CSCE 5320 Scientific Data Visualization
ICE-8

Visualization of Spatial Data, Networks, and Trees

1. **Making Maps(45 points)**

   Using TOPOJSON data links provided in the tutorial and making maps in d3

   - Create a world map with the world Topojson data. Submit the screenshots of your code (commented properly) with an explanation and provide the VizHub link to your code.
   - Create a country map with Topojson data. Any country (including the US) works. Submit the screenshots of your code (commented properly) with an explanation and provide the VizHub link to your code.
   - Which geo-projection you used for the two maps above, explain the reason.

2. **Tree and Network (55 points)**

   - Create a family tree (3 generations at least, with names) with d3.js. Submit the screenshots of your code (commented properly) with an explanation and provide the VizHub link to your code.
   - Add elements to your family tree, use different colors OR shapes to represent different generations in your family tree.
   - Create a social network graph of you (5 people at least, with names) with d3.js. Submit the screenshots of your code (commented properly) with an explanation and provide the VizHub link to your code.
   - What are the differences between a network chart and a tree? What kind of data should be visualized in a network chart but not in a tree? Give examples.

Rubric ICE 8

Q1:Making Map (50 pts)

Criteria	Ratings		Pts
1.1) The graphic is posted to VizHub and runs without errors. Screenshots of Code is provided, and the code should be properly commented with an explanation.	**20 pts**	**0 pts**	10 for the world map 10 pts for code screenshots and code explanation
	Full Marks	**No Marks**	
1.2) The graphic is posted to VizHub and runs without errors. Screenshots of Code is provided, and the code should be properly commented with an explanation.	**20 pts**	**0 pts**	10 for the country map 10 pts for code screenshots and code explanation
	Full Marks	**No Marks**	
1.3) The answer provides sufficient explanation on the questions	**5 pts**	**0 pts**	5 pts for answering the question
	Full Marks	**No Marks**	

Q2: Family Tree and Social network (55 pts)

Criteria	Ratings		Pts
2.1) The family tree graphic is posted to VizHub and runs without errors. Screenshots of Code is provided, and the code should be properly commented with an explanation.	**20 pts**	**0 pts**	10 pts for tree 10 pts for code screenshots and code explanation
	Full Marks	**No Marks**	
2.2) The chart shows different generation by colors or shapes	**5 pts**	**0 pts**	5 pts
	Full Marks	**No Marks**	
2.3) The social network graphic is posted to VizHub and runs without errors. Screenshots of Code is provided, and the code should be properly commented with an explanation.	**20 pts Full Marks**	**0 pts No Marks**	10 pts for network 10 pts for code screenshots and code explanation
	10 pts	**0 pts**	

2.4) The answer provides sufficient explanation on the question.	**Full Marks**	**No Marks**	5 pts for 1st question 5 pts for 2nd question

Plagiarism Rules:

• No scores to the questions which are completely plagiarized i.e., same screenshots captured, or almost same wordings for an explanation.

• If the similarity score for the explanation part (mainly analysis) is >= 50% and is plagiarized with other students or any source, deduct 30-50% off from the obtained score.

• If it is between 30-50%, deduct 20-30% from the obtained score.

• For all others, it should be according to the

ICE Submission Guidelines

1. ICE Submission is individual.
2. ICE code (if there is any) has to be properly commented.
3. The documentation should include the screenshots of your code/results.
4. Provide the explanation of the exercise as per your understanding.
5. The similarity score for your document should be less than 15%.
6. Submit the documentation (.pdf/.doc) with visual images of the data with explanation.
7. Submission after the deadline is considered as late submission.