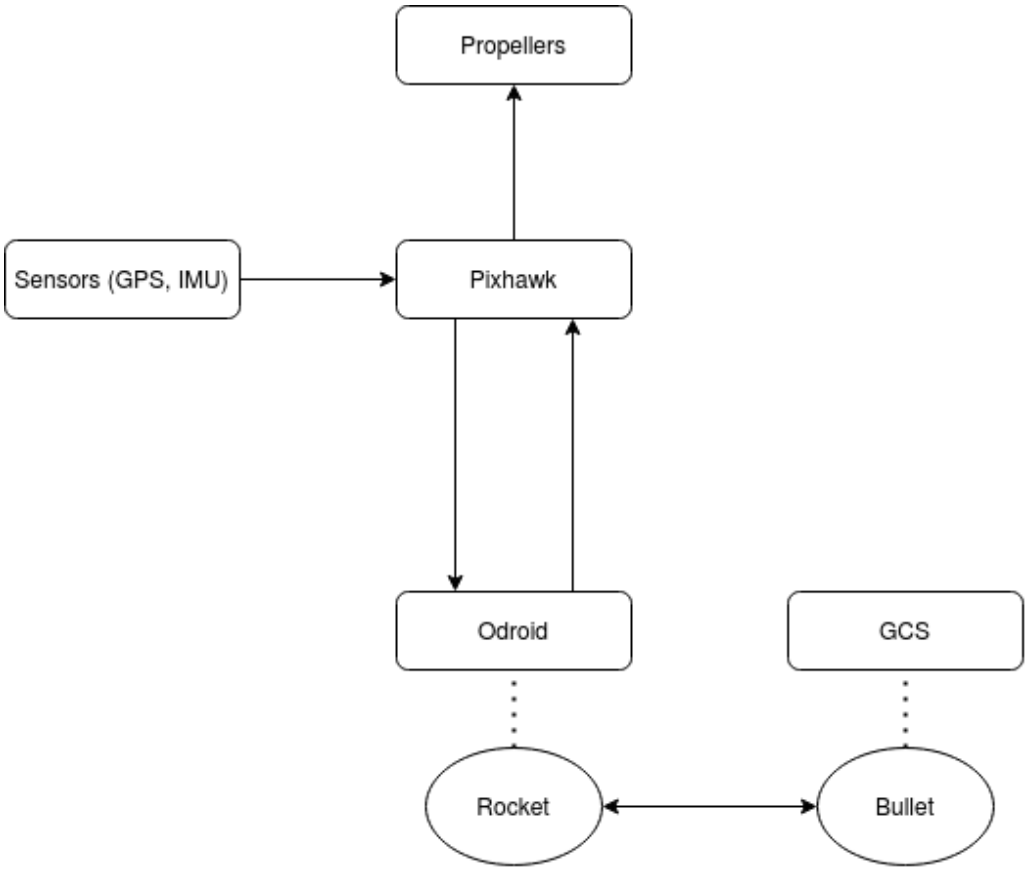
1. Install softwares on Odroid
2. Test Rocket and Bullet on UAV and GCS for communication
3. Test algorithms on hardware through flight tests

Timeline

Low Priority
Medium Priority
High Priority

- **Task #1**: Collaborate with UAV master lab, Mr. Bryan Brown for hardware assembly guidance, flight tests.
- **Task #2**: Identify optimal algorithms for specific use case, intended to test A* for deliberative planning (global, static obstacles) and RRT for reactive planning (local, dynamic obstacles)

Additional Details and Notes



Supporting Documentation (For Reference)

Concept of Operations
Hardware Layout
Allocation Requirements
SDR - Internal Version
Design Logic