

1. Team Name -: Team IASY

2. Members Name and Phone Numbers

1. Yuvraj Singh Deora (leader). 6376179619

2. Sathish Uppalapati. 9989909917

3. Ishika Trivedi 7668062129

4. Aaditry Choudhury 9933984604

3. Domain name -: IOT



ABSTRACT

Weather forecast these days is unpredictable to be exact because of the climate changes drastically over weather. In cause of that, Weather Reporting System is mostly used to monitor the continuously changing climatic and weather conditions over controlled areas likes house, industry, agriculture and etc. in real time monitoring.

The condition of some particular place that be reported by satellite weather report system does not give the exact condition. However, the problem occurs when needed the accurate weather report for current time. With weather reporting system all weather parameters sensor will be controlled by ESP32 microcontroller as the server that will send all the data collected by sensors to the database by Google Firebase and will visible anywhere in the world and also display on the users smartPhone. This data then will be compared with the weather forecast data and statistics made by forecast station. All data collected will be also saved in google sheet format by IFTT tool for easier to analyse the data. This system will monitor the changes of weather condition happening over the environment and then provides the users fastest way to access the information from anywhere.

By Getting realtime change in weather it will be very useful for the farmers to get the realtime updates about the weather suppose if it is going to be rain then then temperature and air pressure reduces drastically when it comes to rain at a particular place so with the help of sensors data it will be very helpful to predict if rain will come or not.



NOVELTY

The novelty in our idea comes from its realtime weather reporting capability because there is no app created so far which can actually send the realtime data to the app with the help of IOT tools we will be having a set of hardware components and sensors which will help us to send the realtime data to the firebase which in turn will help farmers or industry be ready for any kind of weather change.



TECHNOLOGY

STACK

- 1. Hardware components and sensors
 - 1. DHT sensor
 - 2. NodeMcu Esp8266
 - 3. Air Pressure Sensor
- 2. Softwares Requirements
 - 1. Android Studio
 - 2. Google Firebase
 - 3. Arduino Ide



HARDWARE / SOFTWARE IMPLEMENTATION

NodeMcu DHT Sensor+Air Pressure Sensor Google Firebase App Or to the End User



BUSINESS SCOPE

The technology which we are going to create is a very affordable Technology which should be available to end user at the minimal cost.

We have predicted the cost requirement that how much it will actually require to make this

technology actually come into the existence

Cost of DHT sensor -: Rs.100

Cost of Pressure sensor -: Rs.100

Cost of NodeMcu -: Rs. 350

Cost for the software -: 300

Total Cost of the technology -: Rs.850

Once we have enough no. of end users then we can set our app for the advertisement purpose which will add to our source of income.