Drone Information

Connection to the drone:

- We need to set up a UDP server and establish a connection to the drone. This allows us control the drone with text commands. We are given the program to set up the server.
- We connect to the drone by providing it's IP address to the server we create along with it's UDP port number. We will
- It sounds a lot scarier than I believe it will be. Ideally we will be able to implementing this on the start up of our software.

Capabilities:

- Can move forwards, backwards, left, right, up and down
  - Movement commands accept integers, the value of 1 integer translates to 1 cm of movement.
  - So to raise the drone by 1 meter, we need send it the following command: up 100
- Can rotate
  - Clockwise
  - Counter clockwise
- Can flip
  - I question the usefulness of this one.
- Can stop
  - Hovers in place at point where it stopped.
- Can set speed
  - Speed moves in cm/s
- Can send a video feed
  - The server receives the stream.
  - Stream can be implemented into software.
- Remote controller programming
  - It seems that we can code a remote controller for the software.
- Can detect a mission pad

    - We can set it to start attempting to detect a small pad with a pattern it can recognize.
    - I believe the drone comes with 3-8 of these, with patterns the drone can distinguish between.
    - It has both forward and downward detection.
    - We can disable/enable both directions of detection independently.
    - Detection frequency: 10hz, or 1 check every .1 seconds
        - If we are only doing 1 of the directions, we get 20hz, or 1 check every .05 seconds.
- Can provide us status information:
    - We can request the drones speed, battery life and flight time.