Software Design:

* What should our microcontroller be able to do
  + Turn on the water pump to water the plants
    - Is it possible to vary how much water is being pumped by varying how fast the pump is moving?
    - Use a Normally-Open Single Pole Single Throw relay to turn on and off the water pump.
  + Calculate how moist or dy the soil is
    - Maybe calculate how long it takes for the soil to typically dry up within a week?
    - Use two probs to measure the resistance between the soil.
  + Gather data about temperature, humidity
    - If temperature is super-hot it could be worth implementing a failsafe to turn on the water to water them. But maybe we should check the moisture first.
    - Connect temp/humidity sensor to adc channels of microcontroller
  + Notify user if there’s no water
    - Send user an email/text/ some for of notification when water reservoir is empty
  + Plant Stats
    - Keep track of height of plants
    - Determine if plant has produced veggies
    - Determine if those veggies are good /have fallen?
    - Store these data somewhere