**Presentation Sketch**

**Development Requirements**

1. Use Pandas to clean and format datasets.
2. Create a Jupyter Notebook describing the **data exploration and cleanup** process.
3. Create a Jupyter Notebook illustrating the **final data analysis**.
4. Use Matplotlib to create a total of 6-8 visualizations of your data (~2 per “question”).
5. Save PNG images of your visualizations to distribute.
6. Use at least one API.
7. Create a write-up summarizing your major findings.
   1. Include a heading for each “question” you asked of your data
   2. A short description of your findings and any relevant plots.

**Presentation Requirements**

1. Questions you found interesting and what motivated you to answer them.
2. Where and how you found the data you used to answer these questions.
3. The data exploration and cleanup process (accompanied by your Jupyter Notebook).
4. The analysis process (accompanied by your Jupyter Notebook).
5. Your conclusions, which should include a numerical summary and visualizations of that summary.

**Presentation Guidance**

1. If you have a 3-member team, you have a max limit of 10 minutes
2. Only one person from every team will share screen throughout the team's presentation
3. All team members will take turns to present (approx. 3 minutes per person)
4. It is mandatory for every person in the team to present.
5. Try not to go over your code during your presentation. We will have the pleasure of looking at your code later
6. Keep your presentation centered around the data story, inferences and the analysis to arrive at the story.
7. Also talk (briefly) about where and how you got your data and how you cleaned/processed it. (edited)
8. The implications of your findings: what do your findings mean?

**Presentation Sketch**

1. **What’s The Story? Ross**
   1. COVID-19 in the USA: Things you didn’t know.
   2. We were motivated to analyses the COVID-19 case and deaths data to understand
      1. What has happened so far.
      2. How the impact has been felt in different parts of the country.
      3. What factors might be driving regional differences.
   3. Highly topical, personally relevant, and a useful test of our skills.
2. **What’s The Data? Ross**
   1. Data sources:
      1. Cases and Deaths data from USAFacts.org, aggregating data from the Centers for Disease Control and Prevention (CDC), state- and local-level public health agencies.
      2. Census Data from Census.gov.
      3. Health Care data from HRSA.gov.
   2. Data Cleanup
      1. Initial exploration and cleanup of Cases and Deaths data required sorting and merging.
      2. Pulled the data together and then sorted into various dataframes, to make demographic analysis easier.
      3. Healthcare and Census data also required wrangling.
      4. Show Jupyter Notebook.
   3. Sneak Peak:
      1. Maps of where the virus has spread…. And where it hasn’t reached.
      2. Charts of which areas have been most and least affected.
      3. Statistical analysis of demographic factors driving case rates.
3. **Question 1: Setting The Stage. Ross**
   1. Graph 1a. Explosion in mid-March.
   2. Graph 1b. Slowing rate of change in early April.
   3. Graph 2a. Reaching Saturation.
   4. Although, interestingly, on 15 June 2020, there were still 161 counties reporting zero cases. 0.36% of counties reported some cases but zero deaths.
4. **Question 2: Are All States Created Equal? Ross**
   1. Graph 3a. It’s not just population.
   2. Graph 3b. There’s quite a variation. And it’s not just New York!
   3. Graph 3c. Box and Whisker says those outliers are real.
5. **Question 3. Where Is This Happening? Tyler.**
   1. Aaron’s map. All cases.
   2. Graph 4b. Top 6 States.
   3. 4c. It’s not all Latitude tho.
   4. So what is driving the cross-country differences?
6. **Question 4. Is It Access to Healthcare? Tyler.**
   1. Tyler. Lack of healthcare.
7. **Question 5. Is It Age?** Aaron.
   1. Aaron
8. **Question 6. Is it Poverty?** Aaron.
   1. Aaron
9. **Wrap Up. Aaron.**
   1. Primary finding is there is a statistically significantly different experience across the USA.
   2. Some of that difference can be explained by demographic factors.
   3. This has implications for how we understand and address what has happened.