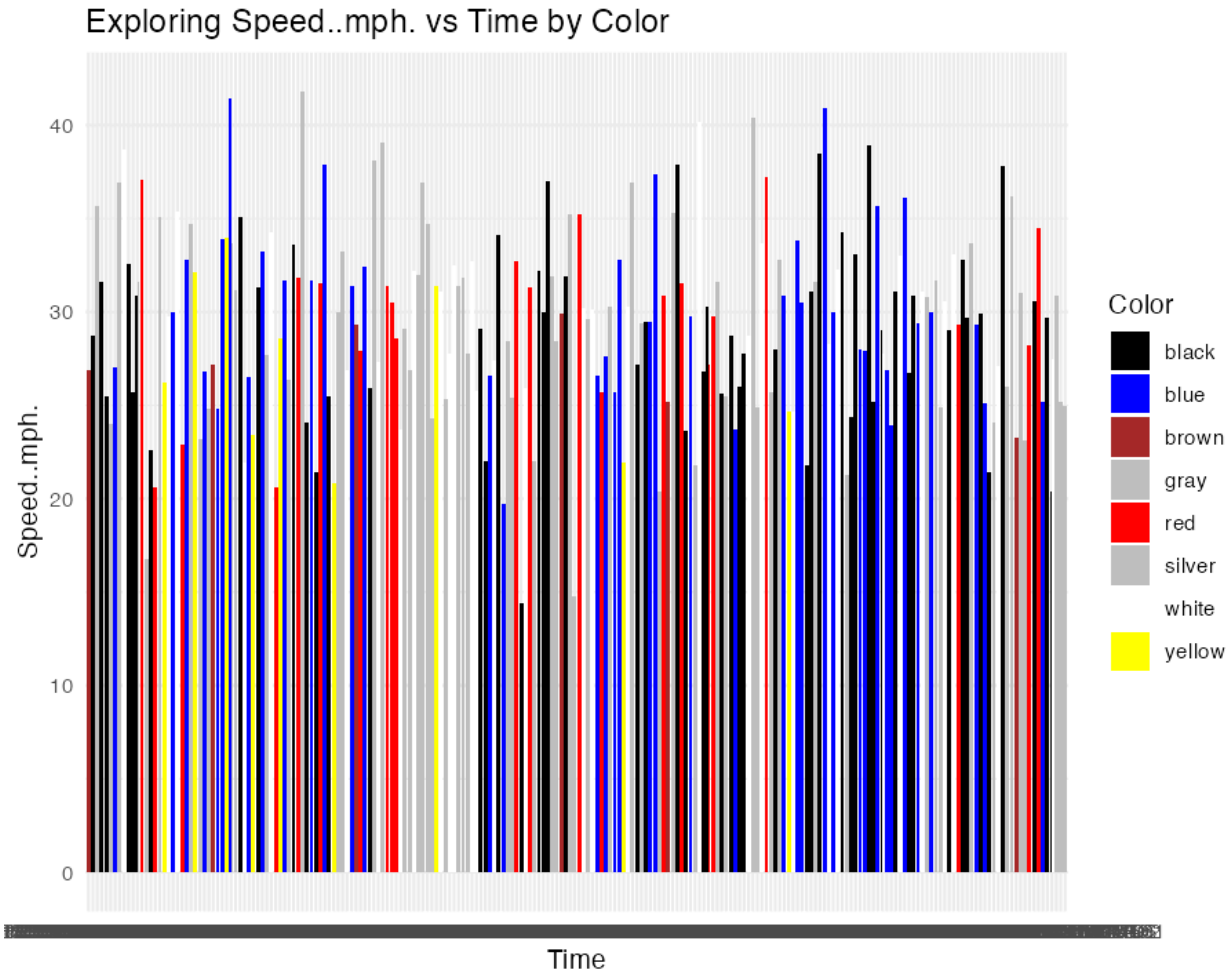
Shiny link: https://reda-mahboub.shinyapps.io/data_cars/

Reda:

