**Raspberri Pi Mini Radar**

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**Task:**

The task of this lab is to use a servo motor, a HC-SR04 ultrasonic sensor and Raspberry Pi to create a mini radar. The radar is used to get 2D positioning data and visualize it in thingsboard.

Thingsboard will receive angle of servo motor and distance detected by ultrasonic sensor from Raspberry Pi.

**Inspiration:**

The inspiration of this mini radar is from the traditional radar used in 20th centuary.

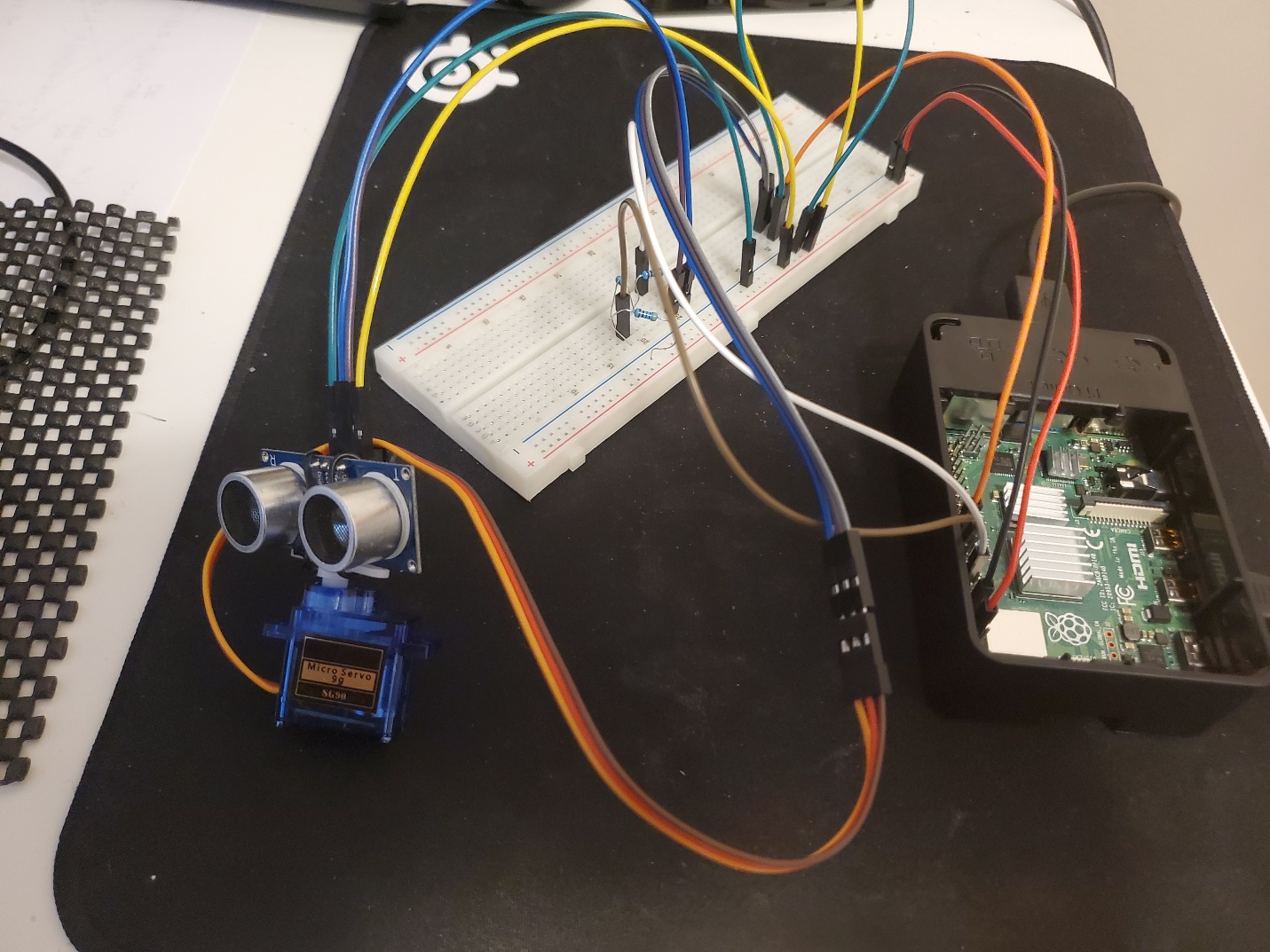
**Result:**

Screenshot of code

Text

Description automatically generated

Photo of hardware:



Screenshot of the thingsboard result:

Graphical user interface, application

Description automatically generated

Demo video is attached in this folder

**Reference:**

1. Servo motor control: <digikey/en/maker/blogs/2021/how-to-control-servo-motors-with-a-raspberry-pi>
2. Ultrasonic sensor control: <https://tutorials-raspberrypi.com/raspberry-pi-ultrasonic-sensor-hc-sr04/>
3. Github of this repository: <https://github.com/ztang22/ENSF510_LAB2_MINI_RADAR.gitgit>