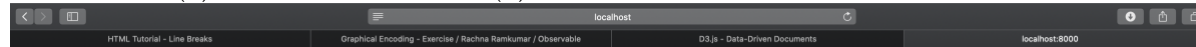**Mini Project 1 – AID DATA**

Rachna Ramkumar/rr3656

1. **How do the countries compare in terms of how much they receive and donate from other countries? Are there countries that donate much more than they receive or receive much more than they donate?**
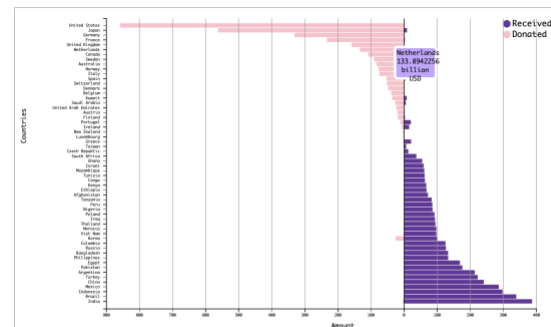
SOLUTIONS :

This problem statement can be visualised using a diverging bar chart. Where countries will be on the y-axis and the funds in billion $ will be on the x-axis. Two haves with two different colours : (1) Donation Received (2) Donation Offered.
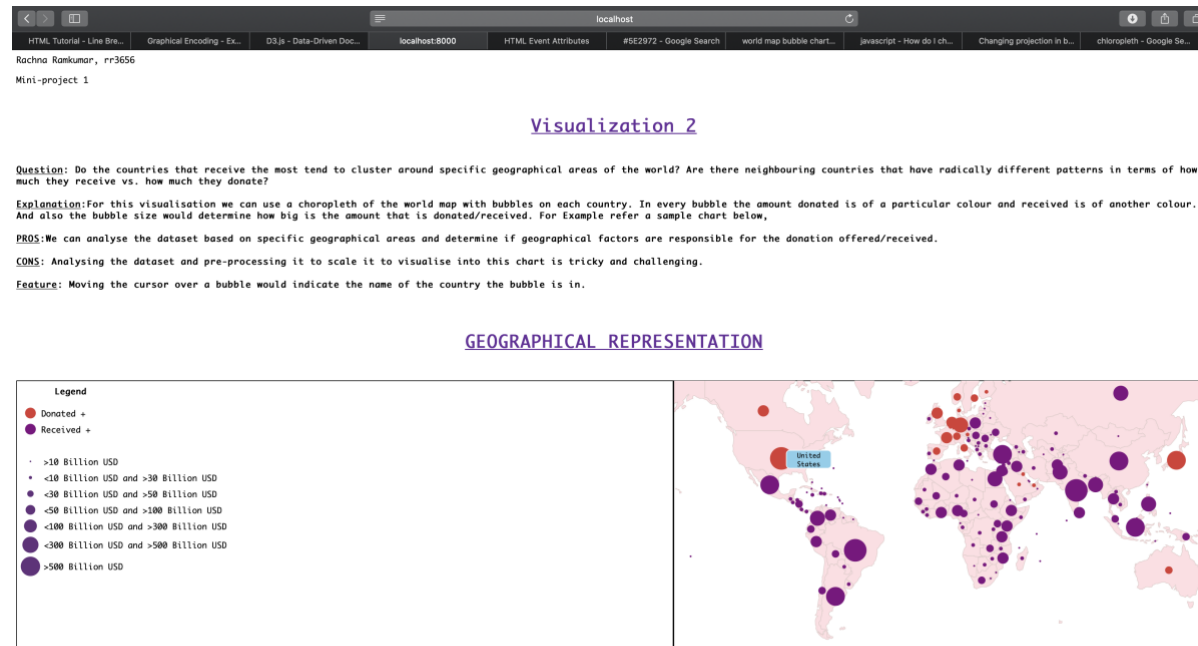

PROS : This Visualisation can represent the amount donated and received by each country distinctly which will help us draw conclusions on the facts about a country whether it has donated more or received more.

CONS : Again, since there are too many countries it becomes confusing when there are too many bars on the chart.

