”WEATHER APP USING API”

Abstract :

- The idea of this project is to provide a simple GUI application to users to get the current temperature of any city they wish to see. The project also provides a simple user interface for simplification of application.
- The features of this application will be that this will be a real-time weather forecast app that returns the current temperature, humidity and condition of the searched city with current date, and time. It can also change its theme according to the time and weather of a day.

Objectives and Scope of the Project :

The objectives of this research study are

- To examine the applicability of Neural Network approach by developing effective and efficient predictive models for weather analysis.
- To develop an efficient, reliable and effective weather forecasting system based on Python and to store the searched history in a Excel sheet
- To compare and evaluate the performance of above models
- The programming was carried out using VS-CODE as a tool.

Hardware Specification :

- Processor : Intel Core i3 and above.
- RAM : 4GB or More.
- Hard Disk : 200MB or More.
- Monitor : 15-inch Color Monitor.
- Keyboard : 102/104 Keys.
- Mouse : Optical Mouse.

Software Specification :

- Operating System : Windows 7/8/10
- IDE : Microsoft Visual Code 1.6
- Python Version : Python-3.10.1
- Front End : Python
- Back End : Python & Excel (Storing data)

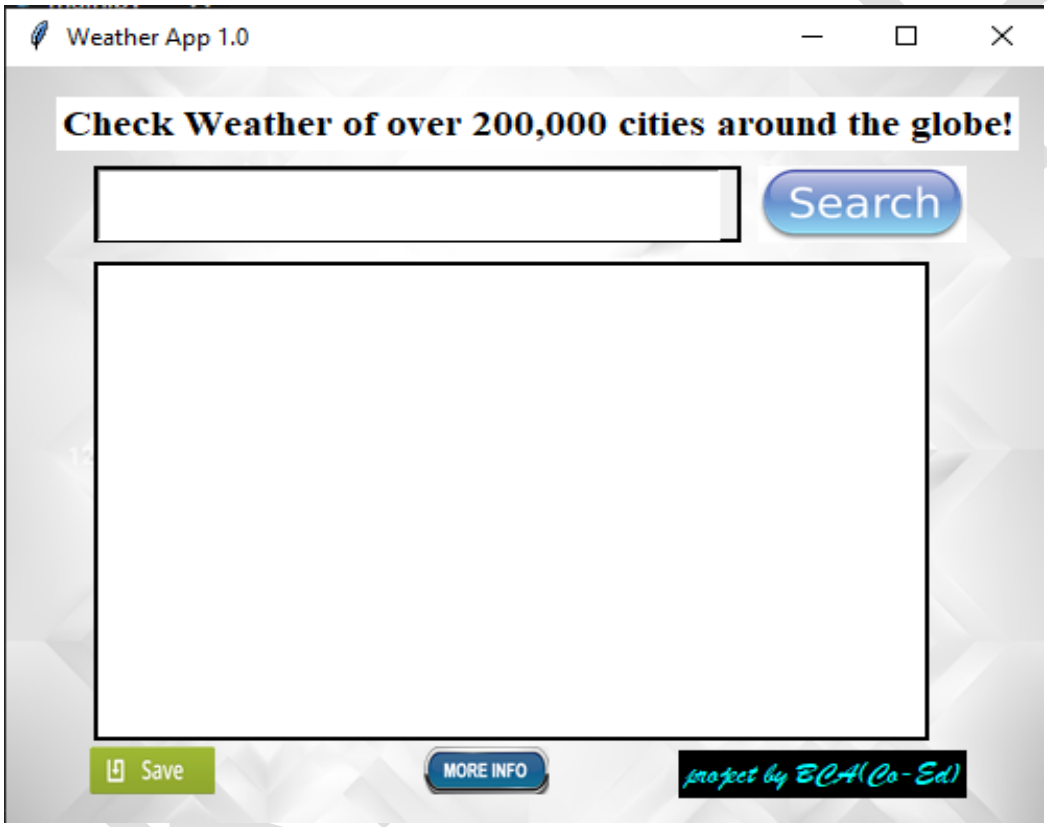
3.2.1 Front End Languages/Tools

Python Tkinter , ImageTk Libraries

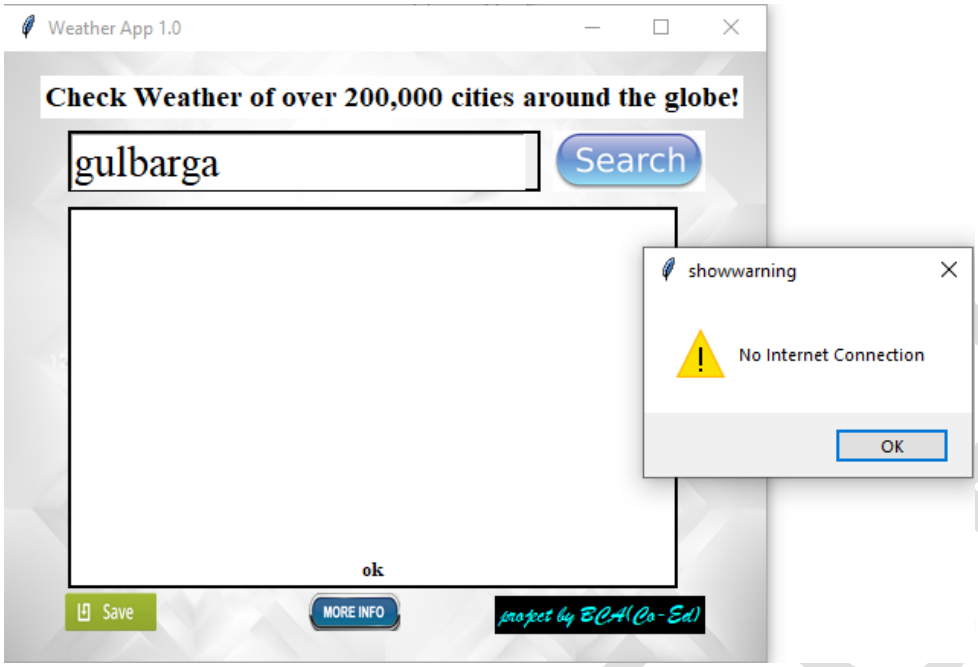
3.2.2 Back End Technology

Python openpyxl,requests,socket libraries and Excel

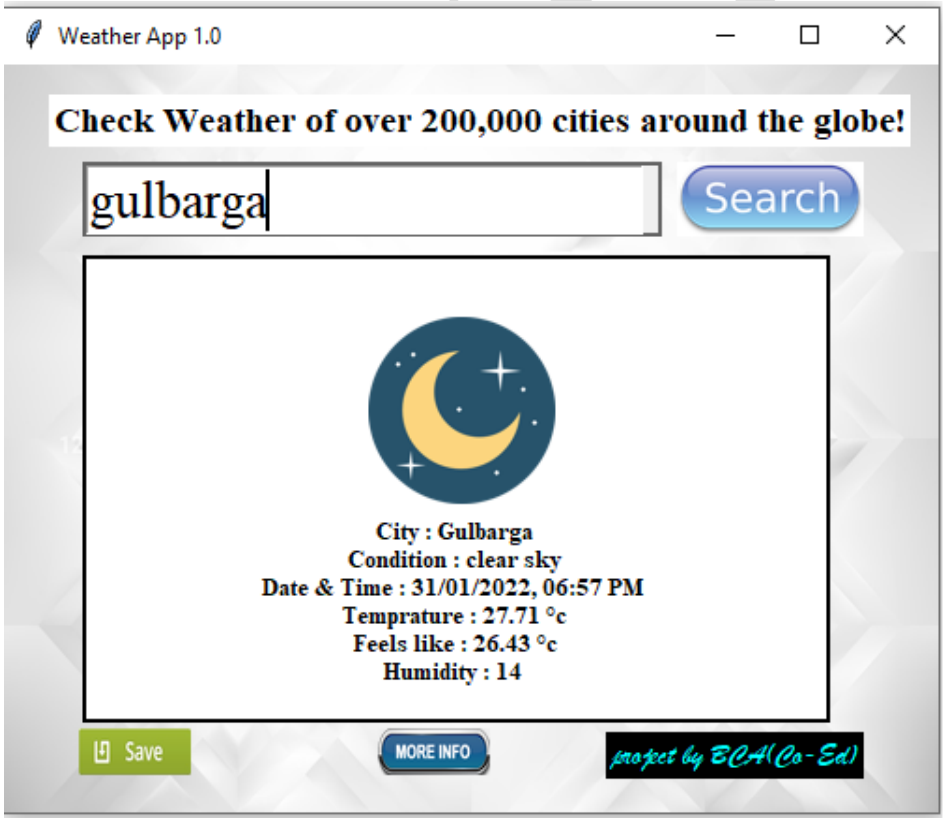
Screenshots :



