sdmay18-30: Intelligent low-altitude air traffic management system

Week 2 Report
September 18 - September 24

Team Members

Humaid Al Kaabi — *Software Developer*
Suhail Aldhaheri — *Communications manager*
Jun An Tan — *Software key concept holder & Report checker*
Saad Alsudayri — *Report & quality manager*

Summary of Progress this Report

In the beginning of the week, we divided the main project, software, to different parts to make it easy to work on. For this week we decided to work on code that calculates the position of an aircraft with respect to the time. Using the departure, destination location and the average flying speed of the drone, we were able to create a code that updates and displays the GPS location with respect to time.

Pending Issues

The GPS output for our code is about 98% accurate, and we are planning to make it more accurate for our final software.

Plans for Upcoming Reporting Period

Next, we are planning to create a code that plots the total trajectory for a given drone on a map. Also,we will continue to improve this week's code to make it work for different cases(flying north west, south east, south west). Since the current code works only when the drone is flying to the north east.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Humaid Al Kaabi	I worked to find the right IDE to help us in developing our software, and looked into the right programming language that fits the making of our software. We ended up switching from using C to Java. I also been doing research to understand altitude and longitude, and find the right formulas to do our calculations . I also worked mainly in writing the code and testing it.	15	21
Suhail Aldhaheri	I did meetings with the professor and also with the group. I did research and worked on the project plan and weekly reflection. I helped the teammates with the code as some	7	12

	of them have never used java.		
Jun An Tan	Researched on possible IDE to use & finally came into conclusion with the team as to which IDE best fits our purpose. Did reports proofreading and drafted a possible idea as to solve one of the tasks (random demands generation)	9	15
Saad Alsudayri	I helped in the trajectory algorithm, and I worked on the weekly report as well as the plan for our project.	7	12