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| Project Name | The COVID 19 Tracking project (US) |
| Team Name | The 5 Masketeers |
| Team Members | Alanna Javier, Ali Deniz, Donna Tigrett, Elizabeth Koehler, Anand Sharan |
| Project Description | Analyzing case rates in relation to states and cities and correlation with household income |
| Charts and Tables | * Heat Map: showing the US household income and the total case counts * Line chart to show case counts over time * Total Existing Cases by Each State (Bar chart) * Pie chart for the percentage of total cases for the states identified * Scatter plot at the county level for the top state showing the relation of total cases to median household income * Scatter plot at the county level for the bottom state for the bottom state showing correlation to total cased to median household income * Line chart to show case counts over time for the top state * Line chart to show case counts over time for the bottom state |
| Finding and Research questions | Number of cases increasing or decreasing  Top 5 states with the greatest number of cases  Bottom 5 states with least number of cases  Correlation between case count and per capita income  Correlation between cases and population density |
| Assumption | We have included US data sets  We have included all 2020 Corona Virus Data for the US  The Census data source includes data up to the year 2017 |

**Project Outline:**

Question 1:

**Anand**

* What is the average confirmed Covid-19 Cases per state in the US?
  + Heat Map: showing the total case counts

Question 2:

**Alanna – identify the top 5 and create charts for top 5**

**Donna – identify the bottom 5 and create charts for those states**

* What are the 5 states with the most Corona Virus Cases?
* What are the 5 states with the least amount of Corona Virus Cases?
  + Step 1: Looking at total case count by state
    - Visuals: Bar chart showing the case counts by state
    - Pie chart for the percentage of total cases for the states identified
  + Identify the top state and bottom state in terms of case count

Questions 3: Narrow down to state with the most cases and state with the least cases

**Ali – create scatter plot for top state at the county level**

**Elizabeth – create scatter plot for the bottom state at the county level**

* In these 2 states is there a correlation between per capita income and case count?

\*\*Include population information when answering this questions\*\*

* + - Scatter plot at the county level for the top state showing the relation of total cases to median household income
      * Add a regression line
    - Scatter plot at the county level for the bottom state for the bottom state showing correlation to total cased to median household income
      * Add a regression line

Question 4: Is there a relationship between Covid-19 cases and population density?

**Anand**

* + Line chart to show case counts vs. population density for the top state
  + Line chart to show case counts vs. population density for the bottom state
  + Line chart to show the case counts vs. population density and Covid-19 cases for all U.S. States