

CLARIFICATION QUESTION IN PIAZZA

Please ask any question related to this assignment in piazza. You can post even anonymously. To be fair to everyone, it is best to ask assignment question in piazza rather than email. Do not post your code in piazza. You can ask clarification questions. Let me know if you find any error in the assignment question as soon as possible.

ASSIGNMENT 4

Q1. CREATE A NETWORK VISUALIZATION (30 MARKS)

This is a team question. For this question, no libraries should be used except for d3.

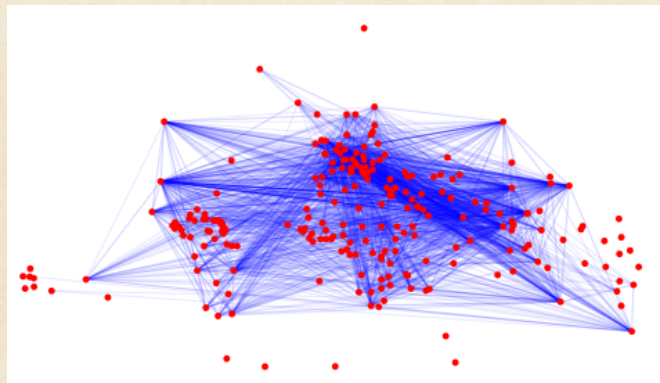
Task 1: You are given two datasets. The dataset `gemstone15.csv` is a list of the gemstone trade transactions among countries in 2015. The lat and lon of the countries are located in `CountryList.csv`. Write a d3 code to Read `CountryList` and `gemstone15` to create a trade network visualization.

Task 2: Create the nodes for the countries and edges that represent the trade relationships. Each edge represents an import or an export. Therefore, there can be at most two edges between two countries (one for import and the other is for export).

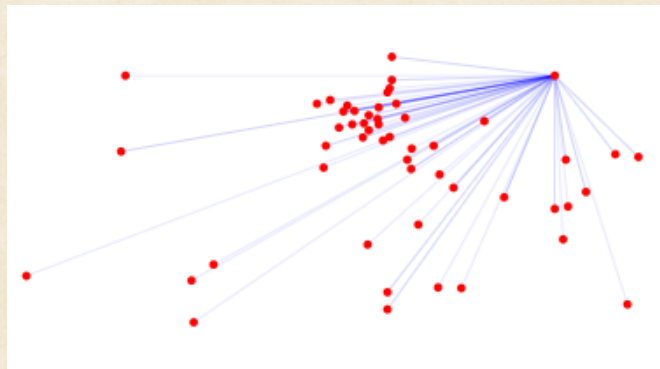
A pair of countries may have many transactions in the dataset, so sum all imports and all exports to create one edge for import and the other for export. If a pair of countries do not have trade relation, then they must not be connected by an edge.

Task 3: Clear up the layout by mapping import and export edge weights to the opacity.

An example expected output is as follows.



Add interaction such that clicking on a node x shows only the nodes that it exported to and the corresponding edges. Clicking on x again will show the nodes that it imports from, and clicking on it the third time resets the visualization.



SUBMISSION

Submit a zip file containing all your code and supporting files. Mark is based on task completion.

Q2. EXPERIENCE BLENDING (10 MARKS)

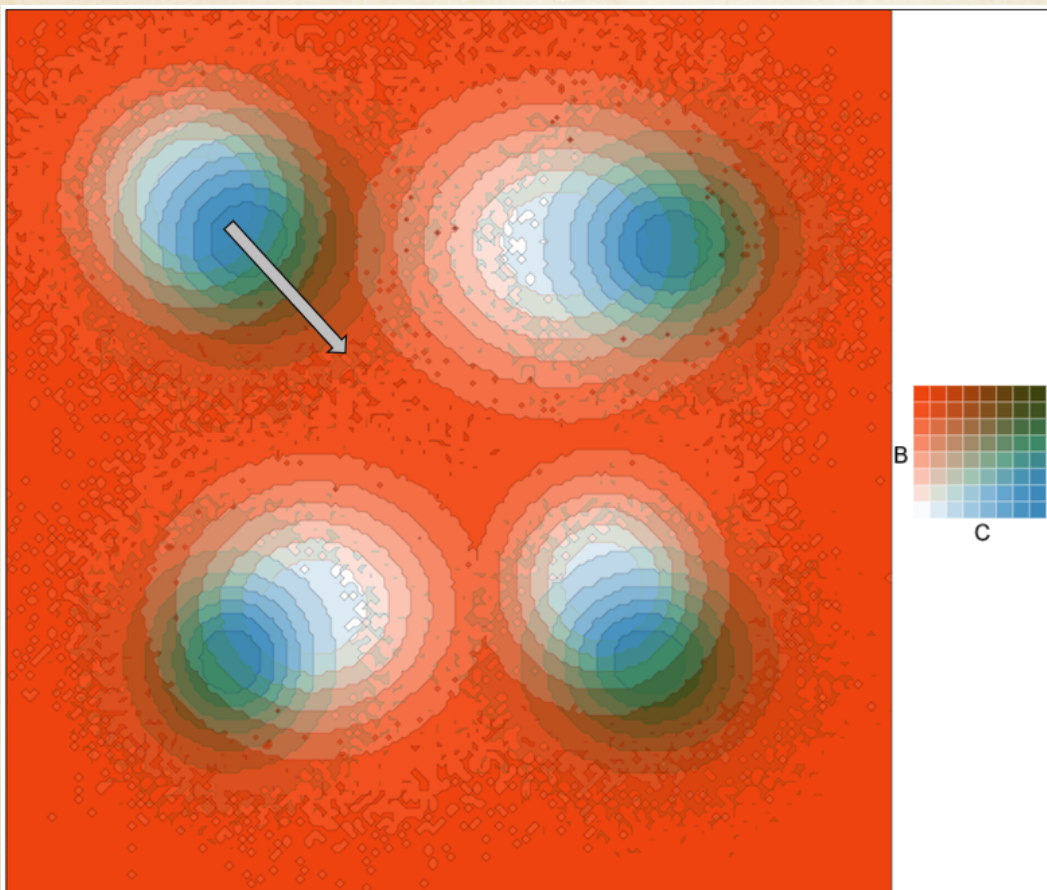
This is not a team Assignment.

Visualizations are often evaluated by user studies. In a user study, users are asked to perform various tasks on a visualization system or answers questions on a visualization. To experience this, you are asked to participate in a simple user study, with only a single type of task, where you will experience different forms of color blending. Everyone (even if you do not recognize all the colors except for a few) should participate.

There are 25 questions in the survey. Each question looks like this:

Towards the arrow:

1. Both B and C are increasing
2. Both B and C are decreasing
3. B is decreasing and C is decreasing
4. B is increasing and C is decreasing



HOW TO CHOOSE CORRECT ANSWER

You can assume this is a landscape. B and C are weather related variables. The right side shows a blending matrix where both B and C are small in the the bottom left corner of the matrix. B increases along y-axis and C increases along x-axis.

In the figure above, towards the arrowhead, B is increasing and C is decreasing.

While answering the survey, **be honest to the best of your perception and understanding**. If you cannot detect all the colors, or find it very difficult, then you can choose a random or probable answer.

MARKING

There is no mark for accuracy, but I expect your honest participation. The results will be presented in the class to show you an example of how the results are typically analyzed.

Everyone participates will get full marks. To receive your grade, you must email to instructor with the subject: CMPT 384 participated.

SUBMISSION

Participation Link: <https://www.surveymonkey.ca/r/8QWHZGX>