DATA SCIENCE PROJECT

OLYMPICS DATA ANALYSIS

Submitted By

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Submitted to

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1. **DATASET COLLECTION**

   Collected data from kaggle website

   https://www.kaggle.com/datasets/heesoo37/120-years-of-olympic-history-athletes-and-results

- **DATA SET INFORMATION**

NAME OF DATASET

120 years of Olympic history:
athletes and results

Dataset consists of 2 files names

- **athlete_events.csv**

  It consist of all details of each athlete participated in olympics

- **noc_regions.csv**

Information related to regions athlete belongs to

2. DATA ANALYSIS AND RESULTS

Jupyter notebook file(olympics_data_analysis.ipynb) attached with a folder contains detailed analysis of dataset using different libraries of python.

Some analysis includes:

- Medal holders
- country wise analysis
- Overall analysis

Different charts like heat chart are also made to give prominent visualization of our analysis

3. REQUIRED FRONTEND OUTPUTS

Basic frontend is made in pycharm to give some details of dataset

Inorder to run pycharm file do following steps:

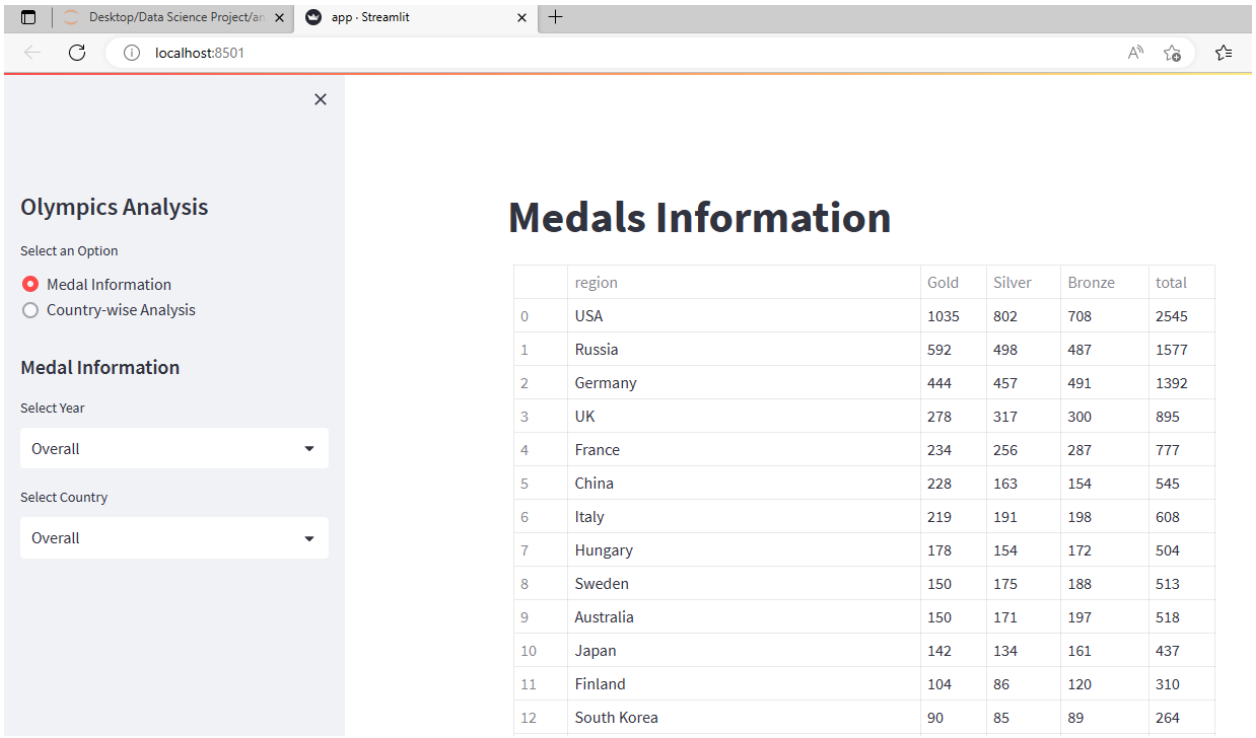
- Install pycharm version (pycharm community edition 2022.3)
- Run .exe file
- From start open pycharm community app
- Open folder in pycharm named as frontend in pycharm
- Open file app.py
- Open terminal
- Install streamlit package by command “pip install streamlit”
- Install matplotlib by “pip install matplotlib”
- Install seaborn by “pip install seaborn”

- Type command “streamlit run app.py” to run application on local host
- All installation must be done on same folder by terminal of pycharm

