CMPE 195B

9/17/2017

Update for Project ARD

Group Updates:

Anahit

* Helped with designing framework for whole drone
* Ordering miscellaneous parts
* Helped group with basic design of circuits

Ali

* Looked into MAVLink protocol
* Researched Ublox GPS module to see if it will work with Crazyflie
* Put together information for ordering of parts

Max

* Assisted Brian in developing design architecture diagram
* Found GPS unit which would function with CrazyFlie <https://www.u-blox.com/en/product/max-8-series>
  + Pros: Lightweight, small, lower power consumption, compatibility with CrazyFlie
  + Cons: No programmable flash and no backup power

Brian

* Worked on hardware schematic
  + Still learning how to use Eagle CAD Schematic and PCB designer
* Spec’d out parts for Rasberry Pi Zero W power supply
  + 6 x AA Energizer batteries
  + 5V 2A max supply
    - Going to use the [eBoot Mini MP1584EN DC-DC Buck Converter Adjustable Power Step Down Module 24V to 12V 9V 5V 3V, 6 Pack](https://www.amazon.com/eBoot-MP1584EN-Converter-Adjustable-Module/dp/B01MQGMOKI/ref=sr_1_3?ie=UTF8&qid=1505705036&sr=8-3&keywords=mini+buck+converter)
* Generated BOM for parts needed to complete hardware integration
  + Found 3 pin Molex connectors for hooking up to Xiro Drone motor pins
  + GPS Module
  + Header pins for RPi Zero