R Analytics Dashboard Report

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About the Data Set

This is a historical dataset on the modern Olympic Games, including all the Games from Athens 1896 to Rio 2016. it appears to be a time-series dataset with various parameters recorded at regular intervals. The dataset contains a timestamp, and each entry includes a variety of parameters such as the country that won the medal, at which sport, and also the gender of the athlete

Key columns

- **Timestamp:** The "Olympic year" column represents the year till which the analysis is done

- **Country wise medals**: Demarcates total medals won by different countries till the chosen period

- **Performance of Olympian:** Tells the total medals won by the country and also gives a division btw the no. of medals won by different genders

- **Olympic sport:** Describes the various games that are being taken into consideration
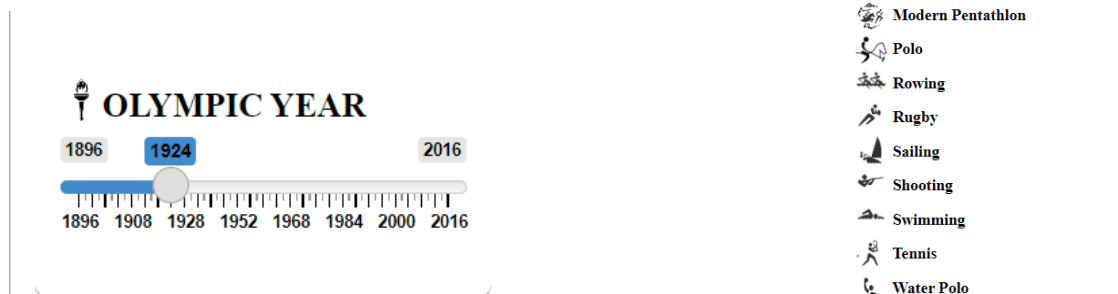
Data Quality Checks

1. **Missing Values:** Checked for missing values in each column to ensure data completeness.

2. **Outliers:** Identified and handled outliers in numerical columns.

Trends and Patterns

1. **Temporal Trends:** Explored how medals tally changed with time and how female participation and contribution increased over time
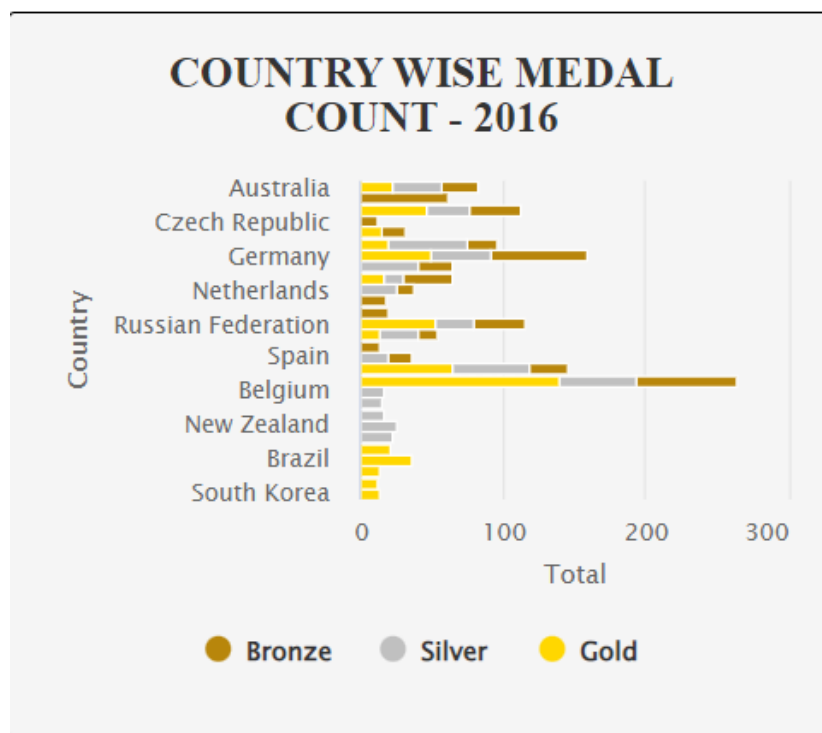
Visualizations

