**Intelligenta Mobila System** – Logbook Kirollos Ghobrial

**Week 13: About 10 hours**

**Thursday 30/3:**

**We had our first meeting, where we decided how we would work, and I became Team Leader. I created a Discord channel and put everyone in when some did not have the opportunity to be in school. I will also work with the mower group. We decided a bit on what rules we have and how we should communicate. I recorded everything and wrote it in the discord channel.**

**Friday 1/4:**

**Today we started with an online meeting with the whole group to check that everyone understood what their task was and had the right conditions to start working. After that, I met with the Mower team to check out what requirements we have and how we should divide the work. We set up Github so we can start coding.**

**Week 14: About 22 hours**

**Monday 4/4**

**We met at school with the Mower team to build the robot and we went through the code for automatic driving. Then we tested the robot.**

* **The code for automatic driving**
* **built robot.**
* **tested the robot for automatic driving.**
* **determined the next step in programming.**
* **I documented the requirements we require from the app and backend teams.**

**Tuesday, 5/4**

**First was a meeting with the whole group where we presented what we did and what we should prioritize this week. We also announced our requirements to both the App and Backend teams, and then a meeting with the Mower team where we discussed how to work further. We adjusted the code a little afterwards and divided the work.**

* **meeting with the whole group.**
* **Meeting with the Mower group.**
* **I double-checked the code change.**
* **Divide the work.**
* **We announced our requirements for the App and Backend.**

**Wednesday 6/4**

**I started with a little search for Bluetooth features to understand how to connect it and compared a bit between Bluetooth and Wi-fi. Then I had a meeting with the whole team where we went through what we had done and the plan for the next meeting. Then I had a meeting with the Mower team where we tested Wi-fi connection from Rpi to mobile hotspot.**

* **Search for Bluetooth functions.**
* **meeting with the hardware group.**
* **Robot evaluation and code modification**
* **meeting with the whole team.**

**Thursday 7/4**

* **Meeting with hardware on Discord**
* **Bluetooth continuation**
* **A little division of the work**
* **Meeting with Husqvarna via teams.**

**Week 15: approximately 20 hours**

**Monday 11/4**

**We had a meeting with the mower team where we tried to increase the speed to different values until we found a reasonable level. This was the same with the delay function.**

* **More robot updates.**
* **An increase in speed and fewer breaks between runs when the robot drove at a slightly lower speed before and took too long a break.**
* **I continue to work with searching on Bluetooth features to understand how everything works.**

**Wednesday 13/4**

* **meeting with the whole group.**
* **I wrote some Bluetooth code, but we discovered that we needed to use Raspberry Pi for Bluetooth.**

**Thursday 14/4**

* **Meeting with the hardware group regarding Bluetooth and some tests**
* **Meeting with Huskvarna.**
* **Meeting with each team about how everything works and that everyone contributes equally**

**Friday, 15/4**

* **meeting with the whole group.**
* **I informed the app team what they needed to prioritize in order for us to continue working with Bluetooth.**

**Week 16: about 20 hours.**

**Monday 18/4**

* **A Study on Serial Communication**
* coding of the move function.

**Tuesday 19/4**

* **We had a meeting with the Mower team plus Dejan where we discussed how the communication between RPI, Arduino, and App should work.**
* **We worked on some changes to the code and various tests for the robot.**

**Wednesday 20/4**

* Sprint planning
* Meeting with the Mower team
* Manual drive coding

**Thursday 21/4**

* Meeting with Husqvarna (Team Leader).
* coding of the move function.
* Search for robot positioning.

**Friday 22/4**

* We have a meeting with the whole team where we divide the work from next week and ensure that we are well placed with the plan.
* Pushing code to GitHub.
* Meeting with each team for reconciliation (Team Leader).

