S.No	Task	Description	Steps	Status
1	Server Connections to Pixhawk in Srone	Client in drone should automaically connects to server when battery is connected, and then on hitting an api by taking drone id it should connect to the drone with that particular id	Implementing port connections	☑
			Developing server sockets for connect and disconnect the drone	☑
			Drone should connect to server automaically if battery is connected to it	☑
			Drone should automatically disconnect from server if battery disconnnected	☑
2	Retriving drone data from pixhawk	Once if the connection is established, get the drone data like messages, warnings, parameters from pixhawk to server via sockets in client and server	Implement code for attitude, altitude, battery percentage, Latitude, Longitude details	☑
			Implement code for getting all live alerts for drone such as Low Battery Warnings, Pre Flight Errors, Post Flight errors etc	☑
			Implement code for getting all messages like Armed, Disarmed, Changing modes etc	☑
3	Triggering Features	R&D on trigger the events like thust, emergency landing, return to launch, hover, alt hold, loiter, loading a mission, altitude holding, auto mode	Implement server with endponts of all the features	☑
			R&D on implementing takeoff, landing, emergency landing, rtl, custom thust generation	☑
			implement the mission file for loading it to the drone and implement the automode to start execute the mission	☐
			Implement error handing for drone	☐

	4	Raspberry pi integraton to drone	Implement internet connection to the raspberrypi using 4g waveshare module and the connect raspberrypi to drone, and if the battery connected to the drone, it should trigger the automatically turn on raspberrypi, 4g module and drone as well. as soon as Raspberry pi gets powered, it soould run client code which listens to server connections	Implement hardware connections from 4g module to raspberry pi including power connections and then provide internet connection to raspberry pi using 4g module	☐
				Run the client when battery connects and listen to the server	☐
	5	Testing the end points	Test the endpoints apis that we generate	Test the following end points live	☐
	SWARM DRONE IMPLEMENTATION				
	6	Implement multiple drone automation	Implemnt endpoints which can select multiple drone inorder to make drone swarm	Implement server for Connecting multiple drones at a time, Data retriving and sending to server	☐
				Implement client scripts for connect and communicate with the server	☐
	7	Implement a basic UI where we can map the drones	Using UI we should be able to select the drone and position it , so that it should automatically take the height the height, latitude, longitude of drone using that ui and then return a json data wich all the data of plan	Implement UI for planning drones position and should the status and availability of drones	☐
				Implement functionality of taking lat, lng, and height of planning drones and generate json file	☐
	8	Implement the client code which can command the drone by taking json data of swarm plan	By taking json file. everydrone should listen to its respective command and position accordingly	R&D on client implementation for swarming the drone by taking json data	☐
				Deploy the drones as per the plan	☐
				Error handling	☐