**ALY 6070-Signature Assignment Individual Essay**

**Purpose of Assignment (WHY)**

Communicating complex data information and insights through story telling with data visualizations using dashboards, scorecards, spatial data representations and use of annotations is an important aspect of data science. In various roles you must be able to evaluate, propose and implement appropriate visualizations for a specified audience using key informational design concepts. In this assignment you will present your contributions to the group project.

**Program Learning Outcomes**

PLO7: Design and deliver presentations, reports, and recommendations that effectively translate technical results/data solutions and are coherent and persuasive to different audiences.

**Course Learning Outcomes**

This assignment is directly linked to the following key learning outcomes from the course syllabus:

* CLO1: Design dashboards that “tell a story” using a narrative flow
* CLO2: Use graphic design concepts that enhance accessibility and aesthetics
* CLO3: Create effective data visualizations by understanding the context, choosing an appropriate visual, and eliminating clutter
* CLO4: Create and present data visualizations that focus the attention of the stakeholder on key data insights

# CLO5: Using ethical strategies, identify and create visualizations that are not biased or misleading to the audience*.*

**Assignment Description (WHAT)**

***Individual Final Essay -80 points***

* Discuss what you did towards the final group project
* Add screen shots of the graphs you created
* Explain the analysis you did of the data set as well as visual choices (e.g., design and visual choice)
* Present the main findings, patterns and/or statistical results in sentences and graphically

The individual essay is about explaining your individual contribution to the final dashboard.

**Individual Essay Rubric**

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| **Criteria** | **Above Standards** | **Meets Standards** | **Approaching Standards** | **Below Standards** |
| **Data Analysis**  **30%** | Goes beyond the requirements to provide an insightful and in-depth analysis of the data | Provides a thorough analysis of the data and identities key data points and appropriate business questions that will formulate the basis of the visualizations | Provides a well- structured analysis of the data. Provides data points that will formulate the basis of the visualization but some data points that are critical for the answering the business question(s) are not included or extraneous data points are focused on. | Provides limited analysis of the data. Does not identify specific data points or data points used are irrelevant to the business question(s) or needs of the audience. |
| **Chosen Visualization**  **30%** | Goes beyond the requirements to make effective arguments of the selected visualizations | Provides a clear and coherent explanation for the chosen visualizations. Provides compelling statements for their use over other options. | Provides a sound explanation for the chosen visualizations. Provides logical statements for their use over other options. | Explanation for the chosen visualizations provided is not sound or is unclear. Does not provide a statement for their use over other options or statement is faulty or illogical |
| **Chosen Data**  **30%** | Goes beyond the requirements to reason for the chosen data points in light of the audience needs and business questions | Clearly explains why data points were chosen and displays an acute understanding of the data. | Explains why the data points were chosen, but explanations are general or not specific to the dataset. Displays an adequate understanding of the data. | Explains why the data point were chosen, but explanations are invalid. Displays a lack of understanding of the data. |
| **Writing Mechanics**  **10%** | There are no errors in grammar, spelling or punctuation.  Labels and titles are precise and descriptive. | There are no noticeable errors in grammar, spelling, or punctuation. Labels and titles are clearly written and descriptive. | There are very few errors in grammar, spelling, and/or punctuation, Labels and titles capture the general concepts presented | There are significant errors in grammar, spelling, and/or punctuation. Labels and titles are unclear or vague or incorrect. |