**Week 17: About 28 hours**

**Monday 25/4**

* **I met with the entire team to discuss how far we've come and what parts we'll work on this week.**
* **coding of the Autorun function and some changes in the whole code.**

**Wednesday 27/4**

* **Testing Bluetooth and trying to identify the problem.**
* **Meeting with the Mower group**
* **Search for requests to the backend.**

**Thursday 28/4**

* **Meeting with Huskvarna.**

**Friday 29/4**

* **Meeting with the whole group (1.5 hours).**
* **Searching and coding the request function (5 hours).**
* **meeting with each team for reconciliation.**

**Saturday 30/4, approximately 4 hours**

* **Helps Khaleel with rpi to test the application and get Bluetooth started.**

**Sunday 1/5 , approximately 6 hours**

* **Helps Khaleel with rpi to test the application and get Bluetooth started.**

**Week 18: About 22 hours.**

**Monday 2/5**

* **We had a meeting with the whole team where we discussed how it went and what we should work on for next week. Our goal in the Mower team is to test all communication between the app, rpi, and Mower.**

**Tuesday 3/5**

* **Backend request continuation (3 hours)**
* **Meeting with the front-end regarding what problems they have in the group, talked to some of them to check who does not work in the group (4 hours).**

**Wednesday 4/5**

* **Meeting with the front-end regarding what problems they have in the group, talked to some of them in order to check who does not work in the group (2 hours).**
* **Meeting with Dejan about how it works in the group and what problems he encounters**

**Thursday 5/5**

* **We tested the communication together with the whole Mower team plus Mikael, where we encountered various problems and needed to change the code a bit. The app team was not done with Bluetooth, so we could not test it, but we managed to get the right value for positioning.**
* **Meeting with Husqvarna (Team Leader).**

**Friday 6/5**

* **We had a meeting with the whole team where we discussed what we have done and what plans we have, plus I needed to address that all groups need to take care that the people are not registered as it has been an unfair division of labor in certain groups.**

**Week 19. About 17 hours**

**Monday 9/5**

* **We had a meeting with the whole team where we discussed how far we have come and what the plan is for this week.**
* **After meeting with different people in the group regarding certain people who do not contribute anything, we have decided to inform a person that he is no longer in the group (Team Leader). (6 hours)**

**Tuesday, 10/5**

* **Self-study on serial communication problems**

**Thursday 12/5**

* **Meeting with Husqvarna (Team Leader).**

**Friday 13/5**

* **We had a meeting with the Mower team where we did some tests, and in the end, we managed to solve the problem with serial communication. We continued with different tests to fix all the bugs to make sure everything works.**
* **We had a meeting with the whole team where we discussed what we have done and that we need to finish everything by next week, plus documentation.**
* **Meeting with each team for reconciliation (Team Leader).**

**Week 20: approximately 27 hours**

**Monday 16/5**

* **We had a meeting with the whole team where we discussed how far we have come and what the plan is for this week.**
* **I met with Dejan regarding the problems in the group.**

**Tuesday 17/5**

* **Meeting with different people in the group where some do not contribute as much**
* **We had a meeting with the Mower team where we tested the communication between the robot, app, and backend where we got some errors from the backend.**

**Wednesday 18/5**

* **Meeting with different people in the group (Team Leader). (5 hours)**
* **I'm working on the documentation and redesigned our Work Breakdown Mower.**
* **Updating the logbook**

**Thursday 19/5**

* **We had a meeting with the Mower team plus Dejan and Mikael where we tested all communication between the robot, app, and backend where we got a bit of a bug that Dejan has fixed. We managed to make all communication work, plus I showed the documentation I did.**
* **Meeting with Dejan (Team Leader).**
* **Meeting with Husqvarna (Team Leader).**

**Friday 20/5**

* I changed a bit in the documentation.
* We had a team meeting and wrote down the lessons we learned together.
* Dejan and I rewrote the report.
* I updated the logbook.

Söndag 22/5

* I had a meeting with the whole team where we discussed that all groups are done with their part, so I can send all files tonight.
* We can work on the presentation using a PowerPoint file I created.
* I checked everything on GitHub, so we have not missed anything, and I downloaded everything so I can email all the material.
* I contacted several people so they could update their logbooks before I downloaded everything.