

Determining Temperature and Humidity using APIs

What is APIs?

An API (Application Programming Interface) is a set of rules and protocols that allow different software applications to communicate with each other. It defines the methods and data formats that programs use to request and exchange information. APIs make it easier to integrate and use services or features from other software without needing to understand their internal workings.

How we are using API?

To determine temperature and humidity using APIs in an easy way, follow these simple steps:

Get an API Key First

you need an API key, which is like a password to access weather data. Sign up for free at a weather service website like OpenWeatherMap or WeatherAPI. After signing up, they will give you an API key.

Make a Request to the API

- Once you have the API key, you can send a request to the weather API to get data about a city or location.
- This request is like typing a question into a search engine.

Read the Response

- The API will send back weather data in a format called **JSON**. This is just a text that contains all the information, like temperature and humidity, in an organized way.

Find Temperature and Humidity

- In the response, you'll see two important things:
 - **"temp"**: This is the temperature (usually in Kelvin).
 - **"humidity"**: This is the humidity percentage.
- To convert the temperature from Kelvin to Celsius: just subtract 273.15.

Conclusion

By using APIs and programming languages like CSS, JavaScript, HTML and with help of AI tools we can determine various climatic condition in more effective, accurate and oriented way