import java.io.BufferedReader;

import java.io.InputStreamReader;

import java.net.HttpURLConnection;

import java.net.URL;

import org.json.JSONObject;

public class WeatherAPIClient {

// Replace with your actual OpenWeatherMap API key

private static final String API\_KEY = "your\_api\_key\_here";

private static final String CITY = "Hyderabad";

public static void main(String[] args) {

try {

// URL of public weather API

String urlString = String.format(

"https://api.openweathermap.org/data/2.5/weather?q=%s&appid=%s&units=metric",

CITY, API\_KEY

);

// Create URL object

URL url = new URL(urlString);

HttpURLConnection conn = (HttpURLConnection) url.openConnection();

conn.setRequestMethod("GET"); // HTTP GET request

int responseCode = conn.getResponseCode();

if (responseCode == 200) { // success

BufferedReader in = new BufferedReader(new InputStreamReader(conn.getInputStream()));

String inputLine;

StringBuffer response = new StringBuffer();

// Read the response line by line

while ((inputLine = in.readLine()) != null) {

response.append(inputLine);

}

in.close();

// Parse JSON response

JSONObject jsonResponse = new JSONObject(response.toString());

// Extract weather details

String cityName = jsonResponse.getString("name");

JSONObject main = jsonResponse.getJSONObject("main");

double temp = main.getDouble("temp");

double feels\_like = main.getDouble("feels\_like");

int humidity = main.getInt("humidity");

JSONObject weather = jsonResponse.getJSONArray("weather").getJSONObject(0);

String description = weather.getString("description");

// Display data in structured format

System.out.println("Weather Information:");

System.out.println("--------------------");

System.out.println("City : " + cityName);

System.out.println("Temperature: " + temp + " °C");

System.out.println("Feels Like : " + feels\_like + " °C");

System.out.println("Humidity : " + humidity + " %");

System.out.println("Condition : " + description);

} else {

System.out.println("HTTP request failed. Response Code: " + responseCode);

}

} catch (Exception e) {

System.out.println("Error occurred: " + e.getMessage());

}

}

}