

Team Name: Team GoGetter

Date of Submission: September 26, 2021

Meeting Date & Time: September 25, 2021 at 6:00 PM

Meeting Location JBC 205

Meeting Duration: 4 hour

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

Progress:

The team shared their research for the weeks before. Most of the components ordered have arrived except for the Arduino power cord. Everyone knows the basic component of the sensor systems. Discussed how to put it together next week in JBC 106. Discussed the project planning and assigned different questions for each member. Report all purchases for reimbursement paper. Talked about team skill sets and strengths/weaknesses.

Individual contributions: (what you did on project planning)

Khanh: For this week, I have researched the legal and ethics for the project. The conclusion is that the project has little to no legal issue because our key focuses are different enough. But there are plenty of ethical issues, especially security problems, that the team needs to address. For next week, I will be working on PIR or IR sensors and how to sensor direction with them.

Phuong: We gathered yesterday at the university for at least 2 hours to discuss our project planning and also for the weekly meeting. My task was to complete the skill analysis for the team and also proposed the team analysis paper for the project. I am currently working on the Arduino software and hardware and also researching strain gauge sensors.

Marshall: I've been researching functions for the Arduino for light sensors, pressure sensors, and OLEDs (how to assign pins, scale ranges of values obtained from the sensor, call on sensor we are using, delay function). I have found a couple of libraries on github that can use the HX711 sensor we have decided to use to measure the weight. I'll do research on the wifi capabilities of the Arduino Uno Wifi Rev2. (Need to find a library that can use the IR sensor)

Mutlaq: This week's meeting, we discussed the skills matrix and filled out the excel file, and worked on the project planning paper. Each team member chose two tasks to complete the next day. Also, I research about power supply for the project from the last observation from team members.

Abdullah: In the sixth week, we met at the university. To emphasize several tasks, including the project planning sheet and weekly minutes. Tasks were given to each person choosing two topics and writing about them. Also, the things we needed arrived from Amazon.

Team Member	Assignment	Due Date	% Complete
Phuong	Find and research and draft reports of various strain gauges.	9/18	100%
Abdullah, Khanh	Find and research and draft reports of various motion sensors before deciding what to use.	9/18	100%
Marshall	Find and research Arduino microprocessors	9/26	100%
Team	Draft the basic logic model of the system.		100%
Team	Decide on the design of the sensor system (within a housing or separated)	9/26	100%
Mutlaq	Power consumption / supply		After knowing the sensor design
Khanh	3D printer for module/ CAD designs		
Khanh	Direction sensor	10/1	
Team	Put the sensor model together	10/1	
Phuong, Marshall	Find the codes for Arduino sensors	10/1	
Team	Project Planning Document	9/26	

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
Power supply (AC-old phone charger/DC-lithium battery)	
Arduino logic codes (how the data is being used)	
Wireless integration between 2 systems (BT/Wi-fi)	
Research the alert system (7 segment display or an alarm).	
IoT for communication	

Issues:

How to sensor direction using IR/PIR motion sensor.

Include the schedule for the next meeting:

Meeting Date & Time: TBD

Meeting Location: JBC 106