CS 442 - Fall 2019
Final Project
Team 4: Coffee Rum & Scotch

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Github: https://github.com/DOWmad/coffee-rum-scotch-project

Data set: Weather
Code Base: Python
Front-End Visualization: Bokeh

Featured Problem Sets:

* The city where the wind speed recorded has been zero for the maximum number of times.
* The city where the strongest wind has been recorded till date.
* The cities of Israel that have their Weather recorded.
* The city that has had maximum number of 'Sky is Clear' weather till date
* The city in Canada that has had maximum number of 'Sky is Clear' weather till date.

Average, Standard Deviation, Variance For the Following:
* Temperature Data by Frequency Periods: Year, Quarterly, Month, Week, Day, Hour
* Pressure Data by Frequency Periods: Year, Quarterly, Month, Week, Day, Hour
* Humidity Data by Frequency Periods: Year, Quarterly, Month, Week, Day, Hour

Highest temperatures recorded by city
Temperatures for selected time periods Year and Month for chosen cities
Plotting temperature vs humidity for selected time periods Year and Month for chosen cities
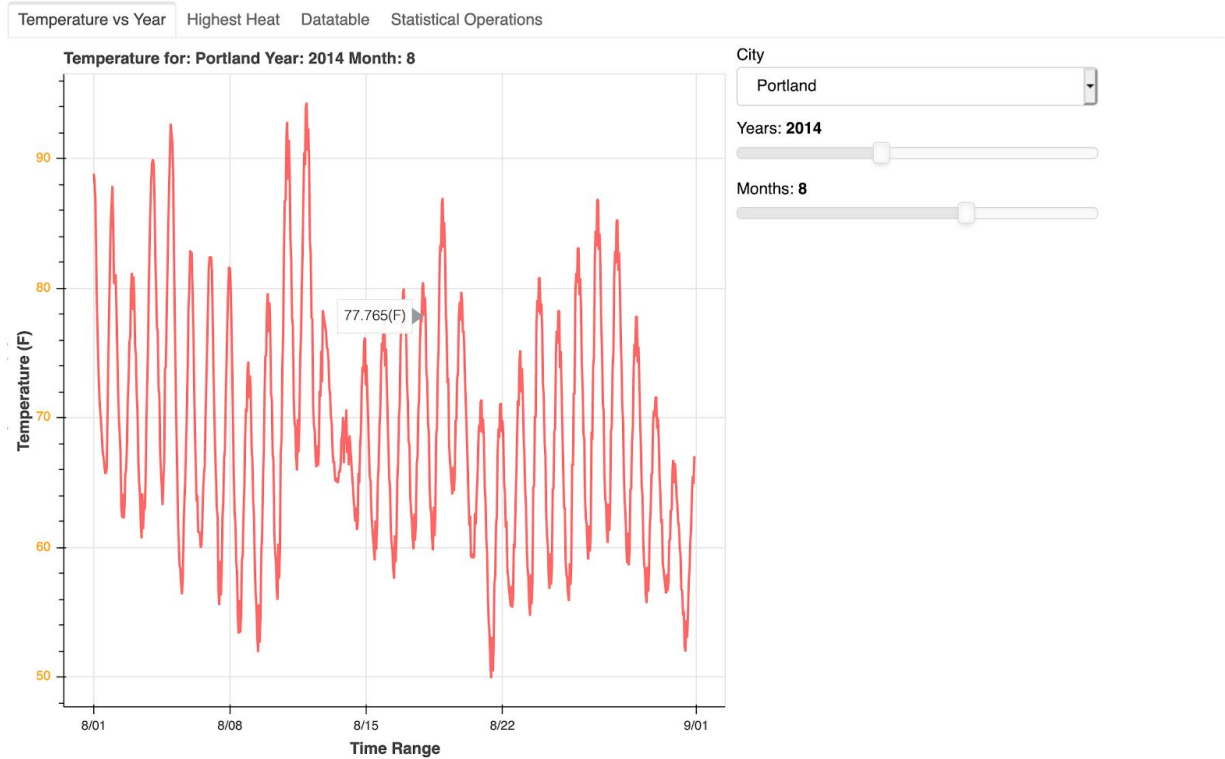Mashup of all weather data for chosen city
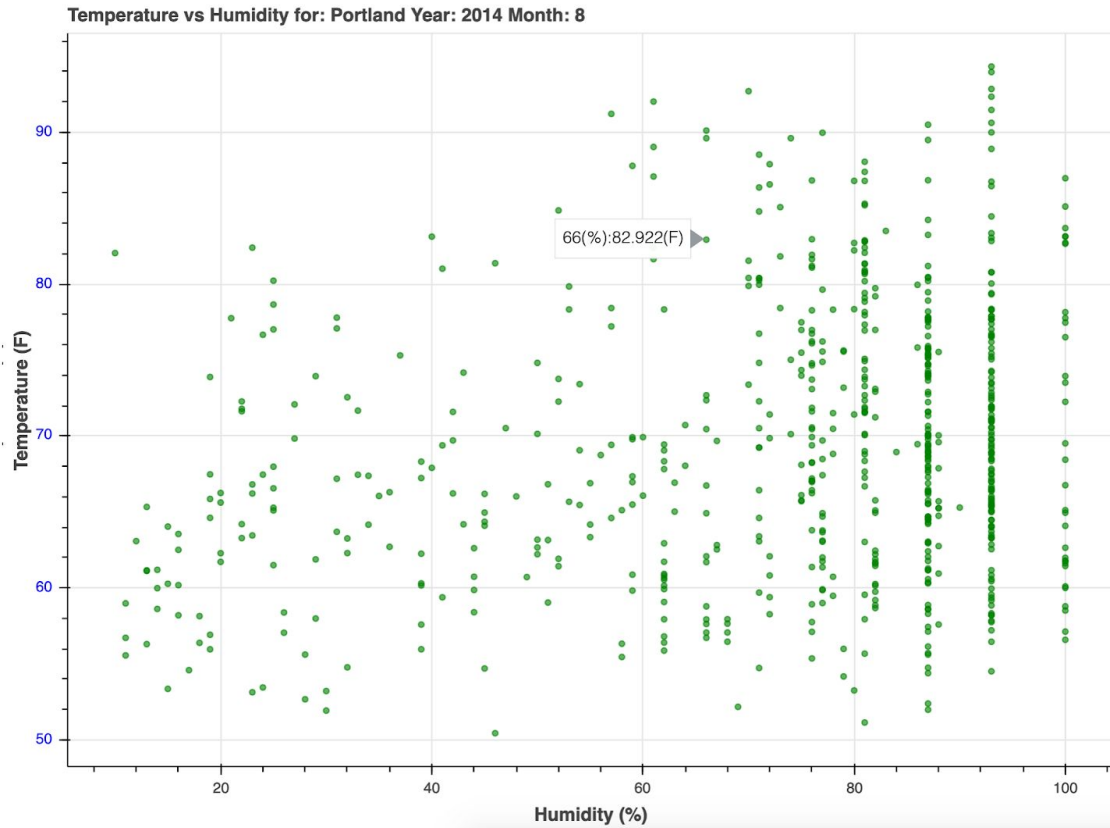
Example Screen Shots:

