**Project:** Group #19 | Raspberry pi / Drones

**Problem Sponsor:** Company/agency and contact point.

**Meeting Date:** 2023-09-18 / 11:00 AM – 2:00 PM

**Group Members present**: Carlo Leiva, Aleysha Santiago, Rayan Rabbi, Colton Rohan

**Group Members absent**: All members were present.

**Next Meeting: Wednesday 9/18**

**Summary:**

Since there was no class session, we decided to meet up in the Engineering East study rooms to meet as a group and fully solidify the plan for our implementation. We spent some time discussing our body idea and if we were going to use a single prop drone or a quad propeller drone. Another thing debated was what pieces we are going to use to build the drone, there are many different parts we can use to achieve lift, but we spent some time talking about which path would be more practical. For controlling the drone, we talked about the idea of using a flight controller or a raspberry PI Pico. We decided that the raspberry pi Pico would require a bit more coding but overall should be the smarter path. Another one of the issues we ran into was the weight of the drone, we needed to make sure and use parts that are used don’t weight the drone down to the point where it can’t achieve lift. We met up with perry to get his input on his idea of what part we should use along with getting the parts we will need for the project ( Raspberry PI 0, Raspberry PI Pico )

Game Plan:

* 1 raspberry pi Pico, use a flight software, 4 ESC modules, 1 lightweight battery, quad propellor, receiver, transmitter, gyroscope.
* Choose between arduopilot/betaflight and download the flight software.

**Action Items:**

* **Carlo has ordered some parts for the drone that will be here by Wednesday. (Motor, flight controller, ESC, Propellors)**
* **Aleysha is going to talk to perry and ask him for his input on our project idea and any parts we might be able to borrow to build out the drone.**
* **Aleysha is going to work on a flight schematic to have a rough idea of what we are going to build.**
* **Colton is working on the group write up to document the progress of the project as we move along.**
* **Rayan is working on researching the flight software for implementing it onto the raspberry pi.**
* **Everyone is going to spend some time researching parts for the drone to find lightweight and cheap parts.**
* **Everyone will spend time downloading the flight software and using it on their own machine.**
* **We will meet up as a group again this week to work on the actual build of the drone.**