FYP Logbook

Interactive display

TAN ZHEN YE, BRYAN

2020

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| Entry | Date/Time | Number of hour(s) | Task Completed |
| 1 | 11/8/2020 | 1 | Meeting with Prof Chua to understand the project details. |
| 2 | 13/8/2020 | 3 | Research on Arduino, RaspberryPi |
| 3 | 18/8/2020 | 3 | Ideation and sketches  -Hiding duck  -Distance theremin  -IoT fountain  -1D pong  -Responsive Robot  -Chaos theory display |
| 4 | 20/8/2020 | 3 | Research on existing Arduino Projects |
| 5 | 24/8/2020 | 3 | Exploration on Clock ideas and sketches  -Braille clock  -Water clock  -Braille clock+  -IoT pinball |
| 6 | 27/8/2020 | 3 | Research on ESP32 and IoT devices  -Tested an OpenVPN connection through RaspberryPi to learn portforwarding |
| 7 | 1/9/2020 | 4 | Ideation 2 done with more focus on details for the 2 main ideas braille clock and pinball.  Emailed Singapore Association for the Visually Handicapped to get in contact with a visually impaired person to be able to better understand them and what they require. |
| 8 | 2/9/2020 | 6 | Created schematics and part requirements for the braille clock and the IoT pinball. |
| 9 | 8/9/2020 | 4 | IoT configuration for ESP32 |
| 10 | 10 /9/2020 | 3 | Research into IoT modes of wireless communication |
| 11 | 14/9/2020 | 6 | Building of carboard prototype and writing up of initial plan and exploration |
| 12 | 17/9/2020 | 3 | Added code for the flipper  Looked for appropriate parts |
| 13 | 21/9/2020 | 3 | Circuit Diagram |
| 14 | 25/9/2020 | 4 | -Build the frame for half of the board  -Wrote code for the PCA9865 |
| 15 | 28/9/2020 | 2 | Continue working on the frame |
| 16 | 29/9/2020 | 2 | Tested and attached the flippers to the frame |
| 17 | 30/9/2020 | 3 | Tested the additional parts that arrived |
| 18 | 5/10/2020 | 4 | Soldered wires to various parts and tested them individually. Piezo might not be sensitive enough for knock. |
| 19 | 6/10/2020 | 2 | Tested the DC Motor and the L298N. Issues with jerking |
| 20 | 7/10/2020 | 2 | Fixed problem with the ball getting stuck at the corner of the flipper by extending it outwards with a block. |
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Problems:

DC motor jerky when changing direction

Servo wire not long enough for both sides. Need to extend.

Need new buttons. Current buttons not sensitive and sometimes get stuck.