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**CPSC-6030**

**Resturant Report Card - NYC**

**Process Book**

**First Group Meeting** :

           There were few problems that could be addressed using Data visualization. Some of the problems discussed were: Child migration issues, COVID data and policies across countries, Trend of house prices in USA states, Music recommendation system, Food choice trend among people, Daily trends in Youtube.

The issue with the Child migration problem and COVID data was that it was very factual and kind of less in size. Summarizing them or altering this data would be problematic. The problem associated with the Trend of house was it had less features. Visualizing this data would be a huge problem. Food choice trend had very limited data and very few features. It wouldn’t be that helpful to visualize this data.

Daily trends in Youtube was the one we decided to go ahead with. It had features like trending date, title, category, published time and many similar to this. It would be interesting to visualize how the trend changes in youtube geographically.

**Second Group Meeting** :

The IMDb dataset was good and elaborate but the data was not varied enough for us to visualize something good and answer interesting questions.

Link: <https://www.kaggle.com/datasets/ashirwadsangwan/imdb-dataset>

<https://scdps-gis-and-mapping-scdps.hub.arcgis.com/>

There was a dataset for crop and livestock but since it wasn’t a topic that any of us were aware of we wouldn’t be able to drive valuable insights with it.

Link:<https://www.ers.usda.gov/data-products/food-availability-per-capita-data-system/food-availability-per-capita-data-system/>

We ended up going with a dataset of restaurant grades for the project.

Link:[https://data.cityofnewyork.us/Health/DOHMH-New-York-City-Restaurant-Inspection-Results/43nn-p n8j/data](https://data.cityofnewyork.us/Health/DOHMH-New-York-City-Restaurant-Inspection-Results/43nn-p)

**Third Group Meeting**:

The agenda for this meeting was to come up with the rough sketches for the visualization and the questions that it would answer.

For the first and the highlight of the website we chose to display it in the form of a map which shows the region, which could be further zoomed in to see the restaurants individually. We first thought of using a borough chart for the map but it was depicting a monolithic visual. It would in a way display that there are few areas which are densely populated with restaurants whereas others are not as such. However, this would be misinterpreting the information in some way and sending a wrong message just because of the effects of the saturation of the colors. So we use a monotonous color and instead pin the restaurants in the areas.

The next question we would like to answer was Are food violations more prevalent in some cuisines than others? We came up with a horizontal bar chart to implement that. There might be future prospects to change things on this one though.

We came up with the next question as are big restaurants better at adhering to safety standards. We couldn’t find another visualization except a bar chart to show it in an effective way. It would be easy to compare between the brand chains if there are bars for each.

Next question was to see the trend over months in food standards. A line chart would be good at depicting this as it would show trend over the months i.e. trend during the whole year. The line makes the user more aware of when and how much changes there were in a month. A sudden spike or decrease is very much noticeable which would be essential for this type of data.

Another question to answer was the type of violations which are dominant during each month. The proposal was to draw either a Bar chart or a line graphs for the same.

The conclusions from this meeting led to the second milestone and the report for the same.

**Fourth Group Meeting**:

This meeting was more focused on making the previous rough sketches more concrete and deciding on the plots which weren’t finalized yet. Analyzing the pros and cons of all the graphs we found a list of visualizations that would make it to the next stage, that was the website. We divided the work among the members and proceeded to assign the canvas space for each of the planned graphs.

**Fifth Group Meeting**

There were challenges in the main plot that we were working on, the map. Since there’s a lot of rows, when we put the restaurants as pins it gets really crowded in certain areas. We were looking for solutions to tackle this problem. The next thing was to figure out how to connect this map with the bar chart next via interaction.