Weather Station:

Introduction:

The objective of this machine is to output the temperature and humidity within the vicinity of the censor and upload it to my computer where it will be processed.

Materials:

- An Arduino Uno
- A ProtoShield Mini Breadboard
- A DHT22 Temperature and Humidity Sensor
- A DS1307 RTC
- A Coin Cell Battery
- An SD Card Module
- An SD Card
- M-M Jumper wires
- M-F Jumper wires
- A USB cord

Methods:

The breadboard has the temperature and humidity sensor hooked up to it and is then connected to the Arduino uno by using a jumper cable. The real time clock is also connected to the breadboard which is then hooked up accordingly to the Arduino once again using jumper wires. Next the sd card reader is connected to the Arduino uno and then has the sd card inserted. Finally using a USB cable, the data collected by the sensor will be uploaded to my IDE.

Conclusion:

The weather station works accordingly and outputs the data onto my laptop to then be read and then outputs information in relation to the data received. This is to follow the natural engagement.

References:

https://learn.sparkfun.com/tutorials/arduino-weather-shield-hookup-guide-v12/all#:~:text=The%20Arduino%20Weather%20Shield%20from,location%20and%20super%20accurate%20timing.

https://howtomechatronics.com/tutorials/arduino/arduino-wireless-weather-station-project/