### **Challenge #1: JavaScript - Weather API (30 minutes)**

Create a simple weather application using JavaScript that interacts with the **OpenWeatherMap API** to fetch the current **weather** and **temperature** of a **city** entered by the user. The app will display weather conditions using images and temperature ranges with visual cues.

#### **Instructions**

1. **Skeleton Files**:
   * Go to **eLearn → Content → Week 5 → In Class → (unzip) Week5\_InClass → Challenge1**
   * You will find **3 skeleton files** along with image files in **images** sub-folder:
     + home.html: The main HTML file.
     + styles.css: The CSS file used to style the main page.
     + script.js: The JavaScript file you’ll use to add interactivity to the main page.
2. Don’t forget to use **Chrome Browser’s InCognito mode**.
3. Please remember to **hard-reload/refresh** (the main HTML page in the web browser upon making changes to the HTML file (if any), the CSS file (if any), and the JavaScript file (you will make changes here for sure).
   * **Windows**: CTRL + SHIFT + R
   * **Mac**: command + SHIFT +R
4. **API Setup**
   * Use the OpenWeatherMap API to retrieve weather data. You will need an API key, which is already included in the JavaScript file (script.js). Ensure your key is valid and working.
5. **User Input**
   * The user will enter the name of a city (e.g., "Moscow" or "Yakutsk") in the input field. The value entered will be retrieved using JavaScript and passed to the OpenWeatherMap API to fetch weather data for that city.
6. **Weather Data Retrieval:** Based on the API response, retrieve the following:
   * Weather condition (e.g., Clear, Clouds, Rain) from the weather object in the API response.
   * Temperature in Celsius from the main.temp value in the API response.
7. **Display Weather Info**
   * Match the weather condition with an appropriate image. For example, if the weather is "Clear," display a sunny image (images/clear.jpg).
   * If multiple weather conditions are returned (e.g., Rain and Clouds), display multiple images.
8. **Display Temperature Info**
   * Categorize the temperature into one of three categories:
     + **Hot** if the temperature is above 25°C.
     + **Okay** if the temperature is between 5°C and 25°C.
     + **Cold** if the temperature is below 5°C.
   * Display an image based on the temperature category (e.g., images/hot.jpg for hot weather).
9. **Update the DOM**
   * Use JavaScript to dynamically update the HTML content:
     + Replace the placeholder images with the actual weather condition images.
     + Replace the temperature image based on the current temperature.

*See below for visuals*







