Olympics Athletes Events Analysis

Team Members:
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Project Description:
This project will analyze data based on athletes who participated in the Olympic Games from 1896 to 2016. The analysis will be completed by comparing countries, gender, medal types won, and individual athletes. The type of games, individual versus team, will also be considered.

Research Questions to Answer:

- Total Percentage of Medals Won by USA each games / Summer vs Winter
- Total Medals Won vs Type of Medals Won
- How many Olympic Games are hosted in each continent?
- Individual Athletes with the most medals (top 5 men, top 5 women) and their identifying country.
- What is the most dominant sport for Team USA? (most medals)

Datasets to be Used:
https://www.kaggle.com/datasets/samruddhim/olympics-althlete-events-analysis/data
https://www.kaggle.com/datasets/statchaitya/country-to-continent/data?select=countryContinent.csv
https://www.kaggle.com/datasets/jonscheaffer/olympic-host-cities

Web Resources:
https://architectureofthegames.net/olympic-host-cities/
https://ourworldindata.org/grapher/continents-according-to-our-world-in-data

Rough Breakdown of Tasks:

- Kelly and Mackenzie - clean up data based on the research question to be answered
- Kelly - Total Percentage of Medals Won by USA each games / Summer vs Winter
- Mackenzie - Total Medals Won vs Type of Medals Won
- Kelly - How many Olympic Games are hosted in each continent?
- Mackenzie - Individual Athletes with the most medals (top 5 men, top 5 women) and their identifying country.
- Mackenzie - What is the most dominant sport for Team USA? (most medals)
- Mackenzie - Which country is the overall most dominant?
- Kelly and Mackenzie - slide assembly and production
- Kelly and Mackenzie - write up/conclusion

Dependencies:

```
import hvplot.pandas
import pandas as pd
import requests
import time
import json
from scipy.stats import linregress
from matplotlib import pyplot as plt

#import the API key
from config import geoapify_key

# Import cities file as DataFrame
cities_pd = pd.read_csv("../Resources/cities.csv")
cities_pd.head()
```