**Intelligent Mobile Systems – Project Logbook**

Team 6: Eddie Lindgren

**Week 13:**

* This was the starting week and as such the focus was on the lectures, meeting the team members and getting to grasp the task given to us.

I attended both lectures which were about the project and how Husqvarna handles larger projects.

We met up as a team and decided how we were going to designate ourselves to smaller groups. I joined the mower group alongside Anton and Kero. Additionally it was decided that the team will use Agile methods for the project. Since we’re just starting there wasn’t a lot done on the mover but we’ve planned to start working on it next week.

I want to give a shout out to Dejan who showed impressive effort in coordinating our large team when we where making decisions.

**Week 14:**

Monday:

* Today we in the Mower group met up and discussed the project. Anton had during the weekend setup the robot and managed to make it move and follow some requirements. He explained to us how it worked and I downloaded some necessary programs such as Arduino and mBlock. After this we discussed our goals and what requirements we where going to need from the other teams. Lastly I set up a Github repository.

Tuesday:

* Two things happened today. Firstly I attended the online lecture about wireless communication. Then we in the mower group held more discussion on our requirements and dependencies. I changed the repository on Github to better follow what the rest of the groups in our team were doing. Then the whole team held an online meeting where we discussed what dependencies we had and everyone's interpretation of the requirements. We also made rough outlines for our planned sprints and how we were going to implement version control.

Wednesday:

* I watched the recorded lecture on Bluetooth and began looking up how Bluetooth was going to work on the robot.

Thursday:

* Anton called in sick and as we currently have the time we decided in the group to take the rest of the week doing individual research. I read up on the robot specifications and familiarized with how coding works on it.

Friday:

* Further familiarized myself with the robot. I looked up libraries the robot used and found documents on the libraries the robot and other Arduino boards use in regards to Bluetooth. Concentrated on reading those documents. Additionally the team had a stand-up meeting where we discussed on how far we were in the project.

**Week 15:**

Monday:

* The day started with a meeting with us from the Mower group. We took our epics and divided them up into user stories. Afterwards we discussed how we were going to implement Bluetooth to the robot. I managed to find the name of the Bluetooth module the Arduino board used. Together with Anton we tried to implement Bluetooth with a test function with example code that we found online. The day ended with a sprint planning session with the entire team.

Tuesday:

* Today I continued reading up on the Bluetooth module. Anton managed to find out that the Arduino board uses the same serial output for the Bluetooth and USB port. Meaning that it would be necessary to use Bluetooth on the raspberry pi instead. We ended the meeting by deciding how the state-machine for the robot would be structured.

Wednesday:

* Attended the lecture on LiDAR. Me and Anton met up after the lecture and attempted to setup Bluetooth on the raspberry pi. We succeeded in establishing a connection with the test app “Serial Bluetooth Terminal” and creating a test function that could send strings between the and the raspberry pi.

Thursday:

* Attended the lecture on internet structure. Afterwards the team took a vacation for Easter between Friday and Monday.

**Week 16:**

Tuesday:

* I attended the lecture on localization and positioning. The day started with a meeting with the mower group where we worked out how we wanted the state-machines for the mower to be. Then we assigned tasks to each other. My task will be to create a random turn function.

Wednesday:

* I focused on getting to know how to work with the robot hands-on. I looked over the ultrasonic sensor and how that works. Finally I created a test-function to be able to more easily test how the mower should turn. The last task of the day was a sprint planning meeting with the entire team.

Thursday:

* Continued programming on the mower and finished the random turn function.

Friday:

* Attended Linus Rudbeck’s second lecture. We in the mower group had a meeting where we checked our progress, had a small discussion on how some functions and enum variables should be handled and then a small tutorial of how we were going to handle Github merges. The last thing I did for the day was to update my turn function based on feedback I got from the meeting.