Team Name: Team GoGetter

Date of Submission: October 17, 2021

Meeting Date & Time: October 17, 2021 at 9:00 PM

Meeting Location: Zoom

Meeting Duration: 1 hour

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.

Individual contributions:

Khanh: I have done research on 3D modeling and 3D printing for the case enclosure. The target is to make a rating of IR64 for all the controller boards and sensors. For next week, I will have a 3D model of the Arduino Uno with its power board.

Phuong: We have discussed the technical data for our sensors and also the power supply regulation to meet the requirement for output voltages for each module.

Mutlaq: We met on zoom and discussed material we need to find and order it to make sure to work with what we observe in the past weeks. I have done research about the power supply and we follow up on the tasks to be completed at the next meeting.

Marshall: I have been researching getting the arduino to send SMS messages. GSM.h is the library that will allow the board to send SMS messages over WiFi. There are two options for getting the board to connect to the GSM.h library. Through either the GSM shield or the sim800l gsm module. The

WiFiNINA.h library has the capabilities of connecting to wifi, but is unable to send SMS messages without a sim card.

    a.) https://lastminuteengineers.com/sim800l-gsm-module-arduino-tutorial/

- https://www.amazon.com/HiLetgo-Smallest-Breakout-Quad-band-3-7-4-2V/dp/B01DLIJM2E
- https://store-usa.arduino.cc/products/arduino-sim
    - $9 for sim800l gsm module
    - $3 for sim card: Upon the activation of the SIM card, you get 10MB free data for up to 90 days (5MB per month for $1.50 USD thereafter)

    b.) https://www.amazon.com/GPRS-GSM-Shield-Arduino-GPS/dp/B01HNV3ZXC

- $60 for GSM shield

Abdullah: We have discussed the data for the sensor . Also, we discussed how the sensor works . I am done with research IR distance and arduino code.

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 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 data sheet	10/17	100%
Phuong	Weight sensor data sheet	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

Plan (future work):

Assignment	Due Date

Test the logic	10/24
Test the wifi webpage	10/24
Create the first prototype	TBD
Test the prototype	TBD

Issues: Test the software of the project

Include the schedule for the next meeting:

Meeting Date & Time: TBD

Meeting Location: JBC 106