Smart Pot - Automatic Plant Watering Pot

Have you ever wondered about owning a potted plant in your home but you worry about taking care of it? Your worry ends with this Smart Pot. Say goodbye to overwatering and underwatering your plant with this innovative product. It's where technology meets nature. Your plant will thank you!

Features:

- Automatic watering of the plant based on the plant's needs by sensing the soil moisture level
- Also works as a weather station by showing the ambient temperature
- All data viewable via a web interface or serial interface
- Can set your desired watering frequency with a button and can water on demand
- Alert to warn when the water reservoir is low
- Healthy and thriving plants with minimal effort
- All for under \$100



What makes this product special?

It's a completely autonomous plant pot that gives you the ability to be a plant parent without the trouble of remembering to water it on a regular basis. It gives water to the plant when it actually is thirsty. Now you can travel without being worried about watering your plant!

Requirements (and how we meet them):

- A microcontroller
 - Use a microcontroller to read sensor data and send messages via the Wi-Fi module
- At least two sensors
 - Soil Moisture Sensor
 - Air Temperature Sensor
 - Humidity Sensor
- Ability to log sensor data
 - o Microcontroller can store data and send logged data via Wi-Fi module
- At least two communication modalities
 - o Wi-Fi Module
 - o SPI/I2C
- A power system
 - 5V rechargeable battery with voltage regulator to reduce power to 3.3 V
- No more than two purchased modules
 - o Wi-Fi Module
 - o LCD Display Screen
- Fits on a 99 mm x 99 mm PCB
- A submersible motor pump to deliver the water
- A display screen to display the relevant information

