

Checkpoint

Accomplishments so far:

- Parts purchased, received and tested
 - Tested meaning we pushed our code onto the ESPs and confirmed they are able to transmit WiFi and BLE
- Github repo at <https://github.com/yonmaor1/wireless-indoor-positioning>
 - More detail as to our implementation and a brief README can be found in our repo
 - `WinPos.ino` for ESP32s, emitting WiFi and BLE signals
 - `main.py` for target node (running on Mac computer), receiving signals and processing* them

Self-Assessment

- We think we are currently a little behind due to me (Yon) being out sick for a while, but we still think we are well on our way to finishing the project by the deadline. We are now in a state where the target node computer receives and is able to process signals of both mediums from the positioning nodes, so the challenge ahead is only tuning transmit power and ensuring that the RSSI algorithm is implemented correctly (which is a solved problem). We then have to actually perform the experiments which should only take an afternoon, and analyze the data. I think this cuts a bit into the time we had allocated into drafting our final report, but that's ok as we shouldn't need a whole week to do that.

Risks

- We are currently performing WiFi and BLE trials simultaneously, and I'm not sure if this is a safe approach (ask prof). If it isn't, it should be trivial to separate out the code into a WiFi bundle and a BLE bundle, and simply run them one at a time.