



DAQ PROJECT PMTOLLOCATION

PRESENTED BY



PM TO POINT 5



TEAM MEMBERS



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PROJECT DESCRIPTION

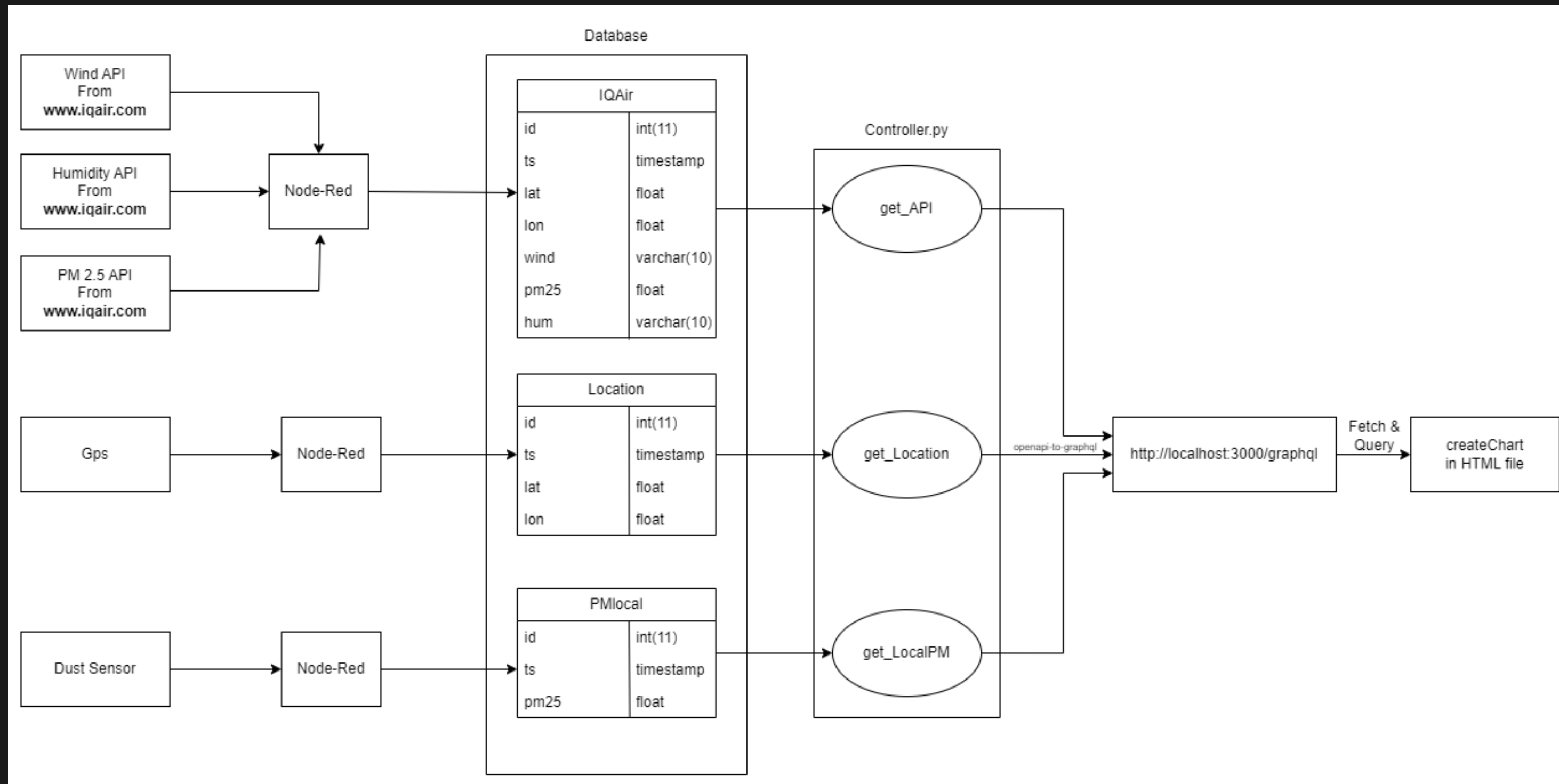
The Smart PM2.5 Monitoring System which combines real-time data from PM2.5 sensors and GPS with various factors from the API to compare PM2.5 data from the sensor and API for visualization.