1. **Time Series Plots:** Plotted time series graphs (Bar charts and line graph) for key parameters to observe trends.
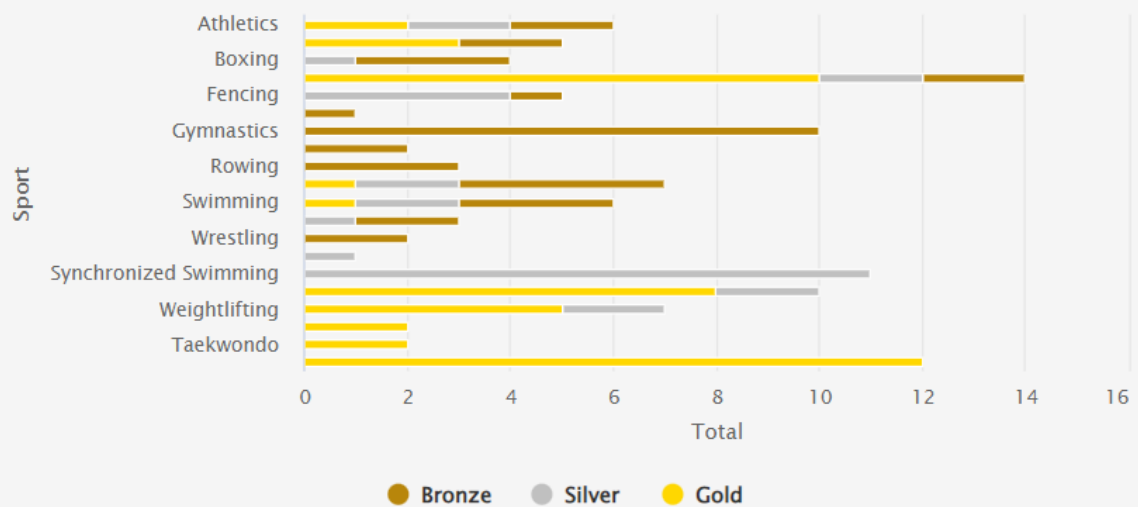
🔥 **OLYMPIC YEAR**

| 1896 | **1924** | | 2016 |

1896 1908 1928 1952 1968 1984 2000 2016

OLYMPIC SPORTS

- Art Competitions
- Athletics
- Boxing
- Cycling
- Diving
- Equestrianism
- Fencing
- Football
- Gymnastics
- Modern Pentathlon
- Polo
- Rowing
- Rugby
- Sailing
- Shooting
- Swimming
- Tennis
- Water Polo

Dashboard

Output
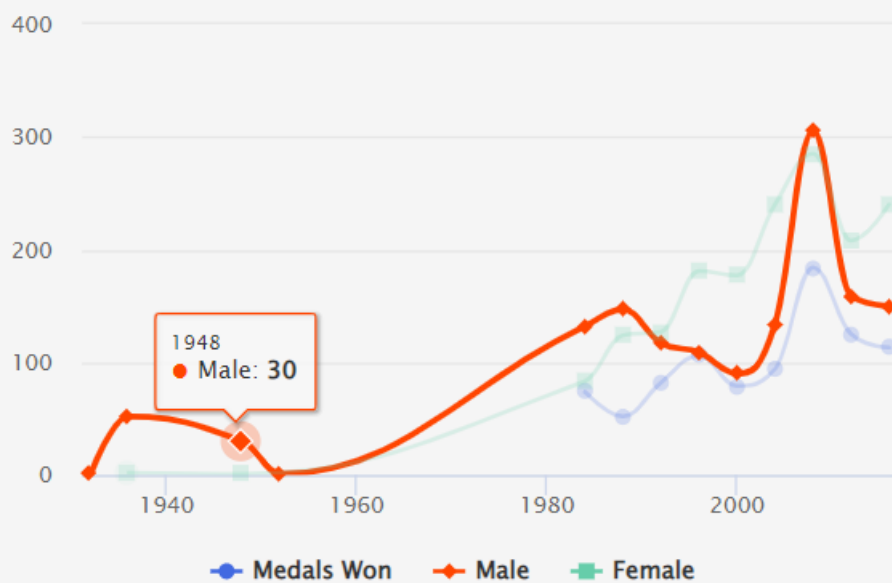

COUNTRY WISE MEDAL COUNT - 2016

SPORTS WISE MEDAL COUNT FOR CHINA IN THE YEAR 2016

PERFORMANCE OF CHINA IN OLYMPICS

Analysis of the Dashboard

1. **Bar graph of total medal won by different countries in the Olympics:**
    *   The dashboard displays bar graph for total no. of medals won by different countries, allowing users to visually analyze the distribution of medals during the specific time period they want to analyze.
    *   Users can choose a specific channel (till year 2016) through a "choose channel" option, indicating the flexibility to focus on data from a particular source or location.
    *   On basis of the analysis we find out that in 2016 Rio Olympics U.S.A won the highest no. of medals (264)

2. **Bar graph showing sports wise medal distribution for the specific country chosen during the time period**
    *   The dashboard includes parameters such as the number of medals won by a specific country in different sports.
    *   Users can adjust these parameters, providing a customizable aspect to the visualization. Changing the year and country changes the bar graph and shows the distribution of medals within the various sports
    *   In the output we have selected the year 2016 and the country China, the maximum no. of medals they won In a single sport was Diving, followed by Volleyball.

3. **Performance of the Athletes in Olympics:**
    *   In addition to the bar graphs, the dashboard includes a line graph that shows the relationship between the total no. of medals and division btw the two gender.
    *   In 2016, China won a total of 113 medals , and the division btw the two genders is given.

Conclusion

In summary, the dashboard offers a comprehensive analysis of Black Carbon concentration data. Users can graphs for various channels, customize the visualization by adjusting the number of years and selecting the country, and examine the no. of medals through a time vs country concentration plot, with the ability to filter based on country, year, and gender. This functionality provides a powerful tool for researchers or analysts to gain insights into the distribution and trends of total no. of medals won across different channels and periods.