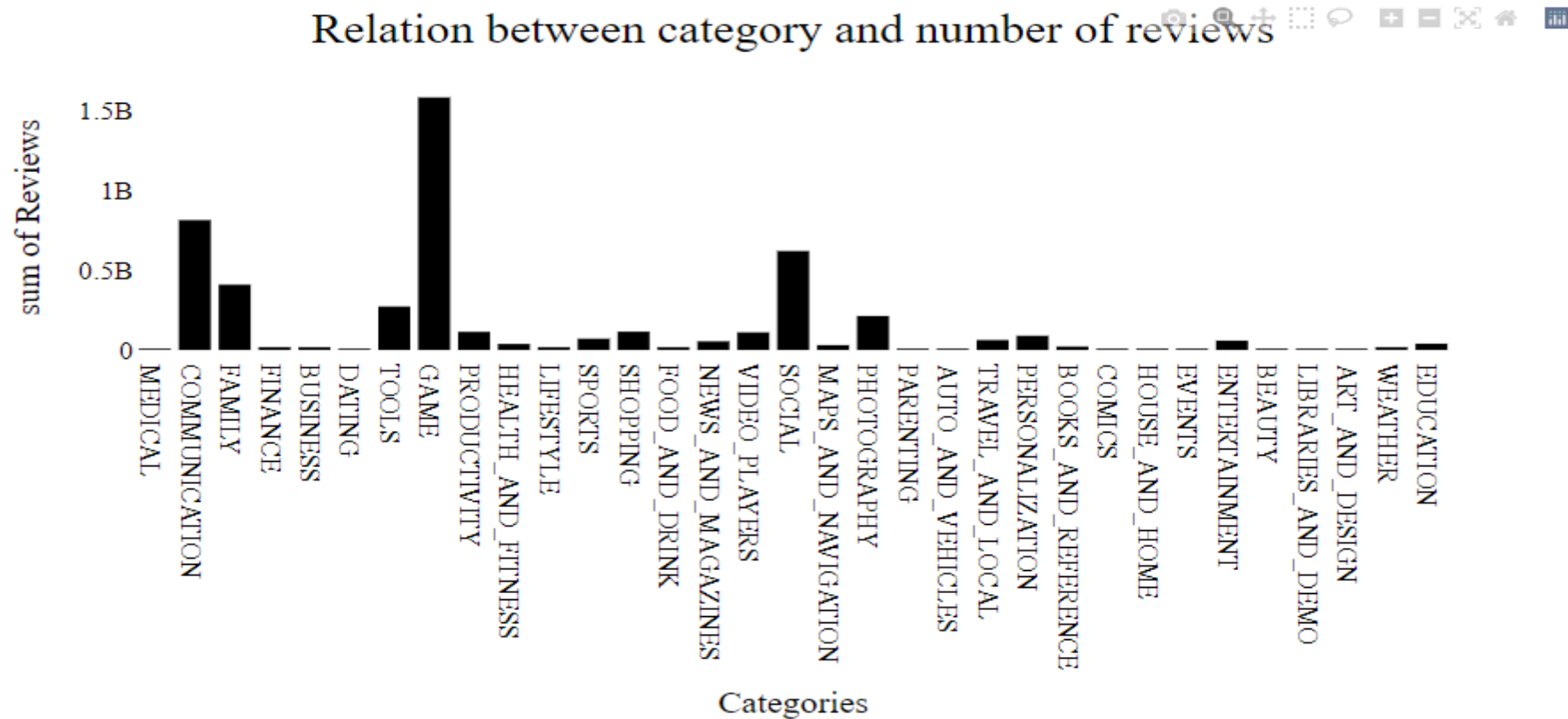
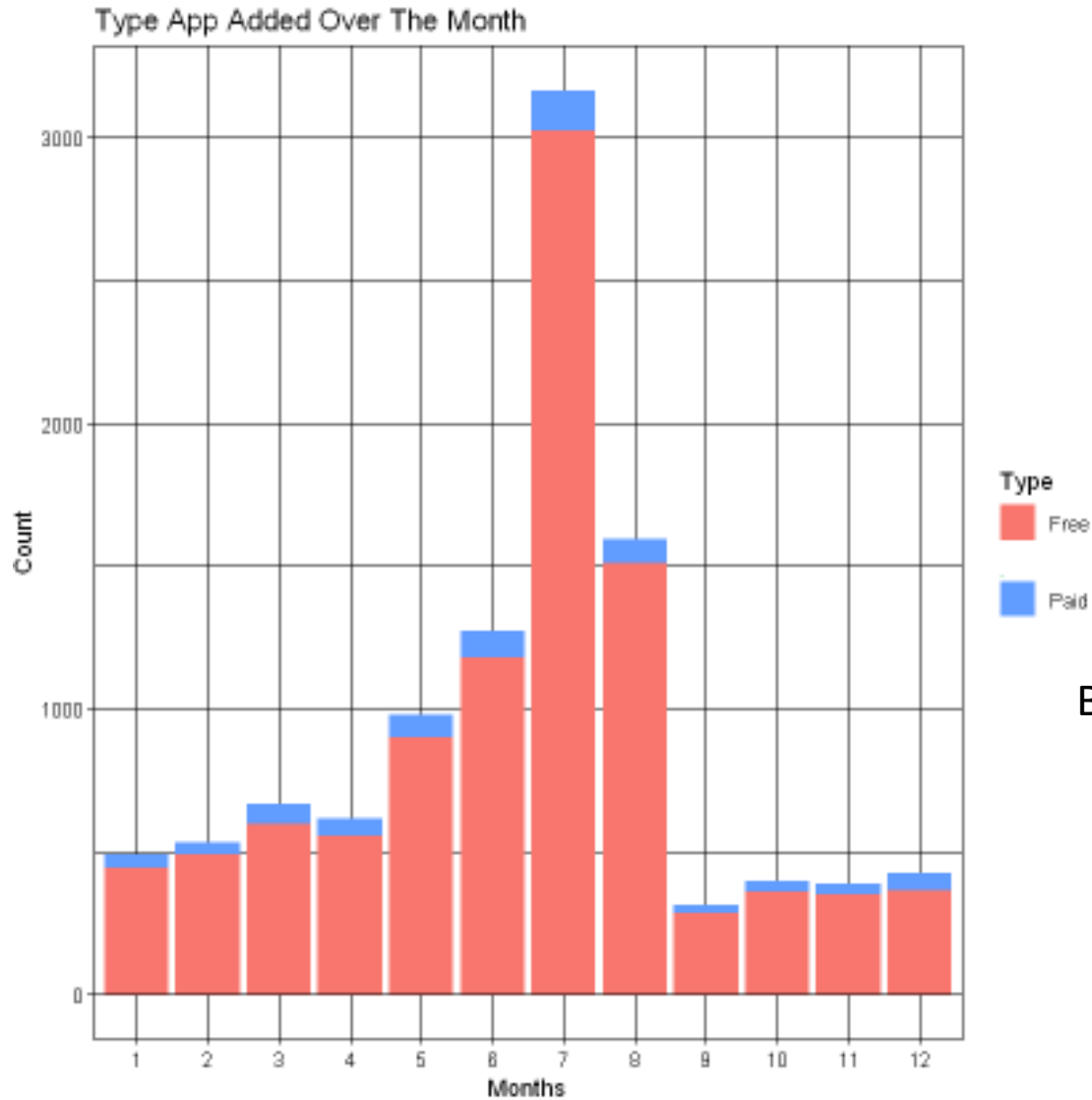


