Data Visualization: CSGO Players

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Business Understanding

- First-person shooter multiplayer game developed by Valve.
- Released in 2012.
- Reached its 10th anniversary last year.
- Celebrate the fun 10 years that I had watching and playing CSGO.

Data Documentation

- Retrieved from Kaggle.
- Consists of 456 rows and 19 columns.
- no missing values, some names with special characters.
- Some data was already aggregated.

Tools and Documentation

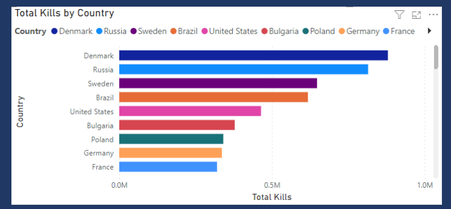
- Tool used was PowerBI.
- Wanted to learn PowerBI.
- Simple UI but hard to find specific features.
- Dataset worked well with PowerBI.

Total Player Count by Country

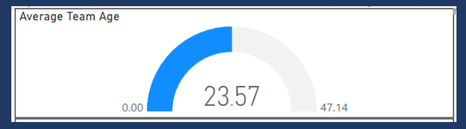
- Visualizes the player count in each country
- Countries are indicated by color and count by circle size
- Russia has the largest player base with 51 followed by Denmark with 47 and then Brazil with 41
- Guatemala, Hong Kong, Korea, Lithuania, Malaysia, Serbia, Switzerland, Taiwan, Turkey, and Uzbekistan has the lowest player base with one.

Total Kills by Country

- Visualizes the total in-game kills by each country.
- Denmark has the highest kills with 879404 followed by Russia with 814673 and Sweden with 647469.
- Countries with the total lowest kills are Lithuania (6546), Taiwan (7439), and Switzerland (7748). They also have the lowest player base.

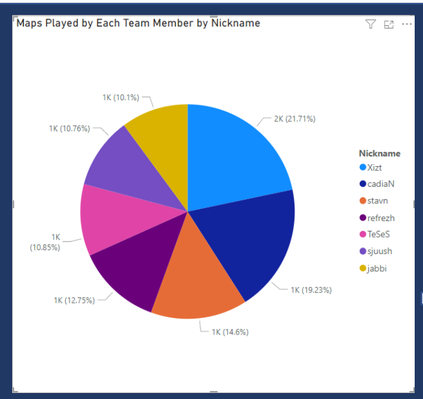


Average Team Age



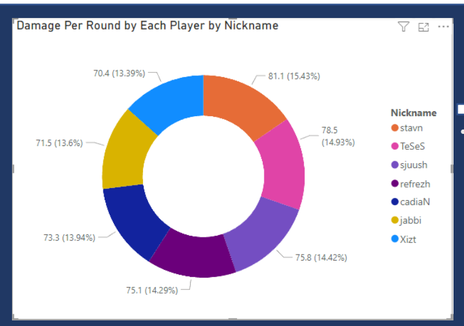
- Team used is Heroic
- Uses a gauge chart.
- Heroic has an average player age of 23.57.

Maps Played by Each Team Member



- Visualizes the number of maps played by each player in a team.
- Xizt has the most maps played for the team with over 2000 maps played.
- The player with the second most maps played is cadiaN.
- The player with the least maps played is jabbi.

Damage Per Round by Each Team Member

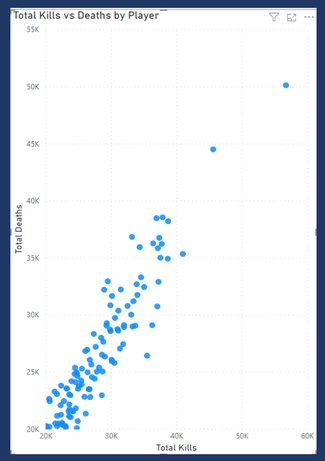


- Visualizes the damage per round by each member.
- stavn has the highest damage per round in the team even though he only has the third highest maps played
- I expected cadiaN to have a pretty high ADR since he uses a sniper which is most of the time a one-hit kill.
- More rounds does not necessarily mean more damage.

