## **Smart Weather Indicator**

A Smart\_weather\_indicator that closely emulates color changing smart weather bulb that changes color with the weather. Keeping in the mind the theme of the project and the spirit at Reverie, I decided to build this smart weather program, that not only helps the user with the current weather of the location he / she desires to be at on that day but simplifies on deciding how to step out to the house, by suggesting the appropriate apparel or to not even step out in case of emergencies. It also has the capability to show the weather in that place for the next 4 days.

I intend that the user of this smart weather program, would eventually use this to better visualize the weather and to know whether he / she needs umbrella, a coat, a snow shovel or sandals and shorts while heading out of that door.

Thanks to the OpenWeatherMap API, even though by sitting in one place the user can get the current and predicted weather data for almost any city across the GLOBE!! I mean it, any city across the GLOBE!!

To get accurate weather information of the place, it gets the specific latitude and longitude of the entered place and the OpenWeatherMap API predicts the data of that location for 7 days, but here I am displaying only for 4 days.

## **Features include:**

Assign which colors you want to use for each weather event or disable any unwanted weather events.(Can be modified in the weather\_dictionary)

Currently, it displays min. temperature(average), the max. temperature(average), weather description with additional capability to display the wind speed, the humidity, and snow or rain, mist and various other weather to trigger weather events.

## Weather Colors used for the emulated bulb:

- **Red(#FF0000)** -- A weather watch, warning, or advisory is in effect in your area. (All weather conditions listed under weather\_dictionary['extreme\_conditions']
- **Dark Grey(#A9A9A9)** Thunderstorm conditions in your area. (All weather conditions listed under weather\_dictionary['thunderstorm\_conditions']
- **Paleturquoise(#AFEEEE)** -- Drizzle condition in your area. (All weather conditions listed under weather dictionary['drizzle conditions']

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- **Mediumblue(#0000CD)** Rain in your area. (All weather conditions listed under weather\_dictionary['rain\_conditions'])
- **Gainsboro(#DCDCDC)** Snow in your area. (All weather conditions listed under weather\_dictionary['snow\_conditions'])
- **Gray(#808080)** Atmosphere conditions in your area. (All weather conditions listed under weather\_dictionary['atmosphere\_conditions'])
- **Deepbluesky**(#00BFFF) Clear sky conditions in your area. (All weather conditions listed under weather dictionary['clear conditions'])
- **Slategray**(**#708090**) Cloudy conditions in your area. (All weather conditions listed under weather dictionary['cloud conditions'])
- **Darkorange(#FF8C00)** Extreme hot or cold outside (All weather conditions listed under weather\_dictionary['extreme\_hot\_cold\_conditions']
- White(#FFFF) -- All clear(All weather conditions listed under weather\_dictionary['normal\_conditions']

Here's to good weather!