**OLYMPICS DASHBOARD**

**Objective of the Dashboard**

Begin with the purpose of the dashboard. The dashboard aims to provide an interactive overview of Olympic data, including country participation, and medal distributions over time. It is designed to help users gain insights into top-performing countries, and athletes.

**Data Overview**

The data used in this dashboard was sourced from Kaggle, a popular platform for datasets and data science projects. This dataset includes comprehensive information on Olympic events, athletes, participating countries, medals awarded, and other key attributes. It provides a solid foundation for analysing Olympic history and identifying trends across different sports and years.

**Dashboard Structure**

Break down the dashboard sections and tabs, such as:

* + **Summary Tab:** An overall view of, total number of countries, athletes, events, and medals represented.
  + **Total Medals:** A section that highlights the distribution of medals
  + **Country Participation:** This section visualizes the participation of countries in each Olympic event. The map provides a global view, allowing users to see how widespread Olympic involvement has become over time. The colors can reflect the level of participation or highlight specific events, making it easy to identify regions with high or low engagement in the Olympics.
  + **Total Medal Distribution:** The medal distribution across countries is displayed in a text table format, making it easy to compare the total medals earned by each country. Each row represents a country, with columns for **Gold**, **Silver**, **Bronze**, and **Total Medals**. This table format allows for quick sorting to identify the top-performing nations, either by individual medal type or by overall totals
  + **Gold Medal Distribution:** This section focuses on the distribution of gold medals across participating countries using a packed bubbles chart. Each bubble represents a country, with the size corresponding to the total number of gold medals won. Larger bubbles indicate countries with higher gold medal counts, while smaller ones represent countries with fewer gold medals.
  + **Silver Medal Distribution:** This section visualizes the distribution of silver medals over time using a continuous line graph. The line graph plots each Olympic year along the x-axis and the number of silver medals awarded along the y-axis, providing a clear view of trends in silver medal counts across different Olympic Games. Users can easily observe changes in silver medal distribution, such as spikes or dips in specific years, and identify patterns in countries’ performance in winning silver medals over time.
  + **Athlete Age Performance:** This section displays athlete performance by age groups using bar charts, allowing for a comparison of medal achievements across various age ranges. Each bar represents a specific age group (RANGE:-10-20,20-30,30-40,40-50,50-60,) and shows the number of medals won by athletes in that range. The chart helps to identify which age groups tend to perform best across different sports or events, highlighting trends such as peak performance ages.

**Visual Elements and KPIs (Key Performance Indicators)**

Describe the key visuals and metrics used, such as:

**Maps:** For a worldwide view of country participation, maps represent the geographic spread of countries involved in the Olympics, making it easy to see the global reach of the Games.

**Text Tables:** These tables organize medal counts (total, gold, silver, and bronze) by country, offering a clear, sortable format for quick comparison of medal performance.

**Packed Bubbles:** For a visually impactful summary, packed bubbles highlight total medals by country and gold medals, with bubble size indicating medal counts. This layout provides an immediate understanding of top-performing nations.

**Lines (Continuous**): Line graphs illustrate year-over-year trends for silver medals, allowing users to observe changes over time in this specific medal type.

**Horizontal Bar Charts:** Bar charts break down age-related performance, as well as data on selected athletes, with each bar representing the number of medals won by different age groups or individual athletes.

**DESCRIPTION OF DATASET**

**Archery**

The data includes participants from various countries, primarily **South Korea, China, United States, Italy, and Ukraine.**

Some notable athletes include **Ki Bo-Bae** from South Korea, who won 2 **gold medals** in the **2012** Olympics, and **Oh Jin-Hyek**, who secured **1 gold and 1 bronze medal** in the same year.

**Marco Galiazzo** from Italy is another distinguished archer with gold medals in 2004 and 2012.

**Gold Medals**: South Korea consistently wins gold in both team and individual events.

**Silver Medals**: Countries like China and Italy are strong contenders for silver medal.

**Bronze Medals**: Various nations, including Ukraine and the United States, have earned bronze

**Athletics**

The data includes participants from various countries **primarily Jamaica, United States, Russia and Kenya**

Some notable athletes include **Yoshan Blake** from Jamaica won 1 **Gold medal** and 2 **Sliver medals** in **2012** Olympics, and **Allyson Felix** from **United States** won 3 medals.

**Gold Medals:** Countries like Jamaica, United States, and Great Britian are strong contenders for Gold medal.

**Silver Medals:** Countries like Turkey and Russia have earned Sliver

**Bronze Medals:** Trinidad and Tobago have earned bronze medal

**Badminton**

The data includes participants from various countries **primarily China, Denmark, Indonesia, South Korea.**

Some notable athletes include **Zhao Yunlei** from China won 2 gold medal, and Gao Ling won 1 gold and 1 silver medal.

