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Team Name: Team GoGetter

Date of Submission: October 24, 2021

Meeting Date & Time: October 23, 2021, at 9:00 PM

Meeting Location: Zoom

Meeting Duration: 2 hours

| Team Members | X = Present | Notes |
| --- | --- | --- |
| Khanh Le | X |  |
| Phuong Nguyen | X |  |
| Abdullah Alhoulan | X |  |
| Mutlaq Alotaibi | X |  |
| Marshall Aurell | X |  |

Progress: Discussed and delegated workload for the upcoming weeks. We shift the focus to prototyping and testing in the upcoming weeks. As of now, there are 3 things we need to get done before the semester ends: Testing the software, creating a prototype, and making an enclosure box. The code testing had some problems that needed to be fixed. The strain gauge connection needs a frame for maximum sturdiness, possibly a 3D printed frame.

Individual contributions:

Khanh: Test the strain gauge connection and code. The strain gauge needs to be calibrated before it can be use in this project. I did the research for all possible standard that the product has to meet

**Phuong**: Contribution to the group project for this week meeting as a hardware design specification for all components and their hardware data specifications. I was making a table and listed all components used for this project with their specs.

Marshall: Group project. Testing IR sensor and research with GSM SMS messaging.

**Mutlaq:** This week's meeting, we met by zoom and discussed sensor testing and work on project technical. I am doing research about product cost in the market.

Abdullah: Testing Sensor and I did engineering standards. We checked GSM SMS messaging.

| Team Member | Assignment | Due Date | % Complete/Progress |
| --- | --- | --- | --- |
| Mutlaq | Power consumption / supply | Nov | Need a voltage regulator for safety measure |
| Khanh | 3D printer for module/ CAD designs | Nov | Done:  \_Found the Arduino 3D model  \_Have basic dimension + draft of the enclosure  \_Learn the process of the 3D printer (need .stl file for the one in the library)  Need to be done by the due date:  \_Need the model for strain gauge  \_Need to find or design a 3D model of: Arduino Nano, Battery board. |
| Marshall | Logic/software for the sensor system | Nov | Need to test the current logic |
| Abdullah | IR sensor datasheet | 10/17 | 100% |
| Phuong | Weight sensor datasheet | 10/17 | 100% |
| Abdullah, Phuong | Test the sensor |  |  |
| Team | SMS messaging method |  | Need to order the SIM card |
| Team | New transceiver logic | Nov | Need to find library and code for a sensor network |
| Team | Project Specification Paper | 10/24 |  |

Cost:

| ID | Price | Manufacturer | Manufacturer Product Number | Link |
| --- | --- | --- | --- | --- |
| Load Cell | $11.19 | Degraw Design | 4 x Load cell 0-50KG  1 x HX711 24BIT Precision ADC Module on breakout board  10 x Breakaway header pins for HX711 connection | https://www.amazon.com/Degraw-Amplifier-Weight-Arduino-Bathroom/dp/B075Y5R7T7/ref=sr\_1\_8?dchild=1&keywords=load+cell+arduino+150k&qid=1631958394&sr=8-8 |
| Arduino Board with Wifi | $44.80 | Arduino | Code: ABX00021 / Barcode: 7630049200234 | https://store-usa.arduino.cc/products/arduino-uno-wifi-rev2 |
| Motion Sensor |  |  |  | JBC 106 |
| Amplifiers |  |  |  | JBC 106 |
| Transceiver |  | RF24 |  |  |
| Arduino Nano |  |  |  |  |

Plan (future work):

| Assignment | Due Date |
| --- | --- |
| Test the logic | Codes for IR sensor need rework and codes for strain gauge (calibrate and logic) need to be tested |
| Test the wifi webpage | Connection is done, focus on the webpage |
| Create the first prototype | TBD |
| Test the prototype | TBD |

Issues: Test the software of the project and fix the code problems. Need to order the parts

Include the schedule for the next meeting:

Meeting Date & Time: TBD

Meeting Location: JBC 106