Week 14

We had our first meeting where the introduction was made. First, we started to get to know each other. Afterward, we divided ourselves into three groups. I chose to be in the Back-End team.

Following the meeting, the Back-End group met again to discuss how we were going to work. We started by reading documentation about different clouds and databases. Finally, we chose Firebase Firestore Cloud because it is free and has many tools that we can use.

At the second meeting, we talked about the project breakdown and how we planned to build up communication between the robot and the app as well as the back end.

We broke down the project and set up Trello for splitting work. We discussed different aspects, and we settled on programming languages and other technologies, such as the choice of a database, but also put up a real-time database soon after the collaboration meeting.

Total hours worked: 10 hours

Week 15

This week we focused more on setting up the cloud and database. In the end, we had some bugs, which me and the other team members worked together to solve.

A group meeting was also held when all of the squads addressed how communication should be handled, as well as what the needs were and what should be done.

Total hours worked: 20 hours

Week 16

This week, the Back-End group discussed the requirements and highlighted all the issues that we can meet while working on the project. We discussed all the data and routes that we needed to meet the requirements.

After the group discussion with the other squads, we learned more about what we should accomplish on the backend to suit the demands of the application and hardware. So, after hearing from the other groups, we decided to develop documentation of what duties needed to be done.

Total hours worked: 20 hours

Week 17

Every team member started to take an assignment on what task they should do. I was assigned to work on a map and coordinate points routes and handle deployments of the server for the cloud.

So, I started reading documentation from Firestore about deploying and structuring the database. In addition, I started working on the communication between the back-end and hardware.

By the end of the week, I was done with settling the structure of the database and established the first API where the mower could send coordinate points.

Total hours worked: 20 hours

Week 18

This week we had some team members who were sick, so we worked from home instead. I continued working with Map Routes where the mobile app can get the latest map data and coordinate points.

Total hours worked: 10 hours

Week 19

This week I focused more on sending and receiving accurate coordinate points and map data. In addition, I worked more on sending all map data, including map id, when it is created, coordinates points, and collision points, to the mobile application. I faced some errors, and I had to work more on fixing them.

Total hours worked: 22 hours

Week 20

This week I was done with my tasks and started to work more on cleaning the code, structuring it, and refactoring it. Despite the fact that I was more concerned with route and communication testing, the tests went well, the communication was stable, and the hardware team and mobile app team had no problems with sending and fetching data.

At the end of the week, we started to work more on documentation for the project and code, and we started preparing for the presentation.

Total hours worked: 22 hours