Temperature vs Year   Highest Heat   **Datatable**   Statistical Operations

#	Date Time	Country	Longitude	Latitude	Pressure	Weather Description	Temp	Wind Speed	Wind Direction	Humid
0	2012-10-01 13:00:	Missing	Missing	Missing	1018	sky is clear	68.468000000000	0	0	22
1	2012-10-01 14:00:	Missing	Missing	Missing	1018	sky is clear	68.4556542878	0	8	21
2	2012-10-01 15:00:	Missing	Missing	Missing	1018	sky is clear	68.435918693600	0	23	21
3	2012-10-01 16:00:	Missing	Missing	Missing	1018	sky is clear	68.416183097600	0	37	21
4	2012-10-01 17:00:	Missing	Missing	Missing	1018	sky is clear	68.396447503400	0	51	21
5	2012-10-01 18:00:	United States	-115.137222	36.174969	1018	sky is clear	68.376711907400	0	65	21
6	2012-10-01 19:00:	Missing	Missing	Missing	1018	sky is clear	68.356976311400	0	79	21
7	2012-10-01 20:00:	Missing	Missing	Missing	1018	sky is clear	68.337240717200	0	94	20
8	2012-10-01 21:00:	Missing	Missing	Missing	1018	sky is clear	68.317505121200	0	108	20
9	2012-10-01 22:00:	Missing	Missing	Missing	1018	sky is clear	68.297769525200	0	122	20
10	2012-10-01 23:00:	Missing	Missing	Missing	1018	sky is clear	68.278033931000	0	136	20
11	2012-10-02 00:00:	Missing	Missing	Missing	1018	sky is clear	68.258298335000	0	151	20
12	2012-10-02 01:00:	Missing	Missing	Missing	1018	sky is clear	68.238562739000	0	165	20
13	2012-10-02 02:00:	Missing	Missing	Missing	1018	sky is clear	68.2188271448	1	179	19
14	2012-10-02 03:00:	Missing	Missing	Missing	1018	sky is clear	68.1990915488	1	193	19

City

Las Vegas

Temperature vs Year   Highest Heat   Datatable   Statistical Operations

Temperature for: Portland Year: 2014 Month: 8

City

Portland

Years: **2014**

Months: **8**

Temperature vs Humidity for: Portland Year: 2014 Month: 8

66(%):82.922(F)

Temperature (F)

Humidity (%)

Temperature vs Year | Highest Heat | Datatable | Statistical Operations

Hottest temps for each city recorded.

Kansas City:100.076(F)

Temperature (F)

Cities

Weather By Q

Weather Data Set

Humidity

Time Interval

Q

Statistical Method

average

Weather play with the city: United States with weather description: overcast clouds

Country

United States

Weather Description

overcast clouds

Weather play with the country

Country

Canada

WindSpeed Max Value