

Topic:

Self-watering house plant.

Team Members:

Greg Melillo (me)

Description of Goals:

Using a soil moisture sensor, read soil moisture data. When the moisture content is under a certain number (perhaps different setting for various types of plants). Use an external water tank with a solenoid valve at the bottom to release a certain amount of water into the soil when appropriate.

Timeline:

Get a solenoid valve working to the point where I can release a volume of water from a container on command. This may require higher voltage than the Arduino can provide so I need to figure out exactly how to achieve that. Then I need to wire the soil sensor correctly and read data in. To make sense of the data, I need to research what the optimal moisture level is for certain plants. At a certain point, I may end up adding a feature to select different types of plants which require different moisture levels (a cactus vs a flower or something).

Soil Moisture Sensor:

<https://www.sparkfun.com/products/13322>

Solenoid Valve:

<https://www.sparkfun.com/products/10456>