Tableau vs PowerBI

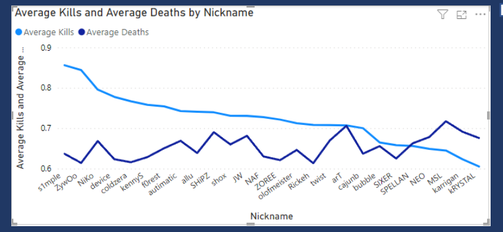
- Similarities:
  - Symbol or fill map
  - Color to indicate country
  - Circle size indicates count
- Differences:
  - Background color of the map chart
  - Tableau repleats its colors after it uses all available ones.
  - Cannot show labels in PowerBI
  - Tableau has a gradient in the legend to show different sizes

Total Kills vs Deaths of a Player



- Visualizes the total kills and deaths of a player.
- Motion is used.
- NiKo has a whopping 56745 kills and 50120 deaths.
- alex is second with 45620 kills and 44499 deaths.
- furlan is third with 37890 kills and 38534 deaths.
- rmn has the lowest kills vs deaths with 20149 kills and 20180 deaths
- MODDII is second with 20585 kills and 20184 deaths.
- xsepower is third with 24769 kills and 20066 deaths

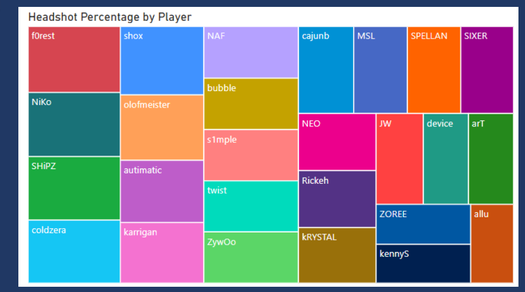
Average Kills and Deaths of a Player



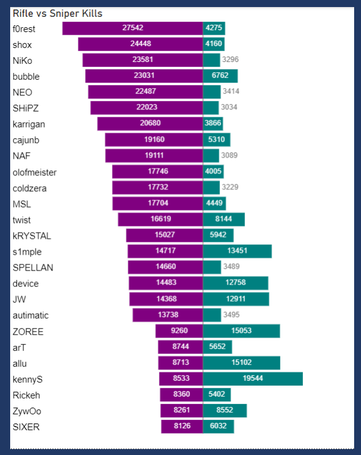
- Visualizes average kills and deaths of a Player.
- Used a filter to get players with over 8000 kills and 3000 deaths.
- s1mple has the highest average kills per round at 0.86 followed by ZywOo with 0.84, then NiKo with 0.80.
- Krystal, karrigan, and MSL have the lowest kills per round with 0.61, 0.62, and 0.64 respectively.
- Players with the highest average deaths per round are MSL (0.72), Krystal (0.71), and a tie between karrigan (0.69) and SHiPZ (0.69).
- Players with the lowest average deaths per round are ZywOo and Rickeh with 0.61, device, coldzera, and ZOREE with 0.62, and kennyS, NAF, and SIXER with 0.63.

Average Headshot Percentage

- Visualizes the average headshot percentage of each player.
- f0rest has the highest headshot percentage at 0.52 followed by NiKo and SHiPZ with 0.50, and coldzera and shox with 0.49.
- Players with the lowest headshot percentage, they are allu with 0.29, kennyS with 0.31, and ZOREE with 0.32.



Rifle vs Sniper kills



- Visualizes the rifles vs snipers kill count.
- The players with the highest rifle kills are f0rest, shox, and NiKo.
- The player with the lowest number of rifle kills is SIXER followed by ZywOo and Rickeh.
- The player with the highest number of sniper kills is kennyS followed by allu and ZOREE.
- The player with the least number of sniper kills is SHiPZ followed by NAF and coldzera.

The Three Ws

What Went Well

- Learned how to use PowerBI's features.
- PowerBI and data were easy to work with.
- Good PowerBI documentation.
- Plenty of data to work with.
- Achieved good visualizations.

What Did Not Go Well

- Could not show labels in the charts.
- Slicer was needed in some charts due to too much data.
- Data does not allow for much calculated fields.
- Some data was already aggregated.

What I Would Do Differently

- Learn more about PowerBI.
- Use a more complex dataset.
- Compile my own data.
- Use more complex charts.