

sdmay18-30: Intelligent low-altitude air traffic management system
Week 10 Report
December 26 - December 3

Team Members

Humaid Al Kaabi — *Software Developer*

Suhail Aldhaheri — *Communications manager*

Jun An Tan — *Software key concept holder & Report checker*

Saad Alsudayri — *Simulation of Trajectory function*

Summary of Progress this Report

we had worked on finishing the last requirements of this semester, we worked on developing a useable .exe file for the users. The .exe file has all the work that we had done for this semester and can be used by anyone. We also worked on developing few more functions in order to test our calculation. First, we have developed a function that write a Matlab code that run simulations for all the ongoing flight list and request list. Second, we wrote few functions that help give more accurate calculations for the position of the aircrafts. Moreover, we debugged some problems with the functions that store the time that we noticed that the previous functions could not handle. Also, we wrote two functions in order to enable the user to input demands or flight requests manually. Finally, we did few tests to make sure that calculations is going smoothly and results were as wanted.

Pending Issues

For the upcoming semester we will ensure that our GUI works alongside with the newly assigned tasks

Plans for Upcoming Reporting Period

As we approach the end of the semester, we will be creating a exe file to display whatever back end codes that we had work throughout this semester. We will be finalizing final drafts for the project plan, design document and doing up a final presentation for both our client and the panel.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Humaid Al Kaabi	For this part of weekly report I mostly worked in doing the final debugging for all the work that we done in this semester. First, I did modify the functions that deal with time variables and improved some of them in order to have more accurate result. I noticed that we needed more data in order to have more accurate calculations so I modified the some of the classes so we can store what we needed. finally, I created two functions in order to enable the user to input demands and requests manually to the software.	6	92

Suhail Aldhaheri	I did more work on the simulation I did in the last few weeks. I fixed the for loop so that whenever an aircraft reaches a warehouse, it will delete itself along with the path. I also fixed the flickering that used to happen with the plots and made it look better. I made the warehouse look more presentable. I looked over the java code to see how I can use my matlab code in the java code. I'll have to figure out how to get the information from the ongoingflight function in java and use it in the matlab.	6	68
Jun An Tan	I have worked on developing a function that write a Matlab function that show the simulation for all the flights in airfield until all the requests are done. It takes a copy of the current of ongoing flight list and the list of the requests and assume that time goes 10 time faster. When we run the Matlab Function we can see what will happen if the program run normally but in a faster way.	8	78
Saad Alsudayri	Prepare for final meeting with the professor Peng Wei and prepare for final presentation. proofread the design document as well as plan document.	5	78