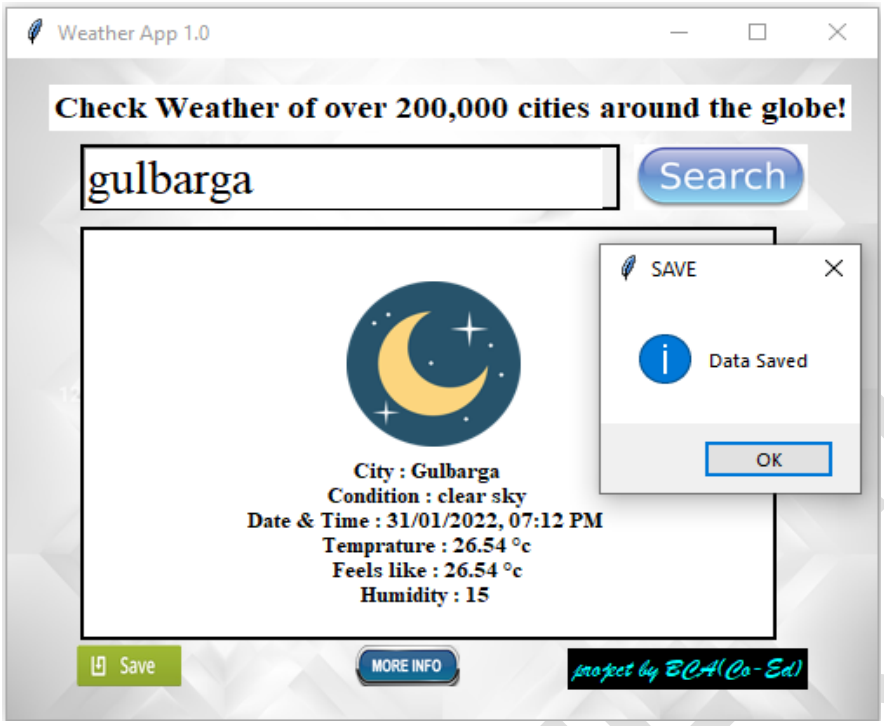
- **Interface when no internet is connected**



- **Enter the Desired city and Click on Search**

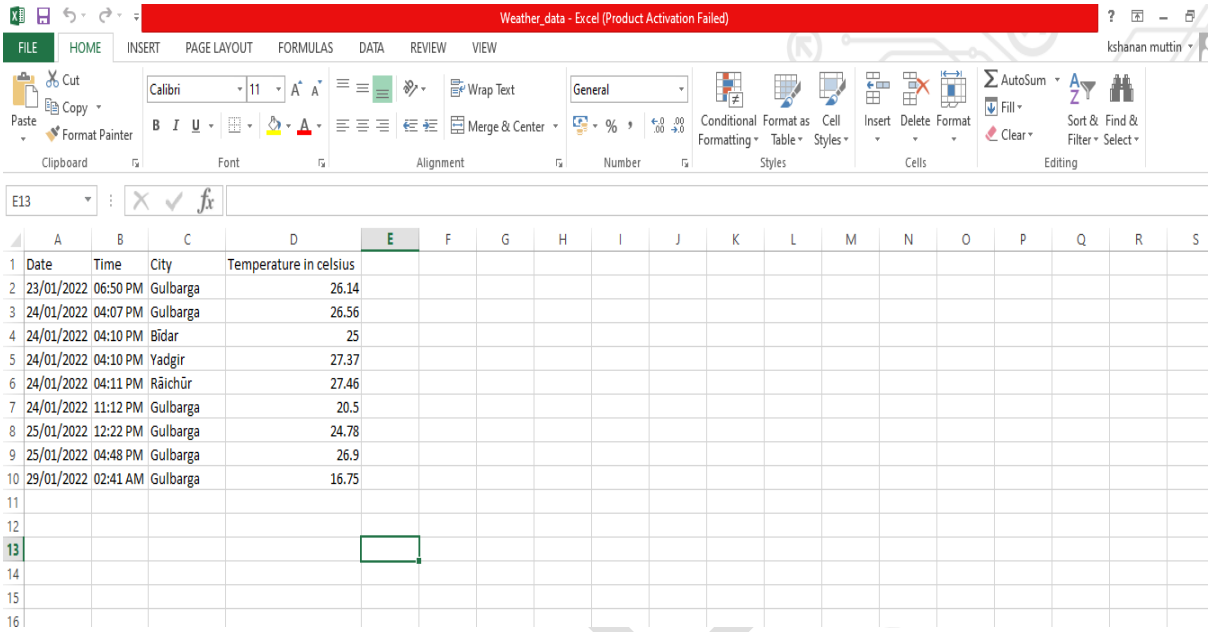


- **Click on Save to save a copy of data to the Excel file**



- **If you Enter Invalid City Name the above error will be displayed**

- **Data Stored in Excel Sheet**



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Date	Time	City	Temperature in celsius															
2	23/01/2022	06:50 PM	Gulbarga	26.14															
3	24/01/2022	04:07 PM	Gulbarga	26.56															
4	24/01/2022	04:10 PM	Bīdar	25															
5	24/01/2022	04:10 PM	Yadgir	27.37															
6	24/01/2022	04:11 PM	Rāichūr	27.46															
7	24/01/2022	11:12 PM	Gulbarga	20.5															
8	25/01/2022	12:22 PM	Gulbarga	24.78															
9	25/01/2022	04:48 PM	Gulbarga	26.9															
10	29/01/2022	02:41 AM	Gulbarga	16.75															
11																			
12																			
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