# **Countries & Cities**

**API Consumer Assignment** 

Leuze/ LEP11



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# 1. Intro

APIs (Application Programming Interfaces) are essential part of modern applications and systems. They allow cooperation, data acquisition and control across multiple systems or parts of one system.

## 2. Countries & Cities

Countries & Cities API is a simple free API that does not require any registration for use.

It provides basic data about countries and their cities.

Documentation for the API can be found here:

https://documenter.getpostman.com/view/1134062/T1LJjU52

## 3. Requirements

For this assignment, create API consumer for the Countries & Cities API.

This consumer (client) can be written in any language, as far is it fulfills given requirements.

#### 3.1 Get population of Czech Republic

Retrieve data for population of Czech Republic

#### 3.2 Get all cities for Czech Republic

Retrieve list of cities for Czech Republic

#### 3.3 Get 3 cities for Czech Republic

Retrieve list of 3 cities (ascending) from Czech Republic

#### 3.4 Flag of Czech Republic

Retrieve flag URI for Czech Republic

#### 3.5 Get all countries and their currency

Retrieve list of all countries and their currencies

#### 3.6 Get all countries and their currency and dial code

Retrieve list of all countries with their currencies and dial codes

# 3.7 All endpoint implementations need to have validation for retrieved errors

Any API endpoint can return an error. Consumer needs to validate the response and handle potential error states.

# 4. Optional

Basic API consuming is defined in section 3. Now, the optional part for this assignment is to perform some additional operation on retrieved data.

# 4.1 Compare populations for Czech Republic and neighbor countries (Germany, Austria, Slovakia, Poland)

Retrieve data for all mentioned countries and compare populations / population growths

#### 4.2 Compare population for Plzen, Praha, Ostrava, Brno

Retrieve data for all mentioned cities and compare populations / population growths

#### 4.3 Get creative

Create your own use case for data retrieved from the API