2. **Do the countries that receive the most tend to cluster around specific geographical areas of the world? Are there neighbouring countries that have radically different patterns in terms of how much they receive vs. how much they donate?**

SOLUTIONS :

For this visualisation we can use a choropleth of the world map with bubbles on each country. In every bubble the amount donated is of a particular colour and received is of another colour. And also the bubble size would determine how big is the amount that is donated/received.
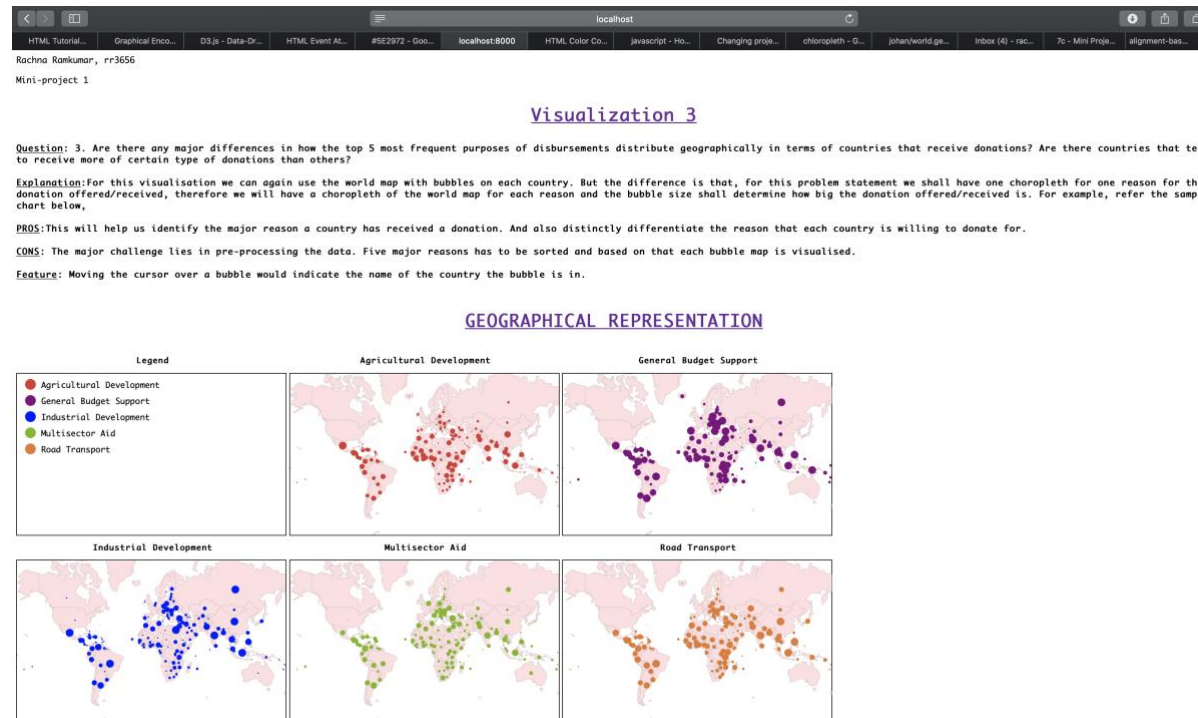

PROS : We can analyse the dataset based on specific geographical areas and determine if geographical factors are responsible for the donation offered/received.

CONS : Analysing the dataset and pre-processing it to scale it to visualise into this chart is tricky and challenging.

3. **Are there any major differences in how the top 5 most frequent purposes of disbursements distribute geographically in terms of countries that receive donations? Are there countries that tend to receive more of certain type of donations than others?**

SOLUTIONS :

For this visualisation we can again use a choropleth of the world map with bubbles on each country. But the difference is that, for this problem statement we shall have one choropleth for one reason for the donation offered/received, therefore we will have a choropleth of the world map for each reason and the bubble size shall determine how big the donation offered/received is. For example, refer the sample chart below,

PROS : This will help us identify the major reason a country has received a donation. And also distinctly differentiate the reason that each country is willing to donate for.

CONS : The major challenge lies in pre-processing the data. Five major reasons has to be sorted and based on that each bubble map is visualised.

References :

1. www.stackoverflow.com
2. https://www.d3-graph-gallery.com/graph/backgroundmap_changeprojection.html
3. Observable Notebooks

NOTE : THE SCREENSHOTS ARE ATTACHED IN THE INDIVIDUAL FILES AS WELL.