Group: May 1738

Project: Flying flashlight

Advisor: Professor Gary Tuttle

Members: Peter Bonnie, Brady Koht, Sebastian Roe, Joseph Wickner, and Scott Melvin

- **Weekly Summary**

    There has been a lot going on with our group over the past week. We are still waiting for our parts to come in since the dealer, hobbyking, can take more than a week to ship from their various warehouses. With the time that is not being spent working on the quadcopter, our group has started making the website and revising the design document. Since the design document due date got pushed back, a couple of group members spent a lot of time revising the document to ensure accuracy and an adequate amount of detail was presented. Another task that was accomplished was the preliminary design for the website which Joe and Sebastian started. Additional content will be put up on the website later but the basic template is there so later revisions will be easy to do.

    To focus on a different issue, we are slightly concerned for our groups ability to finish our first iteration of the project. This is because our parts may take while to be shipped. Thus, the matter was discussed and it was proposed that we might order a cheaper ready-to-fly quadcopter to complete the proof of concept design. Then, second semester can be completely dedicated to a DIY design that entails building the entire quadcopter from scratch. More research will have to be done on finding a smaller, more affordable drone.

- **Past week accomplishments**
    - Peter: Proof read final iteration design document, assisted with website design
    - Brady: Proof read final iteration of design document.
    - Joe: Created the basic template for the website and helped revise final iteration of project plan. Created the logo for the flying flashlight team.
    - Sebastian: Created the basic template for the website and proof read final iteration of design document.
    - Scott: Revised much of the design document to ensure consistency and accuracy.

o **Pending issues**

In the weekly summary it was discussed the ordered parts may take a while to be received. Thus we are discussing the alternative option of buying a ready-to-fly copter and achieving a proof of concept design before final presentations. We have discussed the subject with our advisor and he says it is OK as long as we find a functioning copter that is not too expensive.

o **Individual contributions**

NAME	Individual Contributions	Hours this week	HOURS cumulative
Peter	Project plan, website	2	16
Brady	Project plan	2	16
Scott	Project plan revision	4	17
Sebastian	Project plan proof read, website	4	17
Joe	Project plan proof read, website, logo	4	17

o **Comments and extended discussion**

If it is the case where we buy a ready-to-fly copter, then research will have to done on the flight controller that is used on said copter. Although this option might be time consuming, it is important we are able to deliver a proof of concept design by the end of the semester. The good news is the control box design and the microcontroller that communicates with the flight controller do not need to be changed. The microcontroller code will probably have to be modified for our custom design but we will have had some practice by that time.

o **Plan for coming week**

For the coming week our group will research some ready to fly quadcopters that can be shipped in a short period of time. We will not take the decision lightly since picking just the right quadcopter could drastically save us time. Additionally, it was discussed that Scott will start on the custom frame design for our custom made quadcopter. This way when the parts arrive the frame can be manufactured as soon as possible.

We will continue to work on the website by adding the documents our group have created so far and posting a picture of the group on the "about" page.

o **<u>Summary of weekly advisor meeting</u>**

The predicament of not receiving parts soon enough was discussed with Professor Tuttle. Moreover, the solution of buying a new quadcopter was approved by him as long as it is a smart choice. Additionally, we conversed about funding for EE 492. We are unsure if we are charged a lab fee for 492 which it would be nice to know if we have more funding for next semester.