Output of Our Application

Screen consists of 2 displays

- **MEDAL HOLDERS**



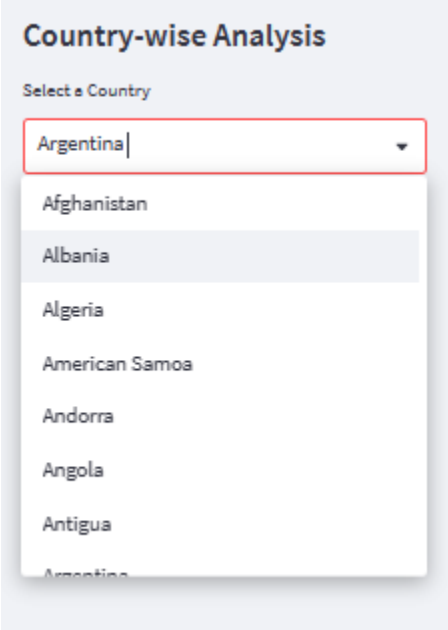
	region	Gold	Silver	Bronze	total
0	USA	1035	802	708	2545
1	Russia	592	498	487	1577
2	Germany	444	457	491	1392
3	UK	278	317	300	895
4	France	234	256	287	777
5	China	228	163	154	545
6	Italy	219	191	198	608
7	Hungary	178	154	172	504
8	Sweden	150	175	188	513
9	Australia	150	171	197	518
10	Japan	142	134	161	437
11	Finland	104	86	120	310
12	South Korea	90	85	89	264

COUNTRY WISE ANALYSIS

We can check different countries details like

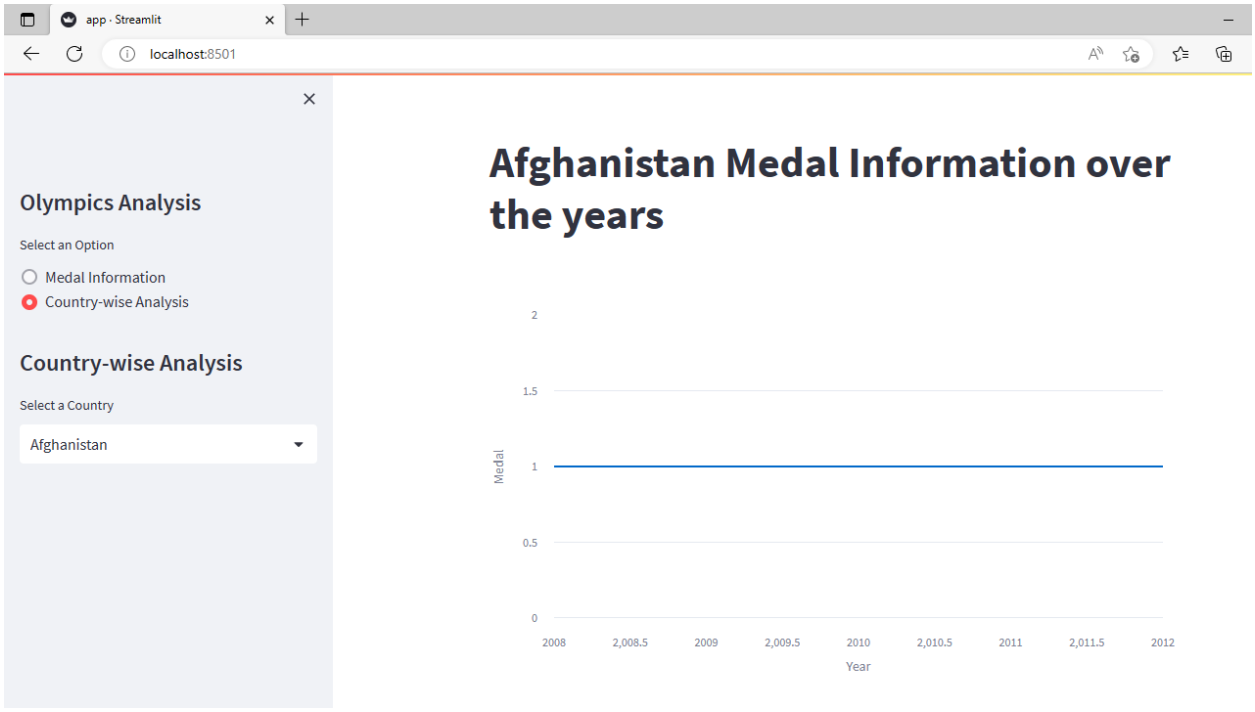
- excels in the following sports
- Top 10 athletes of country

