

## Project Proposal: OLYMPICS

### I. Introduction

To look at the medal counts per country and what factors will influence the outcome.

### II. Data Source

#### ❖ Primary Data Sources

<https://www.kaggle.com/samruddhim/olympics-athlete-events-analysis>  
athlete\_events.csv

<https://www.kaggle.com/piterfm/olympic-games-medals-19862018>  
olympic\_medals.csv

#### ❖ Supporting Resources

<https://www.kaggle.com/themlphdstudent/country-wise-gdp-from-1994-to-2017>  
Country wise GDP from 1994 to 2017.csv

### III. Research Questions

- a. Is the relationship between participating Country success and major historical event /World War II?
- b. Is Country GDP & Population size contributing factors for Olympic success?
- c. Is there a high success rate for specialty games in some countries?
- d. Team vs individual sports, which one has highest success rate per country?
- e. Which game is more popular in which continent?

### IV. Brainstorm/Hypothesis

#### Statistical Test

##### 1. ANOVA Test or Chi Test

- Gold, Silver, Bronze categories
- Determine which one would be more appropriate/accurate.

##### 2. T-Test: Country vs Country

##### 3. Regression

- Predict the total medal count for each country
- New Olympic records could be set

#### Hypothesis

- ❖ We predict the GDP has a major influence on the number of medals the USA achieved.
- ❖ We predict population has a major influence on the number of medals both China/Russia achieved.

## V. Inspirations

- ❖ The “Year” of the Olympics
- ❖ Due to the recent experiences we all had with social distancing and being away from family, friends, and entertainment our group wanted to celebrate the event that brings everyone together and back to some form of normalcy.

## VI. Role Breakdown

- ❖ Cleaning Data: Kidist/Alisha
- ❖ Data Visualizations/Regression/Live Demo: Alfred/Group
- ❖ Slide Deck/Analytical Write Up: Lucas