Interactive histogram



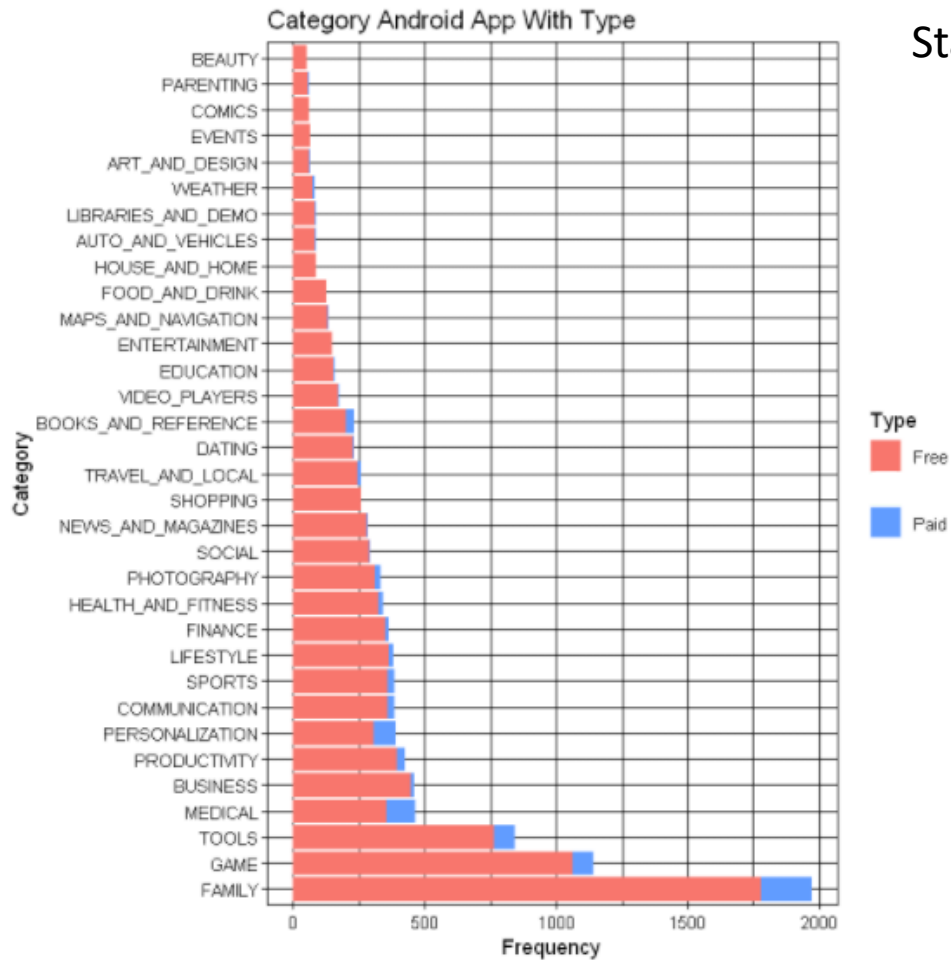
Insights:- The number of reviews relative to each category shows the general attraction of the public towards which category with an interest in changing or actively giving an opinion where the the data are ordered according to their respective rating from lowest to highest

