Script for Screencast

Hello, a warm welcome to you !! We would be demonstrating the setup of code and softwares for our ERTS lab project. The project title is Mini Golf Robot. The project team comprises of Vaibhav Gupta, Arup Kumar Pal, Neeraj Toshniwal and Shrikant Nagori.

Firstly , we would show how to install X-CTU and how to configure zigbee. XCTU is installed in the following way. Click on the setup.exe. Allow the setup to run as administrator. Click I agree to install the software. Now open X-CTU software. Open 2 versions side by side. Check of both the zigbees attached are working by clicking on Test/Query.

We have the tar file of the project. Now, we would unzip these files. We will open the aps file in the AVR studio under a new project. The project has ACC Simulator and Atmega 2560 as settings. We will now change project configurations to frequency of the bot which in our case is 1592000. The optimizations is set to 0o.

Now we will create the hex file and burn the hex file to the firebird using AVR Bootloader. Lastly, we will show you some pictures of the arena and the bot to help you setup the environment of the simulation. The firebird has a incline attached to the servo motor to the right which changes according to the distance of the flag from the bot. Also, we have attached the camera at the top of the bot with a servo motor to enable rotation of the camera when needed.

We have some photos which show the state of the bot. In this picture, ball is searching from the red ball. This image shows when the ball moves towards the ball . Now , the ball is rotating around the ball searching for the flag. Now, the bot aligns itself to hits the ball towards the hole. Lastly, this is the arena that we used.

Thank you very much for your patience.