**GALYTIX API DESCRIPTION AND APPROACH:**

**DESCRIPTION:**

**POST /api/gwp/avg/**

Returns average GWP values for given LOBs as a JSON object.

* URL Params: None
* Headers: Content-Type: application/json.
* Data Params:

{

country: string,

lob: [string1, string2,...]

}

* Status Code: 200
* Content: JSON response{ lob1: gwp-value1, lob2: gwp-value2,...}
* Request:

{

country: “ao”,

lob: [“transport”,”liability”]

}

* Response:

{

“transport” : 16041791.4025,

“liability” : 8259673.275

}

**APPROACH:**

1. Firstly, I have converted the CSV file’s data to JSON object asynchronously.
2. I have declared a route for the intended **POST** request. The post method expects two parameters: a string(**country**) and an array of strings(**LOB values**).
3. I filtered the results array(which contains all of our csv data in JSON object) with the help of **filter**() method in the **‘filteredByCtry’** array which will contain all the rows of the CSV file with the provided country name in the request’s body.
4. Now, for further filtering on the **‘filteredByCtry’** array with the help of lines of business string array provided as the second parameter in the request’s body, I used **forEach** loop which will parse the values of lines of business array one by one. Inside this loop I have used the **filter**() method on **filteredByCtry** array to filter based on each value of lines of business provided.
5. The filtered array is then used for pushing the values inside another array(**valarr**) which has all the values of **GWP** from **2008-2015**.
6. For calculating the average I first calculated the sum by using the **reduce**() method on **valarr** which handles both the cases when there is an empty string and when there isn't.
7. Lastly the values of {lob: average} are parsed inside the object and then sent as a response to the client’s request as a JSON object.