PROBLEM STATEMENT

The climate controlling is most important aspects for the better health and yield of crop. So, weather monitoring is an important key aspect of crop protection in natural calamaties. A weather station is a technology that collects data related to the weather & environment using different electronics sensors. There are two types of weather station, one who is having their sensors and the second type of weather station is where we pull data from the weather station servers. In this project, we are designed by our weather station. We all know that a weather station is not a single device, but it is a combination of many small tools to form a larger system. It contains various sensors and gadgets that work together but in specific ways to transmit proper and accurate data of the weather parameters. It is quite tricky to uses of WEB server-based weather station to nontechnical peoples, so we are providing web server-based user interface as well as Android application. We are well known today most mobile units running on Android OS, and many peoples are well known to use the android phone. So, our application is beneficial for such purpose. This device is all about IOT based Live Weather data Monitoring Using Node MCU ESP8266. We will interface DHT11 Humidity & Temperature Sensor, BMP180 Barometric Pressure Sensor and FC37 Rain Sensor with Node MCU ESP8266-12E Wi-Fi Module. A Weather station is an innovation that gathers information identified with the climate and climate utilizing extraordinary gadgets sensors of numerous little apparatuses to shape a bigger framework. It contains different sensors and contraptions that cooperate however in explicit manners to send legitimate and precise information of the climate boundaries g Using Node MCU ESP8266. We 2 will interface DHT11 Humidity and Temperature Sensor, and FC37 Rain Sensor with Node MCU ESP8266-12E Wi-Fi Module. The Rain Sensor Module's Sensing Pad comprises of two nickel- covered arrangement copper tracks. Likewise, it has two Header sticks; these are inside associated with the two copper tracks of the Sensing Pad. These pins are utilized to associate the Sensing Pad to the sensor module circuit through two jumper wire. Continuously, one pin of the downpour sensor circuit gives a +5v power supply to the one track of the detecting cushion, and another pin is gotten the return power supply from another track of the detecting cushion. Regularly under dry conditions, the detecting cushion gives high opposition and low conductive. In this way, the 5v force supply can't be passed starting.

IOT systems are interconnected and communicate over networks. So, the system offers little control despite any security measures, and it can lead to various kinds of network attacks. An IOT application is used here to monitor the crop which helps to monitor the environmental condition of any area of crop field, and with the help of the internet everyone can view the condition. It is the foremost concern while connecting devices, applications and cloud platforms. Connected devices that provide useful front and information are extremely valuable. But poor connectivity becomes a challenge where IOT sensors are required to monitor process data and supply information