RADAR/SONAR PROJECT

SUMMARY REPORT

At the beginning of the course we had a couple of brainstorming sessions where we were thinking of the project idea. At first, we started to work on a project about automatic pet lizard feeder but after a couple of days it was moved aside for a new idea which we thought was better to do.

I think the project was even surprisingly rewarding in terms of new knowledge. We got a good amount of 3D modelling, we had to code and learn connections between the code and controller, we had to search solutions for different kinds of problems, for example, Bluetooth module, which was a new thing for many of us in embedded programming. Then we had to visualize the data our ultrasonic sensors gather. This problem in particular took some time and with some googling and search for information it was solved with Processing IDE.

Since Processing uses Java, it was also a new thing for us, but there were good projects and guides on the internet which helped us to get through and implement working code.

There was an idea to implement the working prototype to Android, but in the end it was scrapped as we thought the Bluetooth - PC connection is enough for us.

The Android environment would also have been a new thing for us and might have taken much more time to learn. With Processing IDE, you can implement with minor changes the same project for Android but as said, we scrapped it in the end.

Overall the course was interesting and taught us a lot of useful new things about the world of embedded systems and digital fabrication.

The course was well implemented, taking into account the distance learning situation. Moodle page was a bit complicated, for example in terms of Zoom links but it was not that big of a deal.