

Problem Statement - Weather reporting

Create a project that compares weather reporting done by 2 sources.

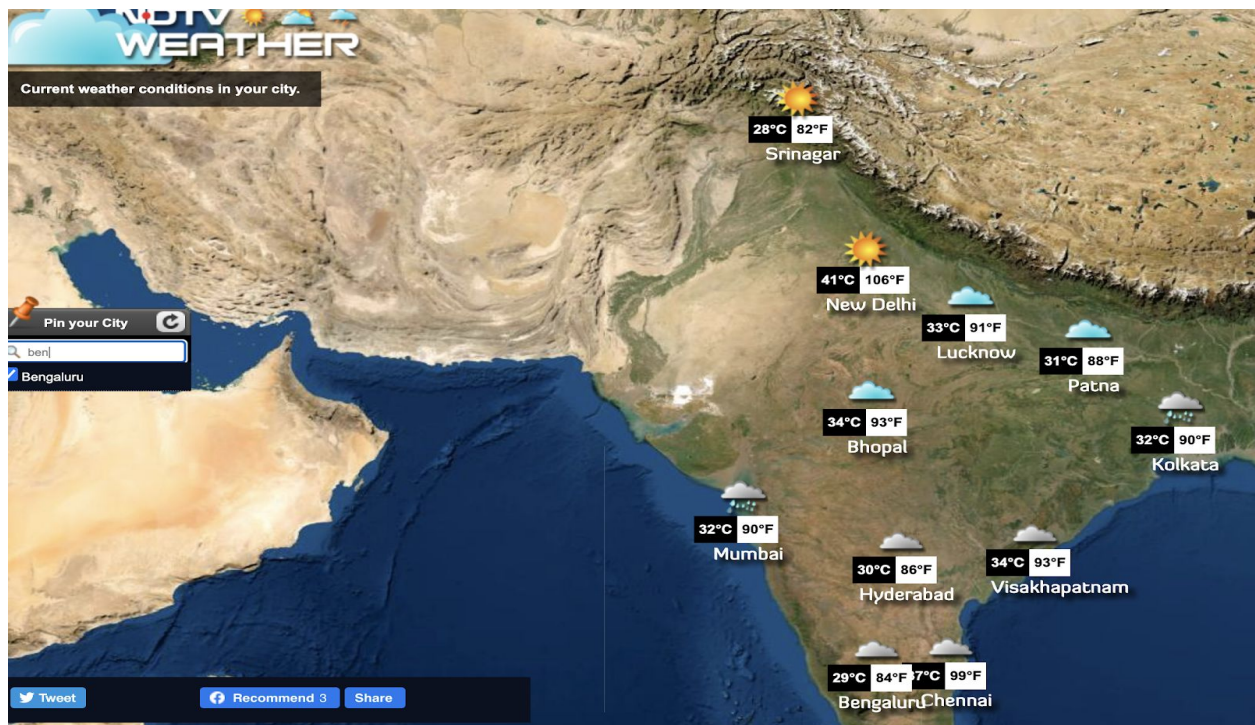
Source 1 : The website <https://www.ndtv.com/>.

Source 2 : The public weather API by <https://openweathermap.org/>

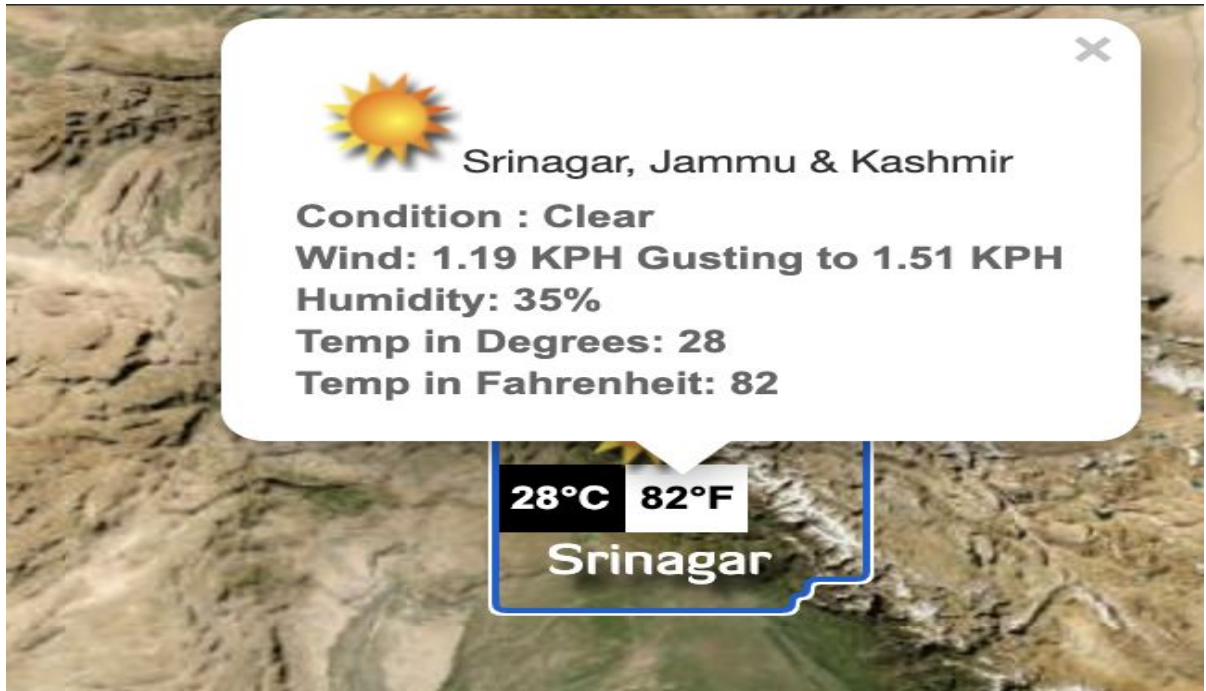
What to do?

Phase 1

1. Use any UI automation tool to automate <https://www.ndtv.com/>
2. Reach the weather section of the website



3. Use the '**Pin your city**' section on the left of the screen to search & select any given city and validate that the corresponding city is available on the map with temperature information
4. Validate that selecting any city on the map itself reveals the weather details (sample screenshot below)



Phase 2

1. Use the APIs listed here (<https://openweathermap.org/current>) for getting current weather data for any city

NOTE: Please use this value as API key in the request :

"7fe67bf08c80ded756e598d6f8fedaea"

2. Automate the above REST API using any Rest client

Phase 3

1. Create a **comparator** that matches the temperature information from the UI in phase 1 against the API response(ensure both are using the same temperature unit) in phase 2
2. Build a **variance** logic(should be configurable) that returns a success if temperature difference is within a specified range, else return a matcher exception

Great to have : Analyse other available weather conditions on both sources that can be compared and do the comparison following a similar variance logic.

Example Workflow

1. Visit ndtv website's weather page and search for Bangalore
2. Store weather object 1 w.r.t this Bangalore (e.g. temp value as 33 degree celsius, humidity level as 70% etc.)
3. Get response from the weather API for Bangalore
4. Store the API response and build the weather object 2
5. Specify the variance logic - for e.g. 2 degree celsius for temperature & 10% for humidity
6. Compare weather objects 1 and 2 along with the variance and mark tests as pass or fail based on comparator response