Birdcall

The Birdwatchers
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Vision Statement

Birdcall is a mobile phone application that enables the user to control their drone using their voice. The user will speak commands into the app, which will communicate with an onboard Raspberry Pi to send commands to the drone. The user will be able to set up waypoints through an on screen UI, since it would be cumbersome to speak coordinates.

- Takeoff.
- Goto waypoint X.
- Fly up/down/forward/backward Y meters.
- Return to launch.
- Land.

Go to waypoint 3

Project Plan

Week 10: Define users stories, assign user stories for first sprint, design screen mockups, create architectural sketch, and look into offline NLP libraries.

Week 11: Write architectural spike that allows us to speak into a basic app, send it to a Raspberry Pi, and print what we said.

Week 12: Connect Raspberry Pi to the drone and figure out how to communicate between the phone and the Raspberry Pi out on the flying field. WiFi? Bluetooth? Our deliverable will be a drone that can respond to a voice command to takeoff.

Week 13: Further develop the UI and add support for more of voice commands. Our deliverable will be a fully functioning version of the app that allows the user to issue commands for takeoff, flying to waypoints, moving X meters from current location, landing and, returning to launch.

Week 14: Last touch ups and testing of application. Our deliverable will be our final project demonstrated at the flying field.