Link to the program: <https://www.jdoodle.com/ia/1tCw>

Code within the program:

import java.net.URI;

import java.net.http.HttpClient;

import java.net.http.HttpRequest;

import java.net.http.HttpResponse;

import java.util.Scanner;

import com.google.gson.Gson;

import com.google.gson.annotations.SerializedName;

public class Main {

private static final Gson gson = new Gson();

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.println("WARNING! Some pokemon heights and weights may not be correct. This is due to an error within the source for the data on the Pokemon" +

"\nHow would you like to find the pokemon: \n1. Name\n2. Pokedex Number:");

int choice = scanner.nextInt();

scanner.nextLine(); // Consume the newline character

String url = "";

if (choice == 1){

System.out.println("Enter a Pokemon name:");

String name = scanner.nextLine().toLowerCase();

url = String.format("https://pokeapi.co/api/v2/pokemon/%s", name);

}

else if (choice == 2){

System.out.println("Enter a Pokedex number:");

int id = scanner.nextInt();

url = String.format("https://pokeapi.co/api/v2/pokemon/%d", id);

}

try {

System.out.println("Fetching URL: " + url); // Debug print

Pokemon pokemon = fetchPokemon(url);

if (pokemon != null) {

displayPokemonInfo(pokemon);

}

} catch (Exception e) {

System.out.println("\nException Caught!");

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

}

}

private static Pokemon fetchPokemon(String urlString) throws Exception {

HttpClient client = HttpClient.newHttpClient();

HttpRequest request = HttpRequest.newBuilder()

.uri(new URI(urlString))

.GET()

.build();

HttpResponse<String> response = client.send(request, HttpResponse.BodyHandlers.ofString());

String responseBody = response.body();

if (responseBody == null || responseBody.isEmpty()) {

String resp = "No response received from PokeAPI.";

return null;

}

return gson.fromJson(responseBody, Pokemon.class);

}

private static void displayPokemonInfo(Pokemon pokemon) {

System.out.println("PokeDex Number: " + pokemon.id);

System.out.println("Name: " + pokemon.name);

System.out.println("Height: " + Math.round((pokemon.height \* 3.93700787) / 12) + " ft " + Math.round(pokemon.height \* 3.93700787) % 12 + " in");

System.out.println("Weight: " + Math.round(pokemon.weight \* .220462 \* 10.0) / 10.0 + " lbs");

// Convert TypeSlot array to type name array for joining

String[] typeNames = new String[pokemon.types.length];

for (int i = 0; i < pokemon.types.length; i++) {

typeNames[i] = pokemon.types[i].typeInfo.name;

}

System.out.println("Types: " + String.join("/", typeNames));

}

}

class Pokemon {

public String name;

public double height;

public double weight;

public int id;

@SerializedName("types")

public TypeSlot[] types;

}

class TypeSlot {

@SerializedName("type")

public TypeInfo typeInfo;

}

class TypeInfo {

public String name;

}