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Team D1

What did you personally accomplish this week on the project?

- Re-setup Raspberry Pi
 - Faced difficulties with Raspi → had to re-install Raspian and all other libraries needed for our project (including OpenCV, which takes a while to install)
- Calibrated thresholds for thermal camera
 - The image quality of the adafruit camera is worse than the test pictures we were using, so:
 - Used bicubic interpolation with `scipy.interpolation` to clean up and smooth the input a little
 - Applied new thresholds for identifying “this is a human” aka red blobs in the interpolated image.
 - The range of the camera is also narrower than we had expected. This means that we probably won’t detect multiple groups in one frame, so our algorithm becomes a little simpler – we no longer need to find the leftmost contour, we can just spin the robot so that it faces the center of the “blob” detected and drive towards it.
- Incorporated the 360⁰ spin case when stopping into the main file
- Incorporated code for object detection into the main file

Schedule

No changes. Mostly on track. The code for our demo (Wednesday) is ready. We just need to solder our circuit and figure out the assembly needed for the demo in lab on Monday.

What deliverables do you hope to complete in the next week?

- Configuring the load sensor to work with the pi