# Assignment 4 – REST APIs

# Group Size: 1

# Value: 25% of course mark

# Due Date: Friday, 17th June, 1:00 pm

## Summary:

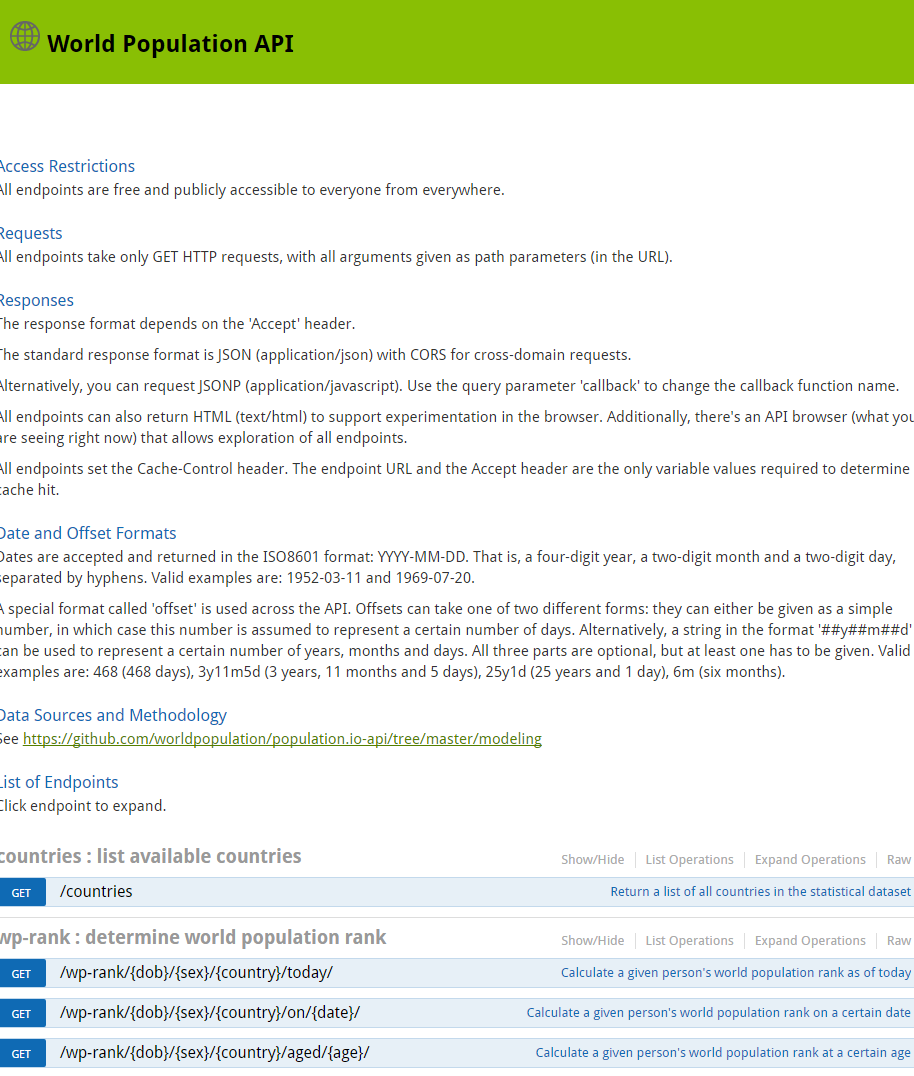
## In this assignment you are requested to carry out 2 different tasks. The 1st task asks you to consume an existing REST API to retrieve data about the population of a country. The video demo demo1Assignment4.mp4 illustrates what you need to do. The 2nd task involves the creation of your own REST API.

## Requirements:

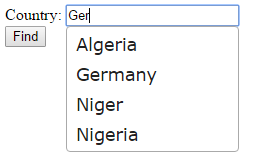
1. Create a simple HTML file that allows a user to input a country name and a button



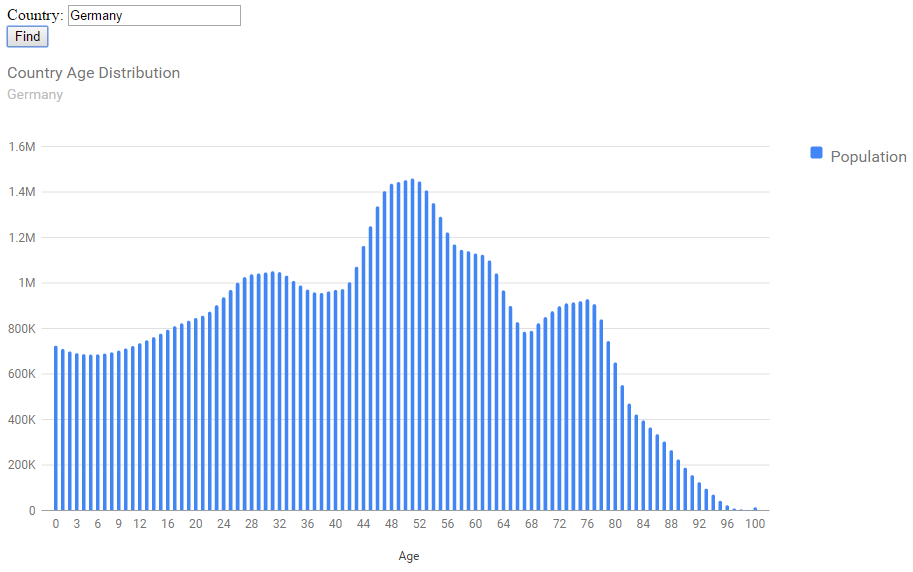
1. Using JavaScript download a list of all the countries available in the following world population API: <http://api.population.io/>



1. Using jqueryUI create an autocomplete functionality in the input box created in requirement 1 using as source the object with all the country names downloaded in requirement 2



1. When the user clicks on the button “Find”, using Ajax use the API <http://api.population.io/> to retrieve data about the population of the entered country distributed by age in the year 2015.
2. Using Google charts plot the extracted data, showing on the X axis the age and on the Y axis the number of people alive of that age bracket in the country in 2015. An illustration of how the end result should look like is provided below:



\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Create a REST API as delineated in the in-class REST tutorials. You will need to:

1. Create a model and a serializer for a book item.
2. Create a book list APIView with methods to respond to GET and POST HTTP requests
3. Create a book detail APIView with methods to respond to GET, PUT and DELETE HTTP requests
4. Create proper authentication and permissions for your API. Create a superuser with user name: admin and password: password123. **This is important since these are the credentials I will use to test your application!** and make sure that only authenticated users are able to create, update and delete book items
5. Add pagination to your API in order to allow a API client to step through the data in your system through pages that display no longer than 10 items at a time.

## Deliverables:

Place each application in a separate folder inside a single folder named YourLastNameYourFirstnameWeb3Assignment4 and drop it at: [M:\Assessments Swallow Box\IN712Web3\Assignment4](file:///M:\Assessments%20Swallow%20Box\IN712Web3\Assignment3).