**Gold Medals:** China have earned gold medals.

**Silver Medals:** Countries like China, Indonesia, Denmark and South Korea are strong Contenders for Sliver medals.

**Bronze Medals**: China, South Korea, and Denmark such countries are strong Contenders for Bronze medals

**Basketball**

The data includes participants from various countries **primarily United States, Argentina.**

Some notable athletes include **Andrés Nocioni** from **Argentina** in the year **2004** won a **gold medal** and in the year **2008** won a **bronze medal** and **Belinda Snell** from **Australia** in the year **2012** won **a bronze medal** and in the **2004&2008** won **silver medal.**

**Gold Medals**: Countries like United States and Argentina have earned Gold Medals.

**Silver Medals:** Australia, France, Spain and Italy won silver medals

**Bronze Medals:** Various nation like Russia, Argentina, Australia, Brazil, and

Lithuania are strong contenders for bronze medals.

**Cycling**

The data includes participants from various countries **primarily Australia, Great Britain, and Germany.**

Some notable athletes include **Chris Hoy** from **Great Britain** in the year **2008** won 3 **gold medals** and in the year **2012** won 2 **gold medals** and won a **gold medal** in the **year 2004** and **Joan Llaneras** from **Spain** won **a gold medal and silver medal** in the year **2008** and won **silver medal** in the year **2004** and also won **a gold medal** in the year **2000.**

**Gold Medals:** Countries like Australia, Great Britain and Germany have strongly earned gold medals.

**Silver Medals:** Countries like Australia, France and United States are strong Contenders for Silver medals.

**Bronze Medals:** Countries like Australia and United States have won the bronze medals.

**Diving**

The data includes participants from various countries **primarily China, Australia, Russia.**

Some notable athletes include **Guo Jingjing** from **China** in the year **2000** won 2 **gold medals** and also in the **2004 & 2008** won 2 **gold medals** each year. **Dmitry Sautin** from **Russia** in the year **2000** won a **gold medal**, a **silver medal** & 2 **bronze medal** in the same year and also in the year **2008** won a **silver medal** and in the year **2004** won a **bronze medal**.

**Gold Medals:** China consistently wins gold in both team and individual events.

**Silver Medals:** Countries like China and Russia are strong contenders for silver medals.

**Bronze Medals:** Various nations, including Australia, Canada, and Russai have earned bronze

**Equestrian**

The data includes participants from various countries **primarily Germany, Great Britain, Netherlands, and Australia.**

Some notable athletes include **Anky van Grunsven** from **Netherlands** in the year **2000 & 2008** won **a gold and silver medal** and in the year **2004** won a **gold medal** and also in the year **2012** won **a bronze medal.**

**Gold Medals:** China consistently wins gold in both team and individual events.

**Silver Medals:** Countries like China and Russia are strong contenders for silver medals.

**Bronze Medals:** Various nations, including Australia, Canada, and Russai have earned bronze

**Swimming**

The data includes participants from various countries **primarily Australia, Netherlands, Japan, and France.**

Some notable athletes include **Peter Van den Hoogenband** from **Netherlands** **won 2 gold and 2 bronze medals** in the year **2000** and in the year **2004** won a **gold medal** and **2 sliver medals.**

**Gold Medals**: Countries like Australia, Netherlands, and France have earned Gold.

**Silver Medals:** Countries like Australia, Netherlands, France and Japan are strong contenders won Silver,

**Bronze Medals:** Various nation like Australia, China, and China won Bronze.

**Table Tennis**

The data includes participants from various countries **primarily China, South Korea, Germany and Singapore.**

Some notable athletes include **Guo Yue** from **China** in the year **2004** won a bronze medal and won **a gold medal and bronze** medal in the year **2008** and also in the year **2012** won a **gold medal.**

**Gold Medals**: China have earned Gold.

**Silver Medals:** Countries like China, South Korea, and Singapore won Sliver,

**Bronze Medals:** Various nation like South Korea, China, and Germany won Bronze.

**Volleyball**

The data includes participants from various countries **primarily Russia, Brazil, Italy, and United states.**

Some notable athletes include **Aleksey Kazakov** from **Russia** in the year **2000** won **a silver medal** and in the year **2004 & 2008** won a **bronze medal. Sergey Tetykhin** from **Russia** in the year **2000** a **sliver medal** and won a **bronze medal** in the year **2004 &2008**, in the year **2012** won a **gold medal**.

**Gold Medals:** Brazil, China and Russia consistently won gold in both team and individual events.

**Sliver Medals:** : Countries like Brazil, Cuba, Russia and United States are strong contenders for silver medals.

**Bronze Medals:** Various nations, including Italy, Russia and Brazil have earned bronze

**Water Polo**

The data includes participants from various countries **primarily United States, Hungary, Australia and Russia.**

Some notable athletes include **Gergo Kiss** from **Hungary** in the year **2000 & 2004 & 2008** won a **gold medal** and **Dejan Savic** from **Serbia and Montenegro** won **a bronze medal**  in the year **2000 & 2008** and won **silver medal** in the year **2004**.

**Gold Medals:** Countries like Hungary, Croatia, Australia and Greece have strongly earned Gold.

**Silver Medals:** Countries like Australia, Italy, Russia, Spain and United States are strong Contenders for Silver medals.

**Bronze Medals:** Countries like Australia, Russia, Serbia, Serbia and Montenegro and United States have won the bronze medals.