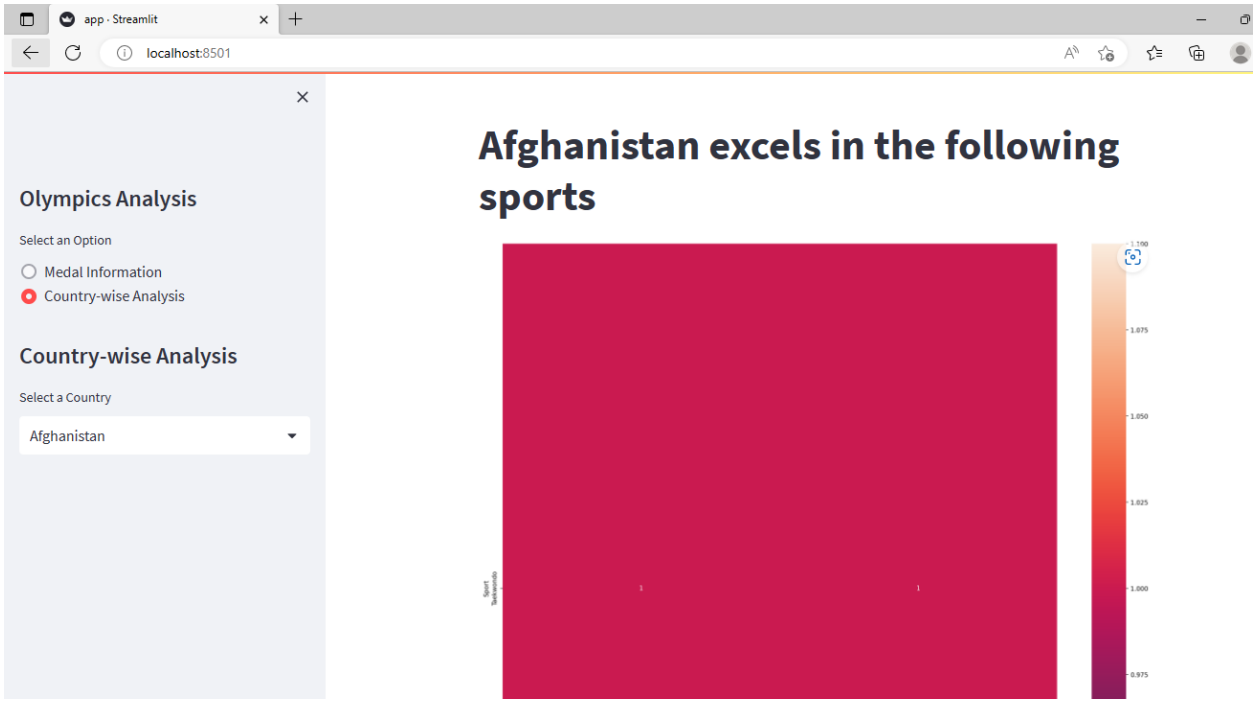
We can select any country from dropdown

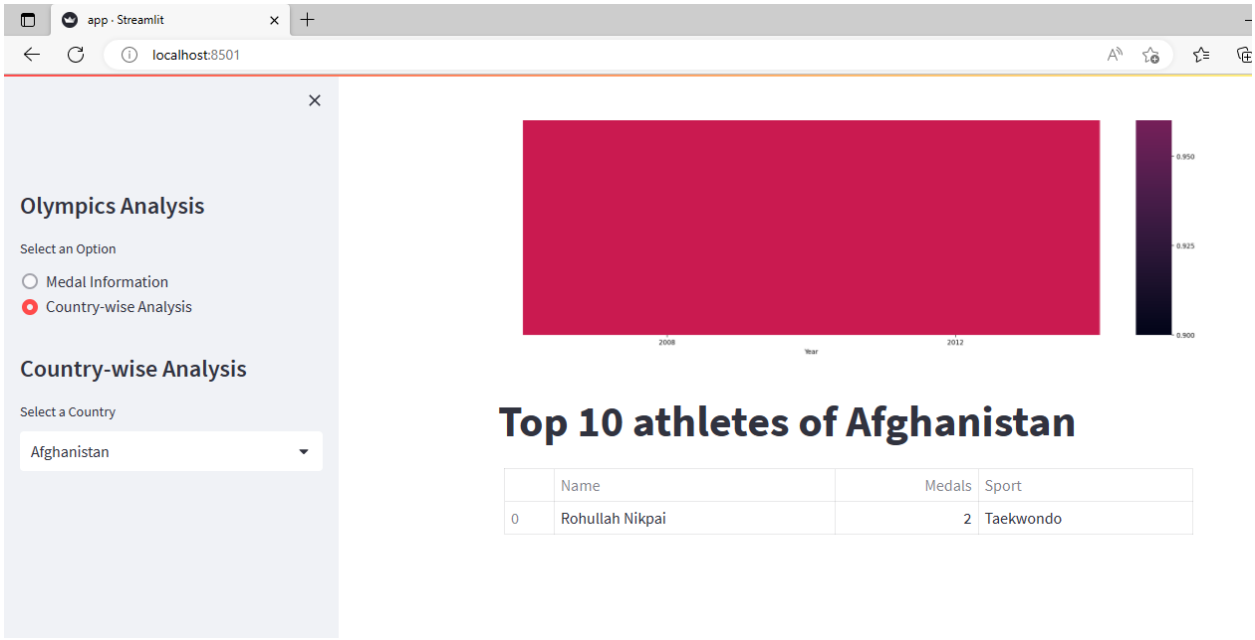


FOR EXAMPLE

1. **AFGHANISTAN**


app · Streamlit
localhost:8501
Olympics Analysis
Select an Option
Medal Information
Country-wise Analysis
Country-wise Analysis
Select a Country
Afghanistan
Afghanistan Medal Information over the years
Medal
2
1.5
1
0.5
0
2008
2,008.5
2009
2,009.5
2010
2,010.5
2011
2,011.5
2012
Year

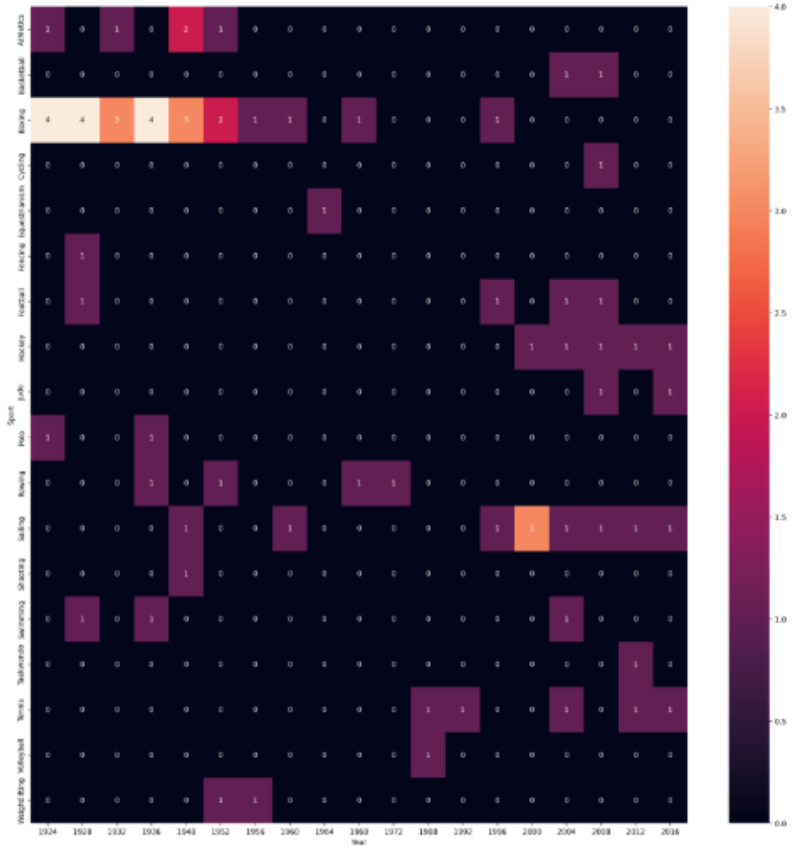

app · Streamlit
localhost:8501
Olympics Analysis
Select an Option
Medal Information
Country-wise Analysis
Country-wise Analysis
Select a Country
Afghanistan
Afghanistan excels in the following sports


app · Streamlit
localhost:8501
Olympics Analysis
Select an Option
Medal Information
Country-wise Analysis
Country-wise Analysis
Select a Country
Afghanistan
Top 10 athletes of Afghanistan
Name
Medals
Sport
0
Rohullah Nikpai
2
Taekwondo

2. ARGENTINA

app · Streamlit
localhost:8501
Olympics Analysis
Select an Option
Medal Information
Country-wise Analysis
Country-wise Analysis
Select a Country
Argentina
Argentina Medal Information over the years
Medal
Year
1940
1960
1980
2000

Argentina excels in the following sports



app · Streamlit

localhost:8501

Olympics Analysis

Select an Option

- ○ Medal Information
- ◉ Country-wise Analysis

Country-wise Analysis

Select a Country

Argentina

Top 10 athletes of Argentina

	Name	Medals	Sport
0	Luciana Paula "Lucha" Aymar	4	Hockey
4	Carlos Mauricio Espnola Lorenzo	4	Sailing
9	Mara Magdalena Aicega Amicarelli	3	Hockey
13	Santiago Ral Lange Roberti	3	Sailing
19	Agustina Soledad "Sole" Garca	3	Hockey
22	Mara Mercedes "Mechi" Margalot	3	Hockey
25	Mara de la Paz "Maripi" Hernndez Margalot	3	Hockey
28	Paola Vukojicic	3	Hockey
31	Andrs Marcelo Nocioni Roux	2	Basketball
35	Ayeln Lara Stepnik Puche	2	Hockey