**"** **The Olympics: A Data Odyssey - Exploring Performance and Trends "**

**Project Manager:** Innovation Pioneers

1. Niranjana J
2. Ayushi Tawari
3. Mutta Datta Sai Vishnu Mohan

**Estimated Start Date:** 04-04-2024

**Estimated Completion Date:** 10-04-2024

**Details of the dataset:**

**Breakdown of the columns:**

* ID: Unique identifier for each athlete.
* Name: Athlete's full name.
* Sex: Athlete's gender (male or female).
* Age: Athlete's age at the time of the competition.
* Height: Athlete's height (measurement in centimetres).
* Weight: Athlete's weight (measurement in kilograms).
* Team: Country the athlete represents.
* NOC: National Olympic Committee code (unique 3-letter code for each country).
* Games: Combined field indicating year and season (e.g., "2012 Summer").
* Year: Year of the Olympic Games.
* Season: Season of the Olympic Games (Summer or Winter).
* City: Host city of the Olympic Games.
* Sport: Specific sport the athlete competed in (e.g., gymnastics, swimming).
* Event: Specific event within the sport (e.g., 100m freestyle, men's high jump).
* Medal: Medal awarded to the athlete (gold, silver, bronze, or "NA" for no medal).

**Overall Objective:**

* Athlete Performance: Analyze factors influencing medal acquisition (e.g., age, height, weight, specific sports/events).
* Trends over Time: Identify trends in participation, medal distribution, and dominance in different sports across various Olympic Games.
* Demographic Analysis: Understand the demographics of Olympic athletes (age, sex, height, weight) across different sports and countries.
* National Performance: Compare performance of different countries based on medal count, participation rates, and athlete demographics.

By analyzing these different aspects, the dataset can reveal valuable information about the Olympics and the athletes who compete.

**Inconsistencies in data:**

The dataset is a Pubic Repository, which consists of

Rows: 271116

Columns: 15

Null Values:

|  |
| --- |
| ID 0 |
| Name 0 |
| Sex 0 |
| Age 9474 |
| Height 60171 |
| Weight 62875 |
| Team 0 |
| NOC 0 |

**Ownership of each deliverable:**

We've divided the work collaboratively. Each team member will analyze a specific aspect of the data, drawing their own conclusions and providing valuable insights. The PowerPoint will be made the same way.

**Ayushi Tawari:**

Medal Distribution: How has the distribution of medals (across countries or sports or players) changed over the years? Are certain countries becoming increasingly dominant? Comparison of how the popularity of different sports has evolved in for individual countries over time? Player analysis (same sportsmen/sportswomen, different sports and seasons)

**Niranjana J:**

Is there a correlation between age and medal success in different sports? Are there sports with a "prime age" for competition? Is there a relationship between height, weight, and performance in different sports.

**Mutta Datta Sai Vishnu Mohan:**

Has the percentage of female athletes increased over time? Are there specific sports where this is more pronounced? Compare performance between Summer and Winter Olympics. Analyze medal distribution and athlete participation across sports for each season.