BACKGROUND

In recent years, there's been significant increase in air pollution in our country, more specifically the PM 2.5 dust. So we would like to collect the data of the PM 2.5 dust and various factors that affect it, such as the location, wind and humidity, to analyze them and compare the accuracy of dust between the data gathered by Kidbright and dust API.

OVERALL ARCHITECTURE



PRIMARY DATA



Collect from dust sensor
Plantower PMS7003.

github.com

DUST SENSOR



Send the location from
smartphone with a
timestamp by using

[CedaloConnect Application.](#)

GPS

SECONDARY DATA



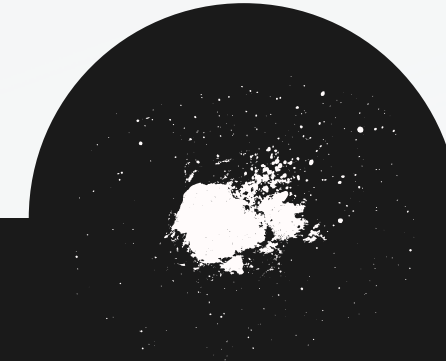
Collect by using API from
www.iqair.com

WIND API



Collect by using API from
www.iqair.com

HUMIDITY API



Collect by using API from
www.iqair.com

PM 2.5 API

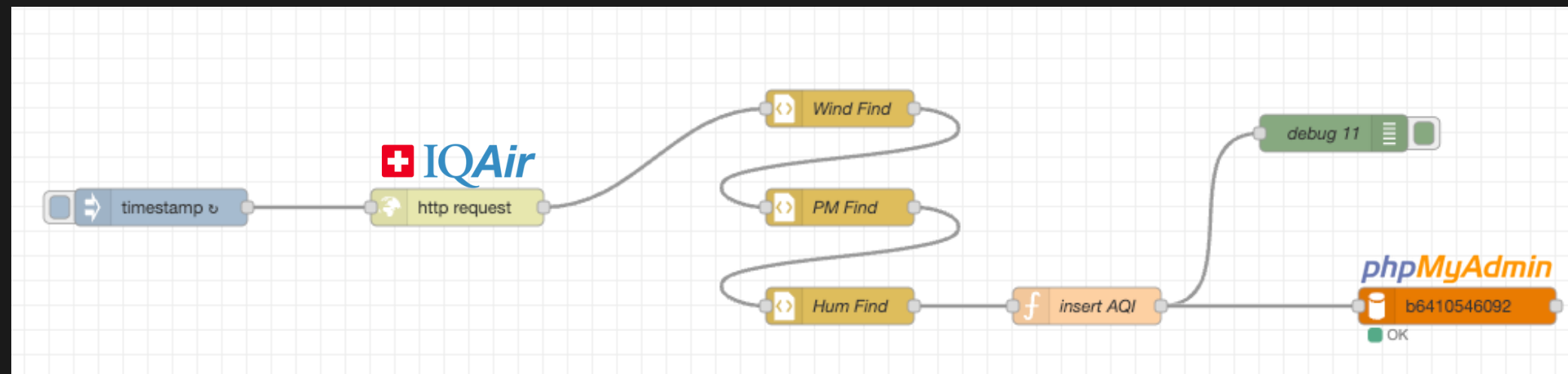
DATABASE SCHEMA

IQAir	
id 🔑	integer
ts	timestamp
lat	float
lon	float
wind	varchar(10)
pm	float
hun	varchar(10)

Location	
id 🔑	integer
ts	timestamp
lat	float
lon	float

PMlocal	
id 🔑	integer
ts	timestamp
pm	float

DATA SHARING API





DATA VISUALIZATION & DEMONSTRATION OF KEY FEATURES





**THANK'S FOR
ATTENTION**



PM TO POINT 5

A large, thick, black wavy line that starts at the top right, curves downwards, and then curves back up towards the right edge of the image.