Problem Solving with the Internet of Things and Python

Unit 6 - Final Project

CASE WESTERN RESERVE UNIVERSITY | INSTITUTE FOR SMART, SECURE, CONNECTED

Final Project

What "problem" will you solve?

Feather Sense Possibilities

- 9-DOF motion Sensing - Accel/Gyro/Magnetometer
- Proximity Sensing
- Light Sensing
- Color Sensing
- Gesture Sensing
- Sound Sensing
- Temperature Sensing
- Barometric Pressure / Altitude
- Humidity Sensing

Featherwing Possibilities

Provide a list of Featherwings that are also available to be used

- FeatherWing displays?
- Ethernet FeatherWing?
- FeatherWing Power Relay?
- FeatherWing Latching/ Non-Latching Mini Relay?
- FeatherWing IR Thermal Camera?
- FeatherWing DC + Stepper Motor Controller?

Connectivity Possibilities

- Wired - Serial/USB Connectivity
- Wireless - Bluetooth Low Energy Connectivity
- Wireless - Wi-Fi Connectivity

Protocol Possibilities

- UART
- MQTT
- HTTP

Service Possibilities

- "Custom" python software
- Adafruit IO
- Adafruit IO plus other online services

Final Project

1. Fill out and submit a project proposal form.
2. Plan, code and test your project - keep a daily log.
3. Demo your project.
4. Submit your project summary.