Dashboard Plan

Dashboard Elements

- 1. Trips over time (line chart)
- 2. Most popular start and end stations (bar chart)
- 3. Trip duration distribution (histogram)
- 4. Heatmap of rides by day of week and hour
- 5. Weather vs. number of rides (scatter plot or line chart with overlay)

Guiding Questions & Visualizations

- 1. What are the trends in bike usage over time (daily or monthly)?
 - o Visualization: Line chart of trips per day/month
- 2. Which start and end stations are used most?
 - o Visualization: Horizontal bar chart for top 10 stations
- 3. What is the distribution of trip durations?
 - o Visualization: Histogram of trip duration in minutes
- 4. When are bikes used the most during the week/day?
 - Visualization: Heatmap (days of week vs. hours of day)
- 5. How does weather affect the number of rides? (NOAA data)
 - Visualization: Line chart comparing daily temperature or precipitation with number of rides
 - o **Explanation**: Merge ride data with NOAA weather data (e.g., temperature, rainfall) and analyze correlation.