**PROJECT DIARY**

**Indoor drone project**

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|  | PROGRESS UPDATE | | | PLAN FOR NEXT WEEK |
| Monday 07/10/2019 | * In this week, we’re having a meeting to discuss about project. | | | * Have a meeting with client to get more details about project and milestones. * Have a meeting with supervisor to discuss about project. * Prepare for the proposal. |
| Monday 14/10/2019 | * We have prepared layout for the proposal presentation. * Checked the hardware components that we had before. | | | * Complete proposal presentation and send a copy to supervisor to review before printing out (before 23/10/2019) |
| Monday 21/10/2019 | * 18/10/2019: Have a meeting with client for first time. We have collected the milestones and steps to begin with. * Complete the proposal presentation. | | | * Starting first stage of project: build a drone (from scratch or based on existing platform). * Research for flight controller. * Research for drone’s components which are compatible with selected flight controller. |
| Monday 28/10/2019 | * 24/10/2019: Had a successful proposal. * Have a meeting to discuss about coordinator’s feedbacks and take note. * Still research for flight controller. * We have tested all drone’s component we had and make list for what to buy or replace. | | | * Continue to research for flight controller. * Report the current status and request for buying drone components. * Buying drone’s components and wires. * Buying stuffs for soldering * Learn how to solder. |
| Monday 04/11/2019 | * We have decided to use Mateksys F405 mini flight controller for building drone. * We have chosen betaflight platform for drone configuration and diagnose. * Have soldered some of the connetion wires of drone components. * Haven’t bought the receiver and transmitter because it’s out of stock. | | | * Try to find receiver and transmiter * Complete soldering wires and connector. * Have basic knowledge about betaflight platform and configure the drone. |
| Monday 11/11/2019 | * We have bought the receiver and transmitter. * Issue: some of welded joints have been loose therefore the connetion is not stable. * Issue: transmitter configuration. | | | * Try to complete welding all the joints. * Fix the transmitter configuration * Testing drone to see if all the components is stable. * Start to build a drone 3D sketch. |
| Monday 18/11/2019 | * Issue: one of the ESCs has been down. And we have to replaced it. The tesing progress has been delayed. * We have completed to config the transmitter and the signal is stable. * All joints have been welded. | | | * Test the drone with transmitter. * Report to the client about current status. |
| Monday 25/11/2019 | * Have a meeting to discuss about stage 2. * Issue: the current flight controller can not be integrated with automatic functions. | | | * Have a meeting to discuss to finding another replacement for flight controller. * Research another ways to automatically controlling drone. |
| Monday 02/12/2019 | * AWAY:   + Learning with AUT lecturer. | | | |
| Monday 09/12/2019 | * Testing flying functions. * Researching building drone with Arduino for automation control. | | * Building drone with Arduino. * Preparing first prototype for client. | |
| Monday 16/12/2019 | * We have researched a source code that help buiding Arduino drone. * We have demostrarted first prototype to client and supervisor. * Issue: while flying, drones cannot stablize itself. | | * Try to fix drone configuration * Start to build and testing Arduino drone. | |
| Monday 23/12/2019 | * Have tested the source code with transmitter and reciver. * Still fix the drone configuration issue. | | * Try to complete drone configuration. | |
| Monday 30/12/2019 | * AWAY:   + New Year’s Eve   + Still research for drone automation implements   + Still fixing drone configuration | | | |
| Monday 06/01/2020 | * Fixed the drone configuration. | * Prepare for informal review with coordinators. * Demonstrating second time to client and received feedbacks. | | |
| Monday 13/01/2020 | * Have prepared for infomal review. * Recorded drone behavior for informal review | * Have informal review with coordinators. | | |
| Monday 20/01/2020 | * Issue: milestione delayed because all team members focusing on building drone. | * Have team meeting to discuss current status of project and make change. | | |
| Monday 27/01/2020 | * TET HOLIDAY | | | |
| Monday 03/02/2020 |
| Monday 10/02/2020 | * Decision: split the team into two group for parallel: Hardware team and Software team. | * Start to work on stage 2. * Buying new flight controller for implement automation control and wifi connection. | | |
| Monday 17/02/2020 | * Still waiting for new flight control to be delivered. * Research software tutorial | * Setup flight controller and integrating it with the existing components * Configure | | |
| Monday 24/02/2020 | * Automation script for virtual drone SITL * Learning tutorial of hardware on Udemy | * Assemble drone version 2 * Environment setup for Ardupilot * Config Raspberry pi | | |
| Monday 02/03/2020 | * Config Raspberry Pi * Assemble Drone version 2 * Config flight controller * Coding Env setup * No GPS automation script for SITL | * Calibrate Drone version 2 * Setup environment for ground control station (PC). * Test Drone version 2 | | |
| Monday 09/03/2020 | * Calibrate Drone version 2 * Sketching map for SITL * Test Drone version 2 | * Prepare for mid-review | | |
| Monday 16/03/2020 | * Debugging script * Prepare for mid-review | * Having mid-review * Continue debug software | | |
| Monday 23/03/2020 | * Mid-review | * Fixing Software problem | | |
| Monday 30/03/2020 | * Debug and Fix code | * Hardware debugging * Simulation update | | |
| Monday 6/04/2020 | * Check and fix hardware problem | * Tello SDK research * Checking hardware | | |
| Monday 13/04/2020 | * Research Tello SDK * Research OpenCV * Fixing hardware | * Develop web application * Document history team conversation | | |
| Monday 20/04/2020 | * Init backend web application * Init frontend web application | * Design UI and architect of backend | | |
| Monday 27/04/2020 | * Hardware debugging * Drone web controller * Test backend | * Update Portfolio * Improve frontend * Drone web controller | | |
| Monday 04/05/2020 | * Update team conversation * Change UI in frontend * Add more functions to backend | * Improve drone web controller * Update Portfolio | | |
| Monday 11/05/2020 | * Update Portfolio * Testing web application | * Update portfolio * Client meeting | | |
| Monday 18/05/2020 | * Update Portfolio * Client meeting and review | * Finalize portfolio and others document | | |
| Monday 24/05/2020 | * Finalize all document * End project | * Final presentation | | |