Unit of Study	COMP3888
Team name	COMP3888_T15A_Group1
Project Name	Optimal Path for Drone Delivery
Project start date	Monday, 07/09/2020
Project end date	Sunday, 22/11/2020
Project point person	Nicholas Hui
Report Date	20/9/2020

Quick description	Path finding algorithm implementation, basic world loading, charger station randomization algorithm development

Status item	Status up to last week	Planned for next week
Scope	Gain further experience in path navigation based on coordinates or point to point in the simulator. Simulation world rendering and loading a fixed world. Algorithm design and simple implementation.	A minute video summary work for each team member. Modelling buildings in a simulator. Implementing algorithm in a simulator
Time	The team is slightly behind schedule due to difficulties in loading up the simulators and environment, phase 1 algorithm implemented but not fully tested, other tasks are on track.	
Quality	Able to satisfy client tasks.	
Planned Activities		Able to model buildings and environments Simple randomization algorithm development
Achievements	Members able to connect drones in the simulators. Path navigation in requested simulators. Able to extract world information such as coordinates for manipulation. Can load the majority of worlds for both flight stacks (Px4 and ArduPilot)	

	Able to design and implement a simple command line path finding algorithm. High level ideas for other factors are produced.	
Major deliverables	Documentation on modelling the weather. Python code and code document for algorithm realisation. Core algorithm design documents. (up to pure Dijkstra's phase 1) Basic code to control the drone.	Documentation on modelling the weather. Code to send the drone on a mission with user defined waypoints as inputs High Fidelity prototype of charging station randomization program. Battery (phase 2) implemented, tested and integrated with simulator. Produce related documents.
Major issues		Ways to connect the code with the drone action in the simulator. Generating random coordinates relative to the drone for the charging station given a certain radius within the program.
Major risks	Not able to load some of the worlds due to lack of packages in the simulator.	
External dependencies	NIL	NIL
Estimated effort (h)	12hr/person	12hr/person
Recorded effort (h)	14hr/person (on average)	
Overall Status (RYG)	GREEN	

*project status report should be brief but informative – may use dot points where appropriate