**What** is the problem, **Why** that is a problem, **How** are your planning on solving, or **How** you solved it.

Due Sunday 9/26/2021

Class Week 6

Journal #2

Current Problem:

Currently, we are now a team of 9 (5 CS’s and 4 EE’s) and need to receive the hardware (it is purchased and is in shipping status) so we can set it up for the CS team for them to get familiar with the hardware’s behavior and then testing out the LoRa WAN system to send data to the CS team’s assigned server. The EE side will need to understand the abilities of the sensors being used and limitations when it comes to power usage.

Solution:

Once we have the hardware, we’ll need to get familiar with the Arduino Developer Environment so we can at least analyze raw data coming from the magnetometer and possibly from the time of flight sensor. With the Raspberry Pi, we’ll need to get a program to collect data from the Arduino via LoRa WAN. The last step is to use Wi-Fi to connect to a network and send the data to the CS’s assigned server. We will also need a USB power meter to analyze the power usage of the Arduino and sensor package installed.