

**SRI SAIRAM ENGINEERING COLLEGE**  
**SMART FARMER – IoT ENABLED SMART FARMING**  
**APPLICATION**

**SOLUTION ARCHITECTURE**

**TEAM MEMBERS:**

- 1) PADHMASHREE.S
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- 4) HEMALATHA.G

## **Solution Architecture:**

- The different soil parameters (temperature, humidity, light intensity, pH level) are sensed using different sensors and the obtained value is stored in IBM cloud.
- Arduino UNO is used as a processing unit which processes the data obtained from sensors and weather data from weather API.
- Node red is used as a programming tool to wire the hardware, software and APIs. The MQTT protocol is followed for communication.
- All the collected data are provided to the user through a mobile application which was developed using MIT app inventor. The user could make decision through an app, whether to water the crop or not depending upon the sensor values.

## Solution Architecture Diagram:

