

INDIAN CITY WEATHER: VISUALIZATION

A

PROJECT SYNOPSIS

FOR PROJECT

BACHELOR OF TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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Indian City Weather :Visualization

Introduction:

This dataset contains weather data for one of the city of India. This data was taken out from wunderground with the help of their easy to use api. It contains various features such as temperature, pressure, humidity, rain, precipitation, etc. The main target is to develop a prediction model accurate enough for predicting the weather. We can try something like predicting the weather in the next 24 hours like Microsoft tried some time back.

About Data

This dataset has temperature information of one of the city of India from 1997 to 2016 December, multiple entries have stored on the same date.

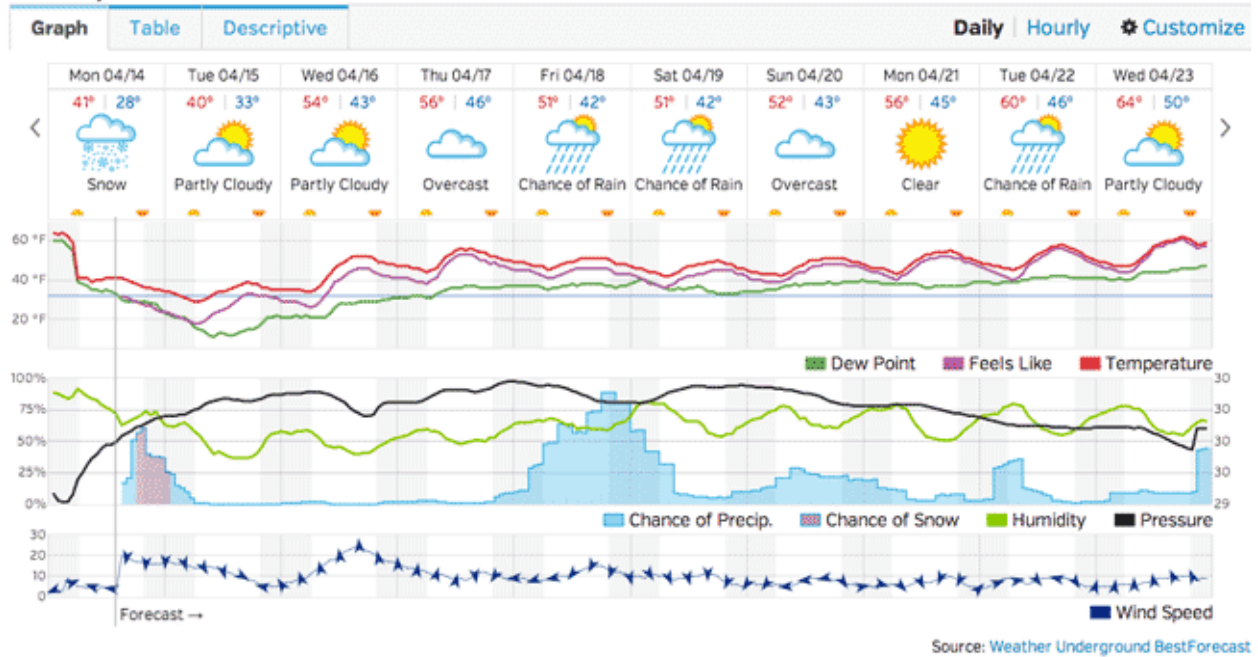
Column Name	Column Description
datetime_utc	Date With time (yyyymmdd-HH:MM)
_conds	Condition of Weather(Rain/Smoke/Clear etc)
_dewptm	Dew point in centigrade
_fog	Information about Fog. Only two possible is stored (0 or 1)
_hail	Information about hail. Only two possible is stored (0 or 1)
_heatindexm	Heat Index Measurement
_humhumidity	Information of Humidity
_pressurem	Pressure in mmbar
_rain	Information about rain. Only two possible is stored (0 or 1)
_snow	Information about snow. Only two possible is stored (0 or 1)

_tempm	Temperature in centigrade
_thunder	Information about thunder. Only two possible is stored (0 or 1)
_tornado	Information about torando. Only two possible is stored (0 or 1)
_vism	Visibility
_wdird	Wind Speed
_wdire	Wind direction

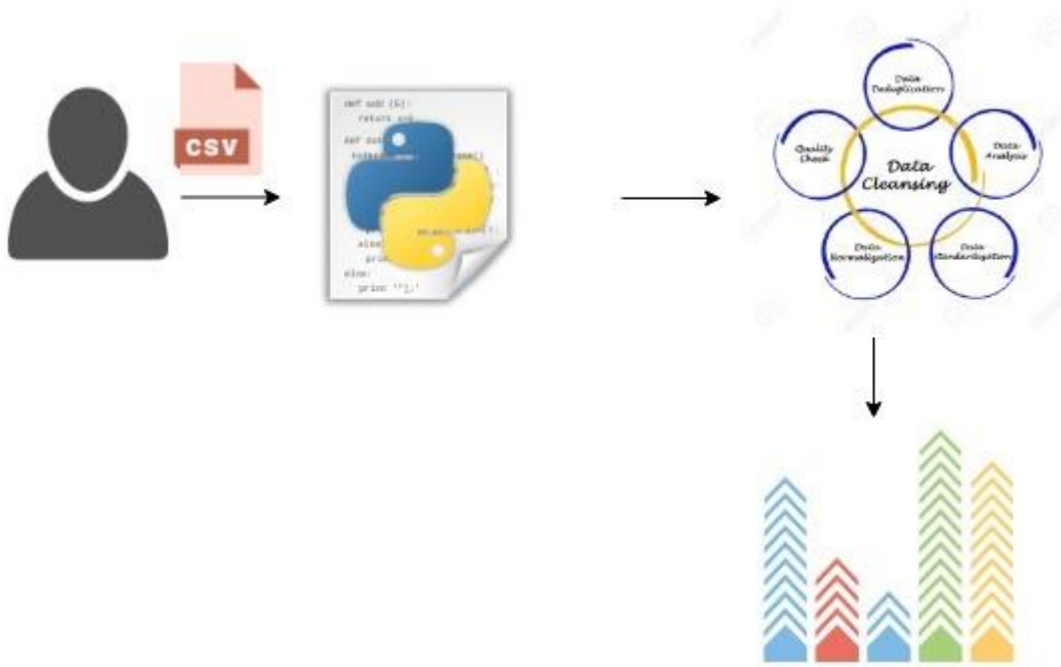
It is expected that you will build a dashboard for the following query and visualize the graph and also predict the temperature, pressure and wind direction:

- Heatmap (Temperature Daily Average)
- Boxplot (For the same data of heatmap)
- Boxplot (Temperature Monthly Average)
- Correlation of Temperature and Humidity
- Average Humidity by year
- Average Heat by year
- Average Rain by year
- Find out rainy, summer & winter season
- Predict the data (Just like [below](#) this)

10-Day Forecast



Architecture Flow:



Included Components:

Following libraries have been included –

- Numpy
- Panda
- Matplotlib

Featured Technologies:

- Python
- Jupyter Notebook