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athlete_events.csv | olympic_medals.csv | Country wise GDP from 1994 to 2017.csv | olympic_metadata_host.csv
C: > Users > alfcu > Desktop > SMU > Project_1_CSV > olympic_medals.csv
1 ,discipline_title,slug_game,event_title,event_gender,medal_type,participant_type,participant_title,athlete_name,at
2 0,Skeleton,pyeongchang-2018,Women,Women,GOLD,Athlete,,lizzy,YARNOLD,Great Britain,GB,GBR
3 1,Skeleton,pyeongchang-2018,Women,Women,SILVER,Athlete,,Jacqueline,LOELLING,Germany,DE,GER
4 2,Skeleton,pyeongchang-2018,Women,Women,BRONZE,Athlete,,Laura,DEAS,Great Britain,GB,GBR
5 3,Skeleton,pyeongchang-2018,Men,Men,GOLD,Athlete,,Sungbin,YUN,Republic of Korea,KR,KOR
6 4,Skeleton,pyeongchang-2018,Men,Men,SILVER,Athlete,,Nikita,TREGUBOV,Olympic Athletes from Russia,,OAR
7 5,Skeleton,pyeongchang-2018,Men,Men,BRONZE,Athlete,,Dom,PARSONS,Great Britain,GB,GBR
8 6,Speed skating,pyeongchang-2018,Men's 500m,Men,GOLD,Athlete,,Sven,KRAMER,Netherlands,NL,NED
9 7,Speed skating,pyeongchang-2018,Men's 500m,Men,SILVER,Athlete,,Ted-Jan,BLOEMEN,Canada,CA,CAN
10 8,Speed skating,pyeongchang-2018,Men's 500m,Men,BRONZE,Athlete,,Sverre Lunde,PEDERSEN,Norway,NO,NOR
11 9,Speed skating,pyeongchang-2018,Ladies' Mass Start,Women,GOLD,Athlete,,Nana,TAKAGI,Japan,JP,JPN
12 10,Speed skating,pyeongchang-2018,Ladies' Mass Start,Women,SILVER,Athlete,,Bo Reum,KIM,Republic of Korea,KR,KOR
13 11,Speed skating,pyeongchang-2018,Ladies' Mass Start,Women,BRONZE,Athlete,,Irene,SCHOUTEN,Netherlands,NL,NED
14 12,Speed skating,pyeongchang-2018,Men's 500m,Men,GOLD,Athlete,,Havard,LORENTZEN,Norway,NO,NOR
15 13,Speed skating,pyeongchang-2018,Men's 500m,Men,SILVER,Athlete,,Min Kyu,CHA,Republic of Korea,KR,KOR
16 14,Speed skating,pyeongchang-2018,Men's 500m,Men,BRONZE,Athlete,,Tingyu,GAO,People's Republic of China,CN,CHN
17 15,Speed skating,pyeongchang-2018,Ladies' 500m,Women,GOLD,Athlete,,Nao,KODAIRA,Japan,JP,JPN
18 16,Speed skating,pyeongchang-2018,Ladies' 500m,Women,SILVER,Athlete,,Sang-Hwa,LEE,Republic of Korea,KR,KOR
19 17,Speed skating,pyeongchang-2018,Ladies' 500m,Women,BRONZE,Athlete,,Karolina,ERBANNOVA,Czech Republic,CZ,CZE
20 18,Speed skating,pyeongchang-2018,Men's Team Pursuit,Men,GOLD,GameTeam,Norway team,,,Norway,NO,NOR
21 19,Speed skating,pyeongchang-2018,Men's Team Pursuit,Men,SILVER,GameTeam,Republic of Korea team,,,Republic of Korea,KR,KOR
22 20,Speed skating,pyeongchang-2018,Men's Team Pursuit,Men,BRONZE,GameTeam,Netherlands team,,,Netherlands,NL,NED
23 21,Speed skating,pyeongchang-2018,Men's 1000m,Men,GOLD,Athlete,,Ted-Jan,BLOEMEN,Canada,CA,CAN
24 22,Speed skating,pyeongchang-2018,Men's 1000m,Men,SILVER,Athlete,,Jorrit,BERGSMAN,Netherlands,NL,NED
25 23,Speed skating,pyeongchang-2018,Men's 1000m,Men,BRONZE,Athlete,,Nicola,TUMOLERO,Italy,IT,ITA
26 24,Speed skating,pyeongchang-2018,Men's 1500m,Men,GOLD,Athlete,,Kjeld,NUIS,Netherlands,NL,NED
27 25,Speed skating,pyeongchang-2018,Men's 1500m,Men,SILVER,Athlete,,Patrick,ROEST,Netherlands,NL,NED
28 26,Speed skating,pyeongchang-2018,Men's 1500m,Men,BRONZE,Athlete,,Min Seok,KIM,Republic of Korea,KR,KOR
29 27,Speed skating,pyeongchang-2018,Ladies' 3000m,Women,GOLD,Athlete,,Carlijn,ACHTEREKKTE,Netherlands,NL,NED
30 28,Speed skating,pyeongchang-2018,Ladies' 3000m,Women,SILVER,Athlete,,Ireen,WÜST,Netherlands,NL,NED
31 29,Speed skating,pyeongchang-2018,Ladies' 3000m,Women,BRONZE,Athlete,,Antoinette,DE JONG,Netherlands,NL,NED
32 30,Speed skating,pyeongchang-2018,Men's 1000m,Men,GOLD,Athlete,,Kjeld,NUIS,Netherlands,NL,NED
33 31,Speed skating,pyeongchang-2018,Men's 1000m,Men,SILVER,Athlete,,Havard,LORENTZEN,Norway,NO,NOR
34 32,Speed skating,pyeongchang-2018,Men's 1000m,Men,BRONZE,Athlete,,Tae-Yun,KIM,Republic of Korea,KR,KOR
35 33,Speed skating,pyeongchang-2018,Ladies' Team Pursuit,Women,GOLD,GameTeam,Japan team,,,Japan,JP,JPN
36 34,Speed skating,pyeongchang-2018,Ladies' Team Pursuit,Women,SILVER,GameTeam,Netherlands team,,,Netherlands,NL,NED
37 35,Speed skating,pyeongchang-2018,Ladies' Team Pursuit,Women,BRONZE,GameTeam,United States team,,,United States of America,US,USA
38 36,Speed skating,pyeongchang-2018,Ladies' 5000m,Women,GOLD,Athlete,,Esmee,VISSER,Netherlands,NL,NED
39 37,Speed skating,pyeongchang-2018,Ladies' 5000m,Women,SILVER,Athlete,,Martina,SABLIKOVÁ,Czech Republic,CZ,CZE
40 38,Speed skating,pyeongchang-2018,Ladies' 5000m,Women,BRONZE,Athlete,,Natalia,VORONINA,Olympic Athletes from Russia,,OAR
41 39,Speed skating,pyeongchang-2018,Ladies' 1500m,Women,GOLD,Athlete,,Ireen,WÜST,Netherlands,NL,NED
42 40,Speed skating,pyeongchang-2018,Ladies' 1500m,Women,SILVER,Athlete,,Miho,TAKAGI,Japan,JP,JPN
43 41,Speed skating,pyeongchang-2018,Ladies' 1500m,Women,BRONZE,Athlete,,Marette,LEENSTRA,Netherlands,NL,NED
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