Insights:- The insight gained from this visualization shows the relation between the number of installs where the installs is the size and the category where they are color coded respective to their rating where each category contains its different android versions and their size is encoded with the installs as well.

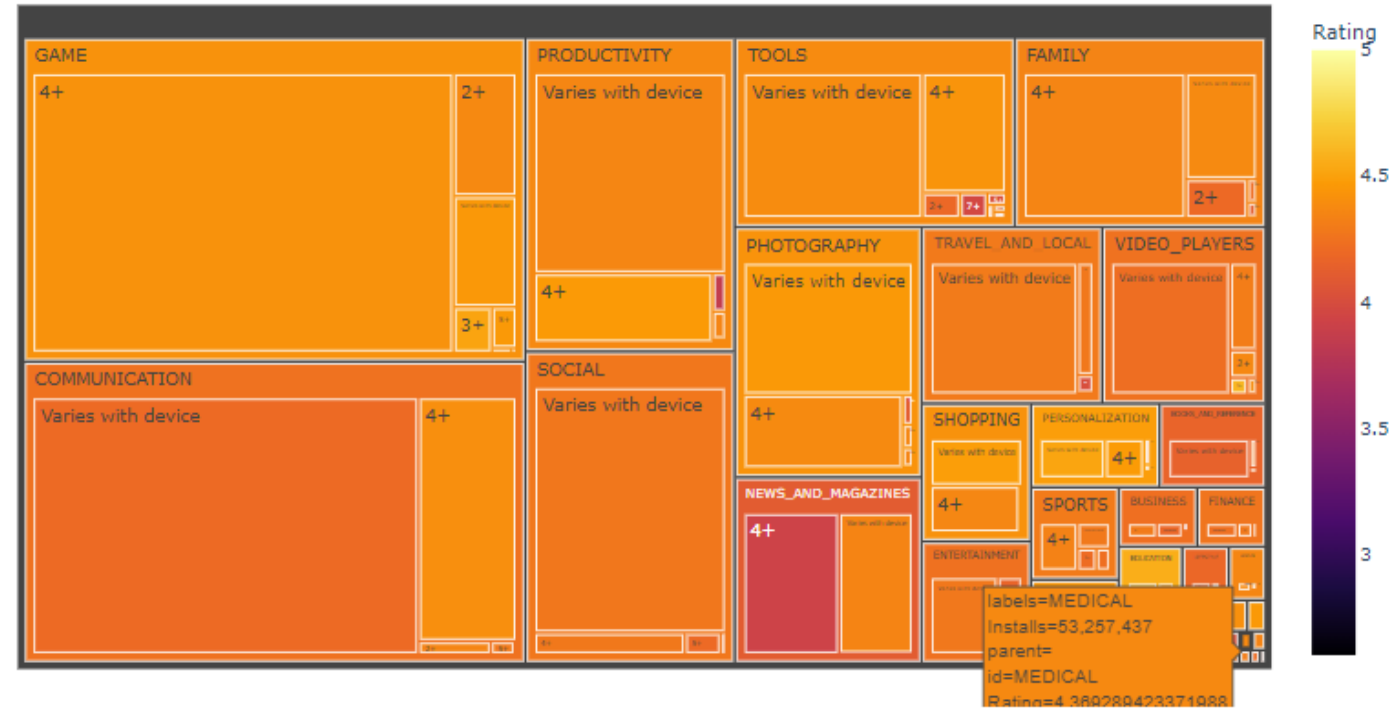


Insights:- The peak of the new apps introduced to the playstore was in the 7th month where each color code represents the amount of each type either Free or Paid shows the best time to introduce the new app for the developer. Where it shows that free apps are the majority of the apps in the playstore.

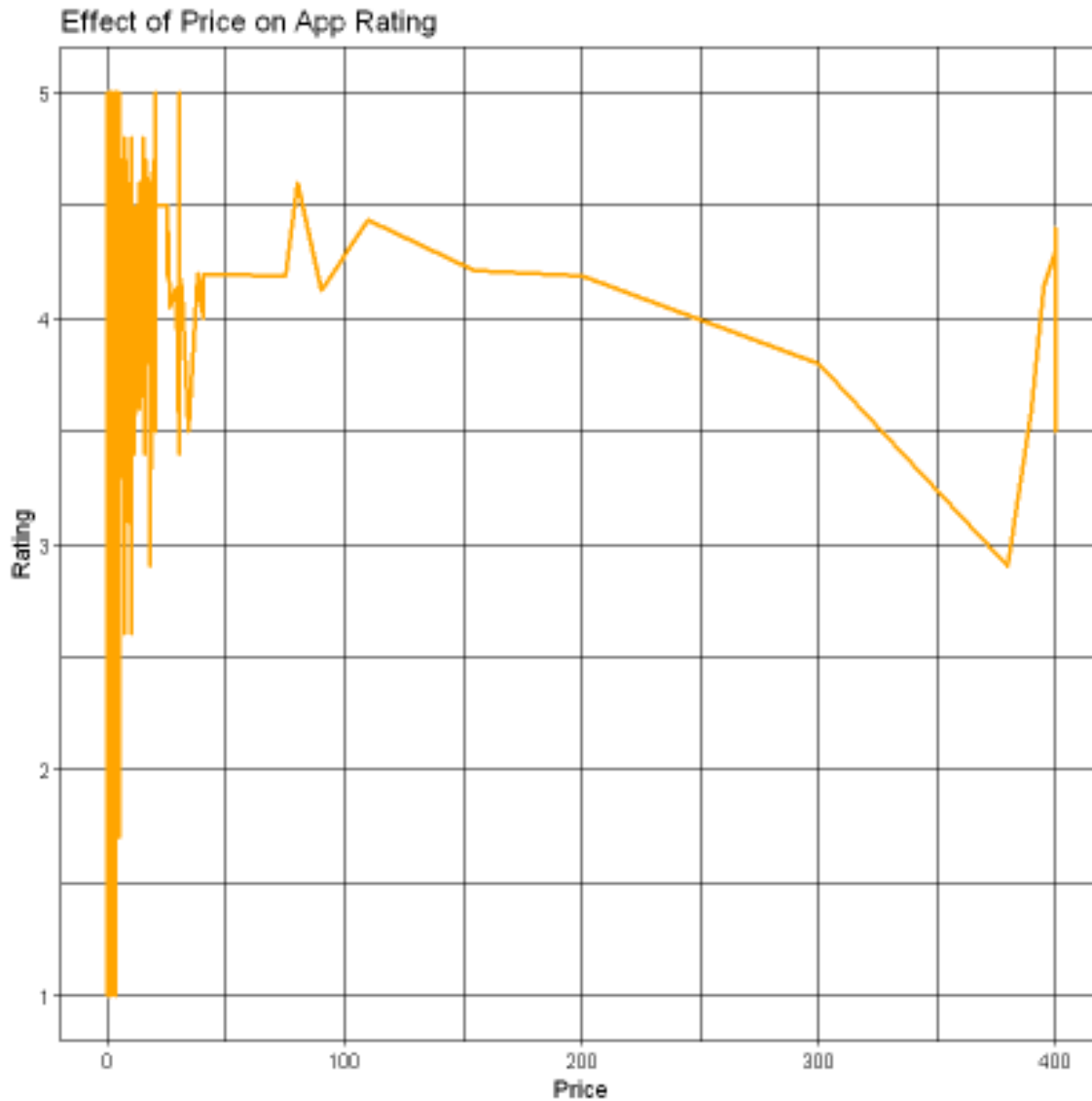
Bar Chart



Stacked vertical bar chart

