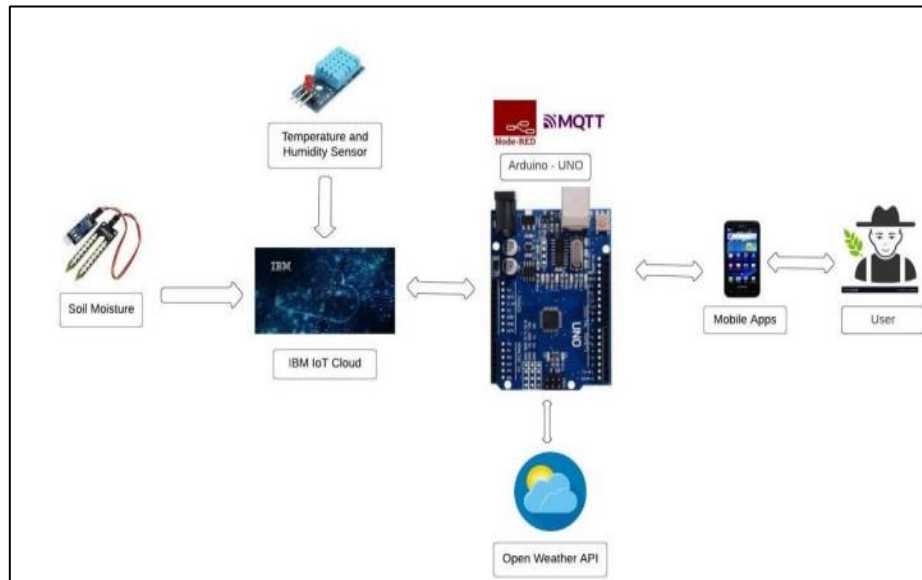


Project Design Phase – I

Solution Architecture

SMART FARMER – IoT ENABLED SMART FARMING APPLICATION

Team ID	PNT2022TMID12911
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Description:

- The parameters from the farming environment such as temperature, humidity, soil moisture is sensed using different sensors and the obtained value is stored in the IBM cloud.
- Arduino UNO board is used as a processing unit that 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 API's.
- The MQTT protocol is used for communication.
- The data collected from the sensors is given to the mobile application through IBM IoT Cloud. The mobile application was developed using MIT app inventor.
- User can take decisions based on the parameters displayed in the mobile application.
- User can monitor and control the process of their field/plant through the mobile application itself.