# Paris 2024 Olympic Summer Games Dashboard 🏅

**Overview**

Welcome to the **Paris 2024 Olympic Summer Games Dashboard** project! This project provides interactive visualizations and insights into Olympic data, including medal counts, athlete performances, event schedules, and more, all displayed on a beautifully designed Power BI dashboard.

**🔗** [**View the Live Dashboard**](https://app.powerbi.com/view?r=eyJrIjoiODJjYmZiMzctZjk2YS00MGU5LTg0YzMtN2ZhMDFlZDA1ODBhIiwidCI6IjcwZGUxOTkyLTA3YzYtNDgwZi1hMzE4LWExYWZjYmEwMzk4MyIsImMiOjN9)

**Project Features**

* **Data Extraction with Python**: Python scripts were used to extract, clean, and prepare the data from the [Kaggle Paris 2024 Olympic Summer Games Dataset](https://www.kaggle.com/datasets/piter...).
* **Interactive Power BI Dashboard**: The dashboard provides rich visualizations, including medal counts, country comparisons, and athlete statistics.
* **Dashboard Design with Figma**: Figma was used to design a modern and user-friendly dashboard layout to enhance the overall user experience.
* **Advanced Power BI Features**: Utilized Power Query for data transformation, DAX for calculations, and custom visuals to present data in engaging ways.

**Key Learning Objectives**

1. **Data Processing**:
   * Extracted, cleaned, and prepared the data using Python.
   * Automating updates for real-time data refresh in the Power BI dashboard.
2. **Dashboard Design**:
   * Designed a professional and intuitive interface using Figma.
   * Best practices for visual design, layout planning, and color schemes for optimal user experience.
3. **Interactive Visualizations**:
   * Built interactive dashboards tracking Olympic data, allowing users to explore the data from different angles.
   * Visualized historical comparisons of countries and athletes in the Olympic Games.

**Technologies Used**

* **Python**: For data extraction and preprocessing.
* **Kaggle**: As the data source for the Olympic datasets.
* **Power BI**: For creating interactive data visualizations.
* **Figma**: For designing the dashboard interface.
* **DAX**: Used in Power BI for creating dynamic and complex calculations.
* **Power Query**: For data transformation and preparation inside Power BI.

**Installation**

**Prerequisites**

* **Python** (3.7+)
* **Power BI Desktop**
* **Figma** (optional, for design modifications)
* **Kaggle API** (to download datasets)

**Steps**

1. **Clone the Repository**:

bash

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git clone https://github.com/yourusername/paris-2024-olympic-dashboard.git

1. **Install Python Dependencies**:

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pip install pandas numpy matplotlib seaborn

1. **Download Dataset**:
   * Use Kaggle API to download the Paris 2024 Olympic dataset:

bash

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kaggle datasets download -d piter/paris-2024-olympic-summer-games

1. **Run the Python Script**:
   * Preprocess the data for Power BI using:

bash

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python data\_processing.py

1. **Open Power BI**:
   * Import the cleaned dataset and build your dashboard.
2. **Design Modifications (Optional)**:
   * Modify the Figma design as per your needs. You can access the Figma file [here](link to Figma file).

**Dashboard Features**

* **Medal Count Tracker**: Compare the total medal counts of different countries and athletes.
* **Athlete Performance**: Explore statistics on individual athlete performances, categorized by event and age.
* **Real-Time Data Updates**: Ensure the dashboard reflects the most recent Olympic data.
* **Event Schedules**: Keep track of upcoming and completed events in the 2024 Olympics.

**Contributing**

Feel free to contribute! If you have any suggestions or want to add features, please follow these steps:

1. Fork the repository.
2. Create a new branch (git checkout -b feature-branch).
3. Commit your changes (git commit -am 'Add new feature').
4. Push to the branch (git push origin feature-branch).
5. Create a new Pull Request.

**Acknowledgments**

* Thanks to **The Developer** for providing invaluable tutorials that guided the data extraction, processing, and visualization steps in this project.
* Special mention to **Kaggle** for the rich dataset used in this analysis.