Phase – I Smart Farming Using IOT – Problem Solution Fit

Team Details:

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EXISITING PROBLEM:

The agricultural land infested with crops must be irrigated continuously to maintain the crop health. Sometimes the land gets over irrigated that leads to disasters such as crop failure, decaying of crops and even many more. The farmer is unaware of the amount of water to be let into the agricultural field and is unable to determine whether the land is irrigated with sufficient amount of water or not.

SOLUTION FOR THE PROBLEM:

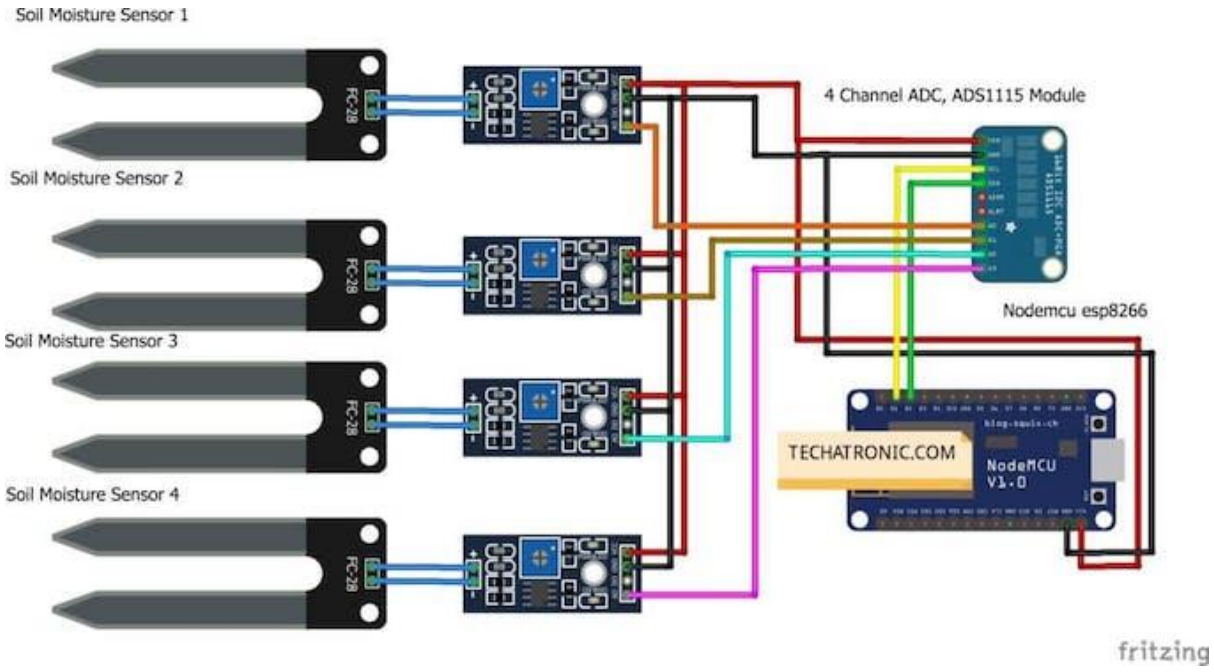
The solution for the problem is that development of a device that helps in determining as well as monitor the agricultural fields. Soil Moisture sensors are placed in the soil all over the agricultural land in specific areas to monitor the soil moisture and indicate it to the farmer. The amount of water to be supplied is calculated in the cloud and then indicated to the farmer. The process is listed as follows:

Components in use:

1. NodeMCU(ESP8266) – 2 No.
2. General Purpose PCB
3. 4 channel Multiplexer
4. Soil Moisture Sensor – 5 No.
5. DHT11
6. Connecting Wires & Cables

Circuit Diagrams:

1) For the 1st NodeMCU:



2) For the 2nd NodeMCU: