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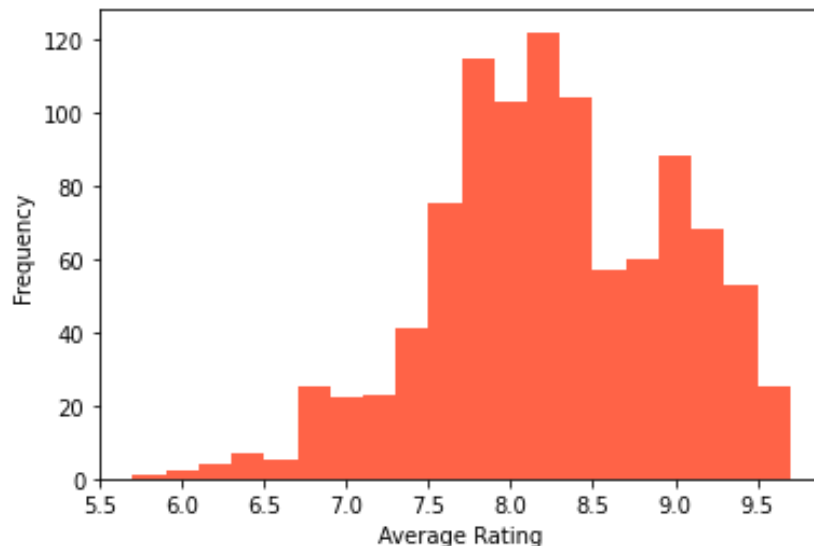
Popularity and Perception of One Piece

Introduction:

One Piece is a Japanese Anime and Manga about a pirate named Monkey D. Luffy and his crew trying to find the legendary treasure the One Piece. The pirate captain who finds the One Piece will be named the Pirate king and will learn all the truths of the world. One Piece is the highest selling Manga (Second best selling comic of all time) of all time selling 500 million volumes, but is it the best perceived and popular Anime/Manga among people. Sales do not always mean something is the best or most liked. An analysis of One Piece's popularity and perception through the years will better tell us how One Piece is doing.

Datasets Used:

A variety of datasets were used to be able to properly assess One Piece's popularity and perception among people. The first dataset used is a dataset from IMBD which has an average rating, amount of people giving the rating, and dates episodes were released of the first 1000 episodes of One Piece. The next dataset used was google trends data from 2004-2022. The trends data has the number of times One Piece has been searched and also how it compares to similar shows.

Analysis of IMBD Data:

The series One Piece is highly regarded and beloved by many people. The TV and movie rating website IMBD has ratings for many shows including One Piece. The average rating from 1-to 10 by episode can be seen in the Frequency histogram shown below. The average rating is gathered by people giving the episode a rating and taking the average of all those values. Of all the 1000 episodes in the dataset, the average rating was 8.2014/10, the median was 8.2/10, and the standard deviation was 0.72984.

	date	average_rating
0	1999	7.850000
1	2000	7.870455
2	2001	7.719048
3	2002	7.895455
4	2003	7.772973
5	2004	7.935897
6	2005	7.953846
7	2006	8.073684
8	2007	7.853333
9	2008	8.004255
10	2009	8.126531
11	2010	8.516327
12	2011	8.339583
13	2012	7.610204
14	2013	7.689583
15	2014	8.272000
16	2015	8.714583
17	2016	8.345652
18	2017	8.538776
19	2018	8.751064
20	2019	8.471429
21	2020	8.612195
22	2021	9.215909

The table on the right shows the average rating of the episodes released that year. Using the average slope formula $\Delta y / \Delta x$ where y is the avreage rating and x is the year we get that the average increase in rating per year is 0.06208.

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We can see from the data that One Piece has been getting a higher rating on average every year since its release.
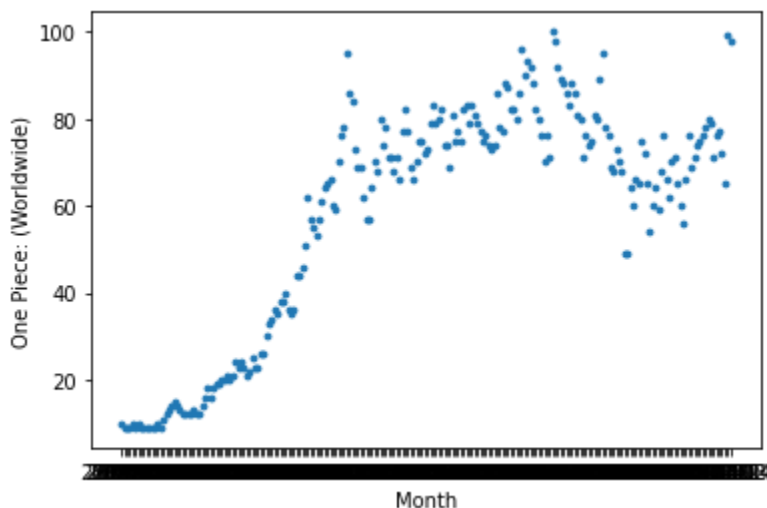
Analysis of Google Trends Data:

Google Trends data contains how much a term has been searched on any Google platform from Google to Youtube. Google ranks the term out of 100(where 100 is the most searched and 0 is the least searched) every week. The data used is from the past 5 years. To look at the popularity of One Piece we can compare it to other Animes/Mangas that are also very popular and how much they are ranked on Google Trends. To do this the mean of the ranking out of 100 from the date 5/7/2017 to 5/1/2022. The

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One Piece: (Worldwide)                           47.214559
Dragon Ball: (Worldwide)                         32.773946
Naruto: (Worldwide)                              48.823755
Demon Slayer: Kimetsu no Yaiba: (Worldwide)      19.946360
Attack on Titan: (Worldwide)                     19.800766
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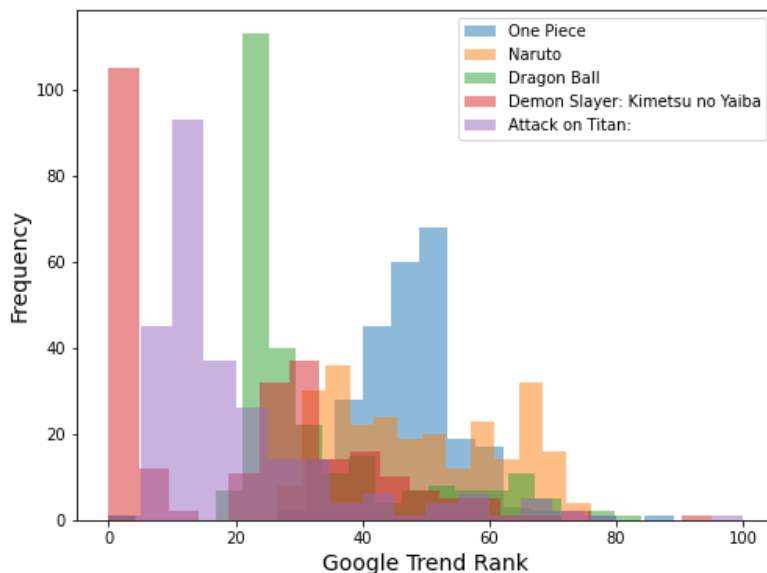
Animes/Mangas compared to One Piece were Dragon Ball, Naruto, Demon Slayer, and Attack on Titan. The data above shows the mean value out of 100 of the popularity on Google Trends of the Animes/Mangas and it is clear that One Piece has the highest value out of the rest. This shows that One Piece is searched for the most out of these on all Google-owned platforms.

The scatter plot to the right shows how One Piece ranks every month on Google Trends. As we can see the popularity of One Piece on Google Trends has been going up on average through the years.

The histogram to the left is a frequency histogram which shows the number of times an Anime/Manga gets a certain rank in google trends. All 5 Anime/Manga are in the same graph to compare all of them together.

From the Google Trends Dataset, we can see that One Piece's popularity has been consistently increasing through the years

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and is one of the most popular Anime/Mangas.

Conclusion:

As the data shows it is evident that One Piece has been gaining popularity through the years it has been released. The visualizations show also back the claim that One Piece's popularity and perception has been on the rise through the years. There were no datasets on the Manga sales of One Piece through the years which would have provided more insight as to when people were buying the Manga.

Datasets used:

https://www.kaggle.com/datasets/zoghlemichihebedine/one-piece-rating
https://trends.google.com/trends/?geo=US (Couldn't link the exact but search the 5 used to get it exactly)