

Code Named: Cat–The Initial write-up for A Real-Time Display Application for the BME-280 Sensor Weather Station

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1 Concept

Continue the Weather Station Project.

Extend the Project to create a desktop application that reads the sensor data directly from the BME280 sensor attached to the RaspberryPi: instead of having to read the webpage.

2 Initial Application Requirements

1. The Application will not read from the webpage
2. The User shall have the ability to view the current weather conditions real time
3. The User shall have the ability to to update by request the current weather conditions
 - (a) The User shall have the ability to “ping” the weather station for the current weather conditions
4. The Super User shall have the ability set “measurement time”
 - (a) The system shall measure the current weather conditions at that “set measurement time”
 - (b) This shall not interfere with the User’s ability to update by request the current weather condition
5. With the exception of the Humidity measurement, the User shall have the ability to chose to view the current weather conditions in one of three units
 - (a) Metric, English, Kelvin

- i. Temperature, Dewpoint, Heat Index
- (b) Metric, English, Millibars
 - i. Pressure