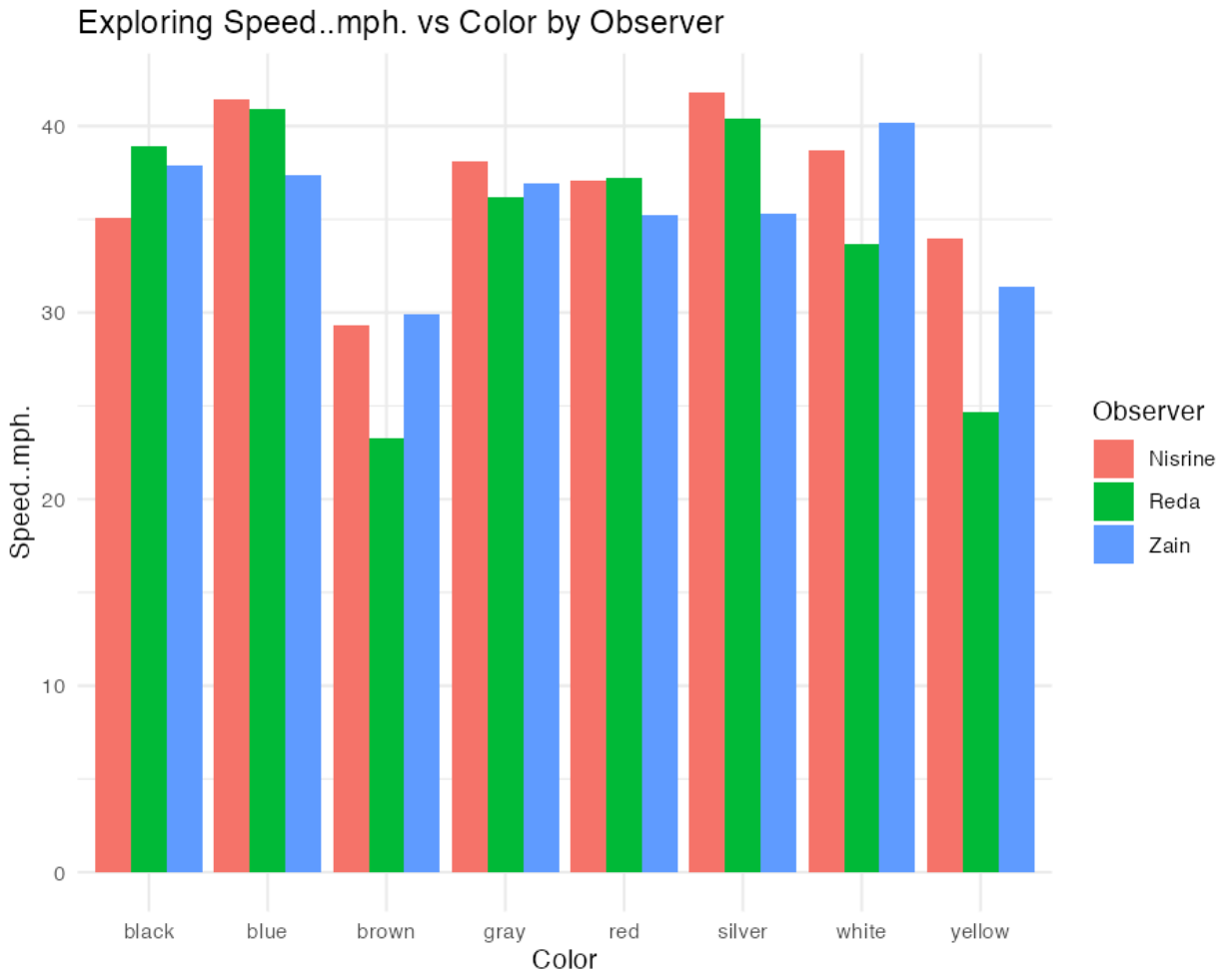


On this chart we can see that each bar represent the color and the speed of each car,
And it shows that:

- Silver, white, and red cars are the most spread out across different speeds.
  → This means they were seen at both low and high speeds, showing a lot of variation.
- Black and blue cars tend to stick to medium speeds (around 25–35 mph).
  → These cars seem to follow more average or consistent driving patterns.
- Yellow cars are less common but appear at high speeds often.
  .
- Most cars, regardless of color, are found between 25 and 35 mph.
  → This is the most common speed range, most likely because its a school zone.
- The chart helps show how car color might relate to how people drive, even if just a little bit.

The chart shows that some car colors, like silver and red, are driven at many different speeds. Black and blue cars usually go at more between 25 - 35 mph. Yellow cars weren't seen often, but they were usually going fast. This might mean that the color of a car is connected to how people drive or what kind of car it is.

Nisrine:



The chart shows vehicle speed observations for eight car colors black, blue, brown, gray, red, silver, white, and yellow categorized by three observers. The goal is to identify patterns, outliers, and any observer bias or variation in data.

For the results regarding the highest Observed Speeds:

