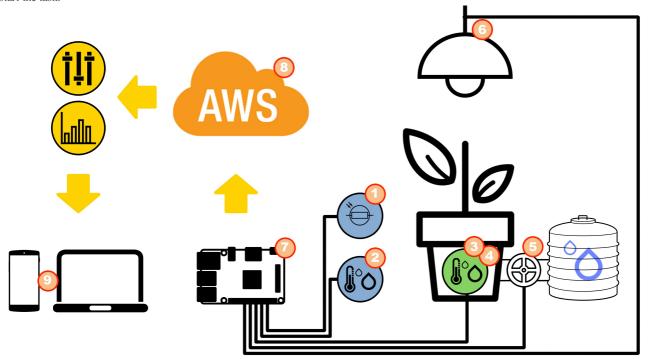
Plant Monitoring System

The Plant Monitoring System consists of an web application that continuously receive data from a monitoring node. The web app should also display the data received and secure the access to the information. All the automated tasks should have a manual mode, in which the user himself start the task.



Contributor

This project was create by Rafael Nascimento Bezerra.

IoT level

Hardware:

The hardware used to make this project possible was:

Raspberry Pi Model 2

Input/output

(CSI, DSI, GPIO, I2C, SPI, serial, UART, etc.)

Network

(WAN, LAN, PAN, or BAN)

Software

Communication model: (request/respond or pub/sub)

The communication is based on requests and responses using REST architecture. The web server acts most of the time as a proxy for the database. The is no direct access to the database. Instead of this, every app (mobile, web or local) must perform requests to the server.

Data

The Monitoring Node code supports the following measurements:

Humidity

Light Level

Soil Moisture

Temperature (of the air and soil)

Storage

Analysis

Links and Credits

Development

AngularJS

CoffeeScript

Less

Ionic Framework

Apache Cordova

Python 2.7

*

C# and .NET Framework

Documentation

Astah Community

Gitbook

The Noum Project Icons

<u>Raspberry Pi B+</u> by Tom Medley from the Noun Project <u>Thermometer</u> by Evan Shuster from the Noun Project

<u>Humidity</u> by Evgeniy Artsebasov from the Noun Project <u>WiFi</u> by Yamini Ahluwalia from the Noun Project

<u>Cloud Secure</u> by iconsmind.com from the Noun Project <u>Photo Resistor</u> by Arthur Shlain from the Noun Project

<u>Light</u> by Creative Stall from the Noun Project <u>Pipe valve</u> by Creative Stall from the Noun Project

<u>Valve</u> by Sergey Demushkin from the Noun Project

<u>Water Tank</u> by Adam Zubin from the Noun Project

*

Statistics by Hermine Blanquart from the Noun Project

• Equalizer by Dominique Vicent from the Noun Project

<u>Smartphone</u> by Martin Jordan from the Noun Project <u>Laptop</u> by Pham Thi Dieu Linh from the Noun Project

Sprout by Agne Alesiute from the Noun Project