**Power BI Skills Test**

Instructions: Navigate to the dataset found here: <https://www.kaggle.com/dgawlik/nyse/download> You will need to create a Kaggle account if you do not already have one. Unzip the compressed folder to your local desktop. Open Power BI and use the 4 csv files from the uncompressed folder and any other data sources you think you might need to create a report which will resolve the problems below. Format and presentation details are up to you, but you should be able to produce a report that will allow a business user to gain actionable insights. Supplement your report with a short, 2-3 sentence analysis for each problem below.

1. Suppose we want to visualize the locations of the companies trading on the NYSE and easily be able to tell which locations have companies with the highest average asset movement (market value of shares changing hands) and highest average closing price for the last trade date in the dataset. This page should be filterable by market sector and sub-industry.

***Selecting the bar on any of the stacked bar chart will filter the above table to show the highest average asset movement or average closing price. Collapsible slicer to the left to filter by Market or sub-industry.***

1. Suppose we want to see how individual stocks are performing over time. We also want to be able to compare their performance to their peer groups.

***For tracking stock performance there is a mixed bar and line chart that shows the average close price (bar) and the average close price for that companies in the same market. The line and bar chart title is dynamic and reads which company and its related market that is selected. Gauges show overall performance for company and time period selected.***

1. Suppose we want to visualize which market sectors experience the highest average daily trade volumes and highest average asset movement. How can we visualize this for market sector and sub-industry? Include relevant security details and a date filter.
   1. Bonus: show how this distribution changes over time

***Simple bar charts with slicer for year and market and sub-industry to left.***

1. Suppose we want to know which sectors and sub-industries experience the most volatility (that is, daily price changes). From this report, we also want to be able to tell which security had the largest price drop/gain and which had the largest % drop/gain and the date it occurred.
   1. Bonus: Configure the report so we can easily tell which stock(s) experienced the largest quarterly price change (value or %). Can we also tell which sectors and sub-industries are most/least volatile over a full quarter? How does this compare to the daily volatility?

***Bar chart shows daily volatility. Drill up or down (default to day) to see volatility. Slicers to the left for year and Market and Sub industry.***