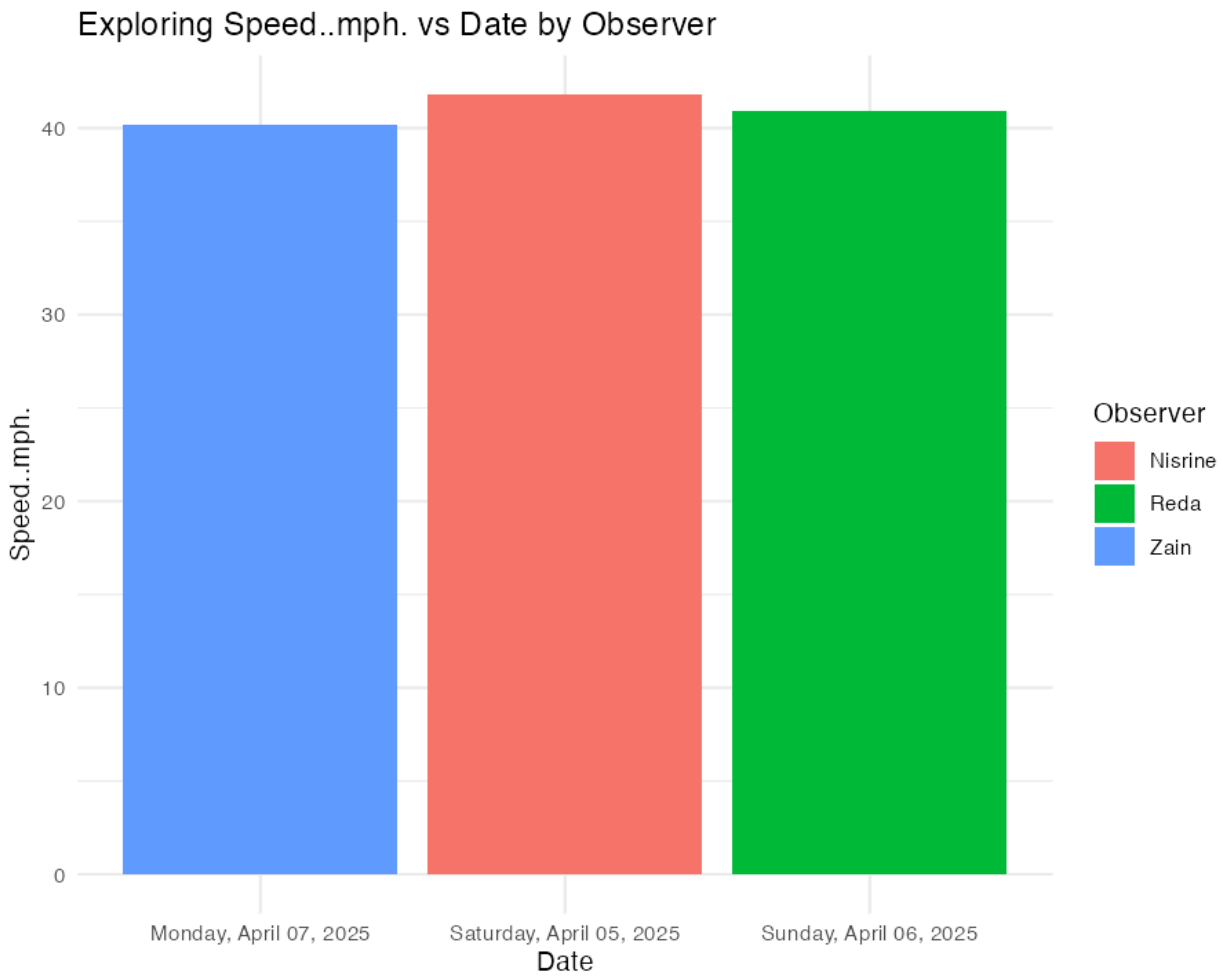
- I recorded the highest speeds overall, especially for silver (≈43 mph) and red cars, indicating either a vantage point with faster traffic or a more assertive observational style.
- Reda also reported high speeds for blue and red cars but showed more inconsistency across other colors.
- Zain noted moderate to high speeds, with white (≈40 mph) and red cars among the fastest in his observations, suggesting alignment with general traffic trends.

Lowest Observed Speeds:

- Reda's observations include the lowest speeds overall, particularly for brown (≈23 mph) and yellow (≈24 mph)cars, suggesting either a conservative measurement or different traffic exposure.
- Zain recorded lower speeds for brown and yellow as well, but not as low as Reda.
- I showed slightly higher speeds for these slower colors, indicating consistency and a more balanced range in observations.

The data highlights observable trends in vehicle speed based on color and demonstrates variation in perception or recording methods between observers. While some colors may genuinely correlate with higher speed, observer bias or positioning may also play a role.

Zain:



Zain:

The chart displays how vehicle speeds varied over time throughout the observation period. Each data point represents a recorded car speed on a specific date.

● Gradual Increase in Speed Over Time
→ The general trend shows a slight increase in average speeds as days progressed. This might be due to observers becoming more familiar with measuring or changes in traffic flow patterns.

● Occasional Speed Spikes on Specific Dates
→ A few dates stand out with significantly higher speeds, possibly indicating less traffic congestion, more aggressive drivers, or anomalies in data recording.

● Consistent Speed Range with Minor Fluctuations
→ While some variation exists, most speeds stay between 25–35 mph, aligning with typical urban driving conditions like school zones or residential streets.

● Observer Timing Might Affect Speed
→ Differences in times of day or days of the week could influence how fast cars are going. This graph suggests certain days had more high-speed entries, hinting at temporal factors.

Conclusion:

The analysis reveals noticeable trends in car speeds based on color, suggesting a potential though not definitive relationship between vehicle color and driving behavior. Silver, red, and white cars showed a wide range of speeds, while black and blue cars tended to maintain moderate speeds. Yellow cars, though rare, often appeared at higher speeds. Observer data introduced some variability, highlighting possible differences in vantage points or measurement methods. Over time, a slight increase in speeds was observed, possibly influenced by external factors such as time of day or observer familiarity. Overall, the project provides interesting insights into driving patterns and emphasizes the importance of consistent observation in data collection.