DSAA 5024 Data Exploration and Visualization

Assignment 1

Posting date: 20 Feb. 2022

Due date: 11:59 PM (Beijing time) on Monday, 26 Sept. 2022.

Data transformation

index.html presents a scatterplot of 10,000 random data points. Try to increase the number of data points to 1 million, 10 million, and even 100 million. Answer the following questions.

- 1. What problems do you encounter when the number of points increases? (30 points)
- 2. Which data transformation method would you choose to address the problems? Name two data transformation methods. (30 points)
- 3. What are the benefits and drawbacks of each transformation method? (40 points)
- 4. Implement one of the data transformation method and submit the code. (20 bonus points)

It's also OK if you do the assignment in Tableau.

TURNIN instructions:

Submit a report called *A1_student ID_name.pdf*, with all questions answered.

If you want to take the bonus points, put your code in *index.html* (or some *twb* file if you use Tableau), zip your code and report in a single file, named as *A1_studnet ID_name.zip*.