TQM ROBOTICS

CLIENT MEETING 1 (Kick Off)

horizontal line

Date: 11th August 2020  
Duration: 1 hour  
Location: MB308(A)

ATTENDEES

Charles Tsui (client)  
Cheryll Singh (mentor)  
Harpreet Singh, Jayden Kean, Leen Alzebn, Miracle Pule, Zureen Hanif

# AGENDA

## Discussion

* He is a retired senior lecturer from MIT, currently working from home, has two running robots within his household.
* Charles will be putting together the hardware whilst keeping us informed on the process as we are inexperienced in the electronics aspect - however, as a team we will be upskilling in this area with his guidance and building continuously on the software development side of this project.
* He uses “Decawave” and “UltraWideband Positioning” as his building modules.
* For the hardware itself, it costs approximately $1500 USD, it’s ordered from China, could be ordered from UK or US as well but this hardware is already provided by Charles so unless there are issues with the hardware, we will not need to order in any other hardware from these third party vendors.
* As a team, we will be building our own software based on the exemplar code provided by Charles.
* Currently, there are unlimited tags, with maximum 4 anchors - we could potentially build on the TCP/IP layer to enhance this and incorporate more anchors but this could result in slower transmission of data across the fields due to the high frequency of communication via Ultra Wideband.
* Charles does not have a certain audience he is looking to aim this for, so we are open to any target audience with good justification and purpose that is.
* The programming codes suggested were C, C# and C++ so will most likely write the code based off of these suggestions.

# ACTION ITEMS

1. Email Charles individually so he can identify amongst us a little easier.
2. Talk to Ramesh about a pass to park on campus.
3. Brainstorm ideas on who the target audience should be.

# NEXT MEETING’S AGENDA

* Address the model and analyse with Charles the bits and pieces - uncover a couple of hardware tips on how he suggests we go about the build of the robot.

# MEETING LOG

|  |  |
| --- | --- |
|  | **Topic:** |
|  | Background and brief introductions |
|  | Charles - hardware, Team - software |
|  | Decawave, Ultra Wideband Positioning, $1500USD - hardware |
|  | End Result: complete working software using whatever language |
|  | Currently has unlimited tags, 4 anchors (potential increase) |
|  | TCP/IP Layer - if programmed, could add unlimited anchors |
|  | Ultra Wideband = high frequency communication ∴ more anchors = insufficient communication time between each domain |
|  | Find our own target audience - open to anybody basically (with good reason and approach ofc) |
|  | language: most likely C, C# or C++ |
|  | 02108090330 - contact method or via email |
|  | Available: Tues - morning, Thursday - whole day |