

Interesting sensors:

Moisture sensor <https://www.adafruit.com/product/4026>

High accuracy temperature sensor: <https://www.adafruit.com/product/4089>

Absolute orientation imu fusion breakout <https://www.adafruit.com/product/2472>

Midterm project:

Smart Flowerpot. It is used to measure soil moisture and air temperature. LCD display shows temperature and humidity in real time. Under normal data, the LED light is green. When the environment is abnormal (humidity is lower than 17% or higher than 44%, temperature is higher than 35 degrees or lower than 10 degrees), the LED light will turn red.

Input sensors: Moisture sensor <https://www.adafruit.com/product/4026>

High accuracy temperature sensor <https://www.adafruit.com/product/4089>

Output: LCD display, LED lights

- 1) Make two sensors work with Arduino separately. Detect their output value
- 2) Make LCD display work and display any random value
- 3) Display temperature and moisture value in LCD display.
- 4) Compute the threshold based on temperature and moisture value to light LED

Nice to have: Make LCD display all info, and display health condition of plant periodically



