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IoT Based Weather Monitoring System

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Abstract: *The system proposed in this paper is an advanced solution for monitoring the weather conditions at a particular place and make the information visible anywhere in the world. The technology behind this is the internet of things (IoT), which is an advanced and efficient solution for connecting the things to the internet and to connect the entire world of things in a network. Here things might be whatever like electronics gadgets. sensors, automotive electronic equipment. The required hardware includes an Arduino development board, I2C module with LCD, DHT11, MQ 135, BMP 180, ESP 8266/01 Wi-Fi module, raindrop sensor and a 12 core adapter. The system deals with monitoring and controlling environmental conditions such as temperature, relative humidity, barometric pressure, air quality, rainfall and sends the information to the web page and then plot the sensor data as graphical statistics using Thing-Speak software. The data updated from the implemented system can be accessible on the internet from anywhere in the world.*

Keywords: I2C, IoT, Arduino, Sensors