Assignment 4 - NEAViz

Submission Date: April 8, Monday 10pm
Demo (During the week of April 8, Schedule to be decided near to the time. Students will be called for demo if marking of submission requires it)

Type: Individual Weightage: 15%

Important : We are expecting students to use Tableau for this assignment. If you are using D3 or any other software let us know by 10 March, and we will issue an alternate submission instruction. Write an email to TA at CS5346.tutor@gmail.com to inform.

Deliverable: Submit your tableau workbook(.twbx), all the datasets, and a short report (see template at the end of this document) in a zip le in IVLE folder **A4-NEAViz**. Name your zip file as *{your name} - {metric no.}-NEAViz*, omitting the brackets.

Assessment Criteria: You shall get 60% for completing the task successfully. That is, if it is timely, correct (truly represent the insight that you claim you have derived) and self-explanatory. You can expect to get at least 80% only if you are creative - meaning,

- you made good use of supplementary dataset(s) from other sources.
- you found novel analytic questions using those datasets.
- you found novel insights using those datasets.

Task:

- In this assignment, you will analyze historical data of NEA (National Environment Agency) licensed eating establishments in Singapore. The data has been collected within the period of June 11, 2015 and September 6, 2016.
- Dataset:

  List of NEA Licensed Eating Establishments
  This dataset is the modified version of **this dataset**. Visit **here** to learn more about the fields. You can also learn about the fields from the metadata shared in the google drive link.

  You are strongly encouraged to supplement this dataset (NEA) with other publicly curated datasets (population data, for instance). However, the supplementary datasets must be used to facilitate additional insights from NEA, since NEA is the dataset of interest here.

- There is no limit on the number of worksheets or dashboards for the assignment. However, since there will be only one story, we expect that you will create just enough worksheets required for the story.

- The specifics of the analytic question are open-ended. However, we expect you to cover most of the following categories -

    - Spatial aspects (involving map visualization), for instance, 'which regions of Singapore has best/worst eating establishments? How the regions can be compared based on that criterion?'
    - Quantitative aspects, for instance, `How the individual establishments compare in terms of their *suspension period* or *demerits points*'
    - Statistical aspects (e.g. correlation, clusters), for instance, `Does *suspension period* has any correlation with *the number of suspensions*? Is there any correlation between the *population* in a region with the number of eating establishments in that region
    - Temporal aspects, for instance, When the establishments are typically suspended?

- Tips: **Be creative** with the data. Mine some **striking** insights. **Use** the flexibility of having supplementary **Tableau worksheets:** Prepare *worksheets* of visualizations with sufficient descriptive texts.

- **Short Report:** Submit a short report on your project following the template given at the end of this document.

- Finally, you are to submit your workbook(.twbx), all the datasets and report in IVLE. Include a URL of your tableau story in your report.

Queries:. Send your queries to CS5346.tutor@gmail.com

See Repot template on next page.

Report template

CS5346 Assignment 4 – NEAViz
Student name :
Matric number :

URL of Tableau story

1. Introduction (1 para including objective of assignment in your own words)

2. Brief description of supplementary dataset(s) – Include source of dataset, description of column fields, why did you choose the dataset, and how you integrate/combine this data with NEA dataset

3. Pre-processing : describe why and how did you do pre-processing , cleaning of any of the datasets if you had to do so

4. Analytic questions you pursued : Describe the questions you pursued and the insights you gained. Provide image of the visualization with each such question/insight.

5. Describe visual encoding of the visualisations you have produced.

6. (optional) Any other comments or information you may have