

# getWeather()

#1 fetch API function

#2 generateLocalDate() - Converting Unix Timestamp to a Date string

- The **purpose** of the function is to get Date and Time of the selected city
- The **goal** of this function is "to use Date.toLocaleString() method" (based on a millisecond world)  
→ The toLocaleString() method converts a Date object to a string

What needs to be converted to a String is

"Unix timestamp of the selected city"

## Step5 & 6

Date.toLocaleString()

Unix Timestamp(1615784353)

- of the selected city (goal) as a parameter

Human-Readable Time (2021/03/15 10:30:40)

- of the selected city (purpose) in string format

### Unix timestamp

A number of seconds that have passed since the Unix epoch, which is the time of **00:00:00 UTC on January 1st 1970**

However....

The data I can get from API's JSON file is "timeshift in seconds from UTC" (-> convert to millisecond)

## Step1 & 2

The data I need is "current Unix timestamp of UTC" (millisecond)

## Step4

current Unix timestamp of UTC (millisecond) + timeshift in seconds from UTC (millisecond) = Unix timestamp of the selected city (millisecond)

## Step3

To Obtain current Unix timestamp of UTC

- 1) Obtain "your PC's Unix time" in milliseconds → **getTime()** -- millisecond base
- 2) Obtain "the time difference in milliseconds between UTC and your PC time" → **getTimezoneOffset()** -- minute base  
→ Convert to millisecond
- 3) Calculate "current Unix timestamp of UTC"

your PC's unix time + the time difference between UTC and your PC time = current Unix timestamp of UTC

\*\*\* Calculation results need to be millisecond

#3 unixConverter()

#4 displayData()