

Group number: 1705

Project title: Drone Energy Delivery

Client &/Advisor: Geiger/Chen

Team Members &/Role: Dustin Reed: Communication Justin Howe: Key Concept, Jeffery Schons, Chidike Ubani: Webmaster, Eric Himmelblau: Team Lead

o **Weekly Summary**

This week, we looked at the mobile sdk for controlling the drone. We decided that we will control the drone from a server running an android app. We starting looking at how to use the provided sdk to program an app.

o **Past week accomplishments**

- Dustin Reed: Downloaded the SDK, and got the sample app running. Will test the sample app when I can get the drone.
- Jeffery Schons: Downloaded Android Studio and SDK
- Avanish Kuntla: Downloaded SDK.
- Chidike Ubani: Downloaded Android studi and SDK, read a lot more in depth on SDK
- Eric Himmelblau: Downloaded SDK, looked up flight control coordinate systems and explained it to the team.

o **Pending issues**

- Dustin Reed: We still can't fly the drone because it is owned by the university and we have licensing issues. It will be hard to move forward if we cannot be sure our programs do anything.
- Jeffery Schons: Having trouble installing SDK, as well as the Drone university licensing issues (mentioned by Dustin above)

o **Individual contributions**

<b><u>NAME</u></b>	<b><u>Individual Contributions</u></b>	<b><u>Hours this week</u></b>	<b><u>HOURS cumulative</u></b>
Dustin Reed	Installed the SDK and played around with Android studio, read	5	13.5

	documentation on the SDK and programmable missions, and attended meetings		
Avanish Kuntla	Attempted to install SDK, familiarized myself with DJI coordinate systems, attended meetings, read through DJI tutorial for Waypoint missions, Started to work on waypoint mission app	6	15
Jeffery Schons	Attended meetings, Tried to install the SDK. Installed and started to get familiar Android Studio. Read through the DJI mobile-SDK documentation	4	12
Justin Howe	Researched limitations of available DJI	3	11

	models in our price range, Attended meetings		
Eric Himmelblau	Played with SDK, researched coordinate system	4	12.5
Chidike Ubani	Downloaded and worked with SDK	4	10.5

○ **Comments and extended discussion**

We are progressing fairly well, but we will be bottlenecked until we can actually fly our drone. We are waiting for the university to settle the licensing issues. Prof. Geiger is taking care of it.

○ **Plan for coming week**

- Dustin Reed: Write out an app that will take off, fly to a location based on coordinates, land, take back off, and return home.
- Avanish Kuntla: Use sdk to create an Android app that will run a simple waypoint mission.
- Justin Howe: Be able to do basic location and communication with the drone to give commands from apps built with the SDK.
- Jeffery Schons: Make an Android app using sdk to have the drone do a waypoint mission.
- Eric Himmelblau: Play around with the SDK and make a few test programs
- Chidike Ubani: Get comfortable with android SDK, hopefull make a simple app with it

○ **Summary of weekly advisor meeting**

Our advisors were both out of town this week, so we were unable to have a meeting

**Grading criteria**

Each weekly report is worth 10 points. Scores will be awarded as follows:

- **8 – 10:** Progress for your project seems to be suitable. Documentation and hours reported by team members are adequate.

- **6 – 8:** There is scope of improvement both in your report and your project progress. Can consult with instructor/TA after class for further inputs.
- **< 6:** Please talk to instructors/TA after class hours about any difficulties that you/your team is facing.