Weather Widget

Make a borderless app, that can be dragged around the desktop and resized responsivly.

The app should have 3 view:

- Today's Weather: display the current tempurature, icon depicting (rain/sun/snow/ect), todays tempurature high, todays tempurature low, short forecast description, detailed forecast hidden behind a hover information icon.

Weather API - <https://openweathermap.org/>

DAILY WEATHER FORECAST API EXAMPLE

### **By ZIP code**

##### Description:

Please note if country is not specified then the search works for USA as a default.

API call:

api.openweathermap.org/data/2.5/weather?zip={zip code},{country code}

Examples of API calls:

api.openweathermap.org/data/2.5/weather?zip=94040,us

Daily Forecast Parameters:

* coord
  + coord.lon City geo location, longitude
  + coord.lat City geo location, latitude
* weather (more info Weather condition codes)
  + weather.id Weather condition id
  + weather.main Group of weather parameters (Rain, Snow, Extreme etc.)
  + weather.description Weather condition within the group
  + weather.icon Weather icon id
* base Internal parameter
* main
  + main.temp Temperature. Unit Default: Kelvin, Metric: Celsius, Imperial: Fahrenheit.
  + main.feels\_like Temperature. This temperature parameter accounts for the human perception of weather. Unit Default: Kelvin, Metric: Celsius, Imperial: Fahrenheit.
  + main.pressure Atmospheric pressure (on the sea level, if there is no sea\_level or grnd\_level data), hPa
  + main.humidity Humidity, %
  + main.temp\_min Minimum temperature at the moment. This is deviation from current temp that is possible for large cities and megalopolises geographically expanded (use these parameter optionally). Unit Default: Kelvin, Metric: Celsius, Imperial: Fahrenheit.
  + main.temp\_max Maximum temperature at the moment. This is deviation from current temp that is possible for large cities and megalopolises geographically expanded (use these parameter optionally). Unit Default: Kelvin, Metric: Celsius, Imperial: Fahrenheit.
  + main.sea\_level Atmospheric pressure on the sea level, hPa
  + main.grnd\_level Atmospheric pressure on the ground level, hPa
* wind
  + wind.speed Wind speed. Unit Default: meter/sec, Metric: meter/sec, Imperial: miles/hour.
  + wind.deg Wind direction, degrees (meteorological)
* clouds
  + clouds.all Cloudiness, %
* rain
  + rain.1h Rain volume for the last 1 hour, mm
  + rain.3h Rain volume for the last 3 hours, mm
* snow
  + snow.1h Snow volume for the last 1 hour, mm
  + snow.3h Snow volume for the last 3 hours, mm
* dt Time of data calculation, unix, UTC
* sys
  + sys.type Internal parameter
  + sys.id Internal parameter
  + sys.message Internal parameter
  + sys.country Country code (GB, JP etc.)
  + sys.sunrise Sunrise time, unix, UTC
  + sys.sunset Sunset time, unix, UTC
* timezone Shift in seconds from UTC
* id City ID
* name City name
* cod Internal parameter

5 day forecast api example

### **By ZIP code**

##### Description:

Please note if country is not specified then the search works for USA as a default.

##### API call:

api.openweathermap.org/data/2.5/forecast?zip={zip code},{country code}

##### Parameters:

**zip** zip code

##### Examples of API calls:

[api.openweathermap.org/data/2.5/forecast?zip=94040,us](http://samples.openweathermap.org/data/2.5/forecast?zip=94040&appid=b6907d289e10d714a6e88b30761fae22)

5 Day Forecast Parameters:

* code Internal parameter
* message Internal parameter
* city
  + city.id City ID
  + city.name City name
  + city.coord
    - city.coord.lat City geo location, latitude
    - city.coord.lon City geo location, longitude
  + city.country Country code (GB, JP etc.)
  + city.timezone Shift in seconds from UTC
* cnt Number of lines returned by this API call
* list
  + list.dt Time of data forecasted, unix, UTC
  + list.main
    - list.main.temp Temperature. Unit Default: Kelvin, Metric: Celsius, Imperial: Fahrenheit.
    - list.main.feels\_like Temperature. This temperature parameter accounts for the human perception of weather. Unit Default: Kelvin, Metric: Celsius, Imperial: Fahrenheit.
    - list.main.temp\_min Minimum temperature at the moment of calculation. This is deviation from 'temp' that is possible for large cities and megalopolises geographically expanded (use these parameter optionally). Unit Default: Kelvin, Metric: Celsius, Imperial: Fahrenheit.
    - list.main.temp\_max Maximum temperature at the moment of calculation. This is deviation from 'temp' that is possible for large cities and megalopolises geographically expanded (use these parameter optionally). Unit Default: Kelvin, Metric: Celsius, Imperial: Fahrenheit.
    - list.main.pressure Atmospheric pressure on the sea level by default, hPa
    - list.main.sea\_level Atmospheric pressure on the sea level, hPa
    - list.main.grnd\_level Atmospheric pressure on the ground level, hPa
    - list.main.humidity Humidity, %
    - list.main.temp\_kf Internal parameter
  + list.weather (more info Weather condition codes)
    - list.weather.id Weather condition id
    - list.weather.main Group of weather parameters (Rain, Snow, Extreme etc.)
    - list.weather.description Weather condition within the group
    - list.weather.icon Weather icon id
  + list.clouds
    - list.clouds.all Cloudiness, %
  + list.wind
    - list.wind.speed Wind speed. Unit Default: meter/sec, Metric: meter/sec, Imperial: miles/hour.
    - list.wind.deg Wind direction, degrees (meteorological)
  + list.rain
    - list.rain.3h Rain volume for last 3 hours, mm
  + list.snow
    - list.snow.3h Snow volume for last 3 hours
  + list.dt\_txt Time of data forecasted, ISO, UTC