Web based API Project phase 4

CS257

SQL Table Structure mockups:

CREATE TABLE data\_gdp\_usd (

country\_name TEXT,

year INT,

gdp\_usd FLOAT

);

CREATE TABLE data\_gdp\_ppp (

country\_name TEXT,

year INT,

gdp\_ppp FLOAT

);

CREATE TABLE data\_gdp\_capita\_usd (

country\_name TEXT,

year INT,

gdp\_capita\_usd FLOAT

);

CREATE TABLE data\_gdp\_capita\_ppp (

country\_name TEXT,

year INT,

gdp\_capita\_ppp FLOAT

);

API Query Structure:

1. *Synopsis*: Get a list of each country's GDP for each year in the database

*Query*: /countries/gdp

*Response*: returns a list of dictionaries containing every country in the database alongwith that country’s GDP per year. Each dictionary contains a country’s name, one specific year, and the country’s GDP during that year.

*Example*: http://apiquery.com/countries/gdp/

[{‘name’ : ‘Algeria’, ‘year’ : 1960, ‘GDP’ : 50 million dollars}, {‘name’ : ‘Algeria’,

‘year’ : 1961, ‘GDP’ : 50 million dollars}…{‘name’ : ‘Algeria’, ‘year’ : 2017, ‘GDP’ : 50 million dollars}, {‘name’ : ‘Bahrain, ‘year’ : 1960, ‘GDP’ : 50 million dollars}, {‘name’ : ‘Bahrain, ‘year’ : 1961, ‘GDP’ : 50 million dollars}…{‘name’ : ‘Bahrain’, ‘year’ : 2017, ‘GDP’ : 50 million dollars}…]

1. *Synopsis*: Get a list of one country's GDP for each year in the database

*Query*: /countries/gdp?country\_name= somecountry

*Response*: returns a list of dictionaries. This list of dictionaries contains the specified country’s name along with its GDP per year.

*Example*: http://apiquery.com/countries/gdp/?country\_name=Jordan

[{‘name’ : ‘Jordan’, ‘year’ : 1960, ‘GDP’ : 50 million dollars}, {‘name’ : ‘Jordan’,

‘year’ : 1961, ‘GDP’ : 50 million dollars}…{‘name’ : ‘Jordan’, ‘year’ : 2017, ‘GDP’ : 50 million dollars}]

1. *Synopsis*: Get a list of country's GDP for one specified year

*Query*: /countries/gdp/? year=someyear

*Response*: returns a list of dictionaries. Each dictionary corresponds to a country, each country is paried with a dictionary containing a key representing GDP and a value representing the specified year.

*Example*: http://apiquery.com/countries /gdp/?year=1960

[{‘name’ : ‘Algeria’, ‘year’ : 1960, ‘GDP’ : 50 million dollars}

{‘name’ : ‘Bahrain’, ‘year’ : 1960, ‘GDP’ : 50 million dollars}

{‘name’ : ‘Tunisia’, ‘year’ : 1960, ‘GDP’ : 50 million dollars}

{‘name’ : ‘Jordan’, ‘year’ : 1960, ‘GDP’ : 50 million dollars}]

1. *Synopsis*: Get a list of country's GDP for a set of years from start\_year to end\_year, inclusively.

*Query*: /countries/gdp/?country\_name=somecountry&start\_year=someyear&end\_year=someyear

*Response*: Returns a list of dictionaries with the country’s name, the year, and the GDP during that year. Returns dictionaries with year values within the start\_year and end\_year endpoints inclusively.

*Example*:

http://apiquery.com/countries /gdp/?country\_name=Jordan&start\_year=1960&end\_year=1963

{‘name’ : ‘Jordan’, ‘year’ : 1961, ‘GDP’ : 50 million dollars}

{‘name’ : ‘Jordan’, ‘year’ : 1962, ‘GDP’ : 50 million dollars}

{‘name’ : ‘Jordan’, ‘year’ : 1963, ‘GDP’ : 50 million dollars}]

1. *Synopsis*: Get a list of each country's religion’s practiced

*Query*: /countries/religion

*Response*: returns a list of dictionaries. Each dictionary corresponds to a country, each country corresponds to a dictionary with a key representing a religion and a value representing the percent of the population that practices that religion.

*Example*: <http://apiquery.com/countries/religion/>

[{‘Algeria’ : {Islam: 92%, Shia Islam : 1%… Christianity: 5%}},

{‘Bahrain’ : {Islam: 79%, Shia Islam : 68%… Christianity: 11%}},

{‘Iraq’ : {Islam: 90%, Shia Islam : 9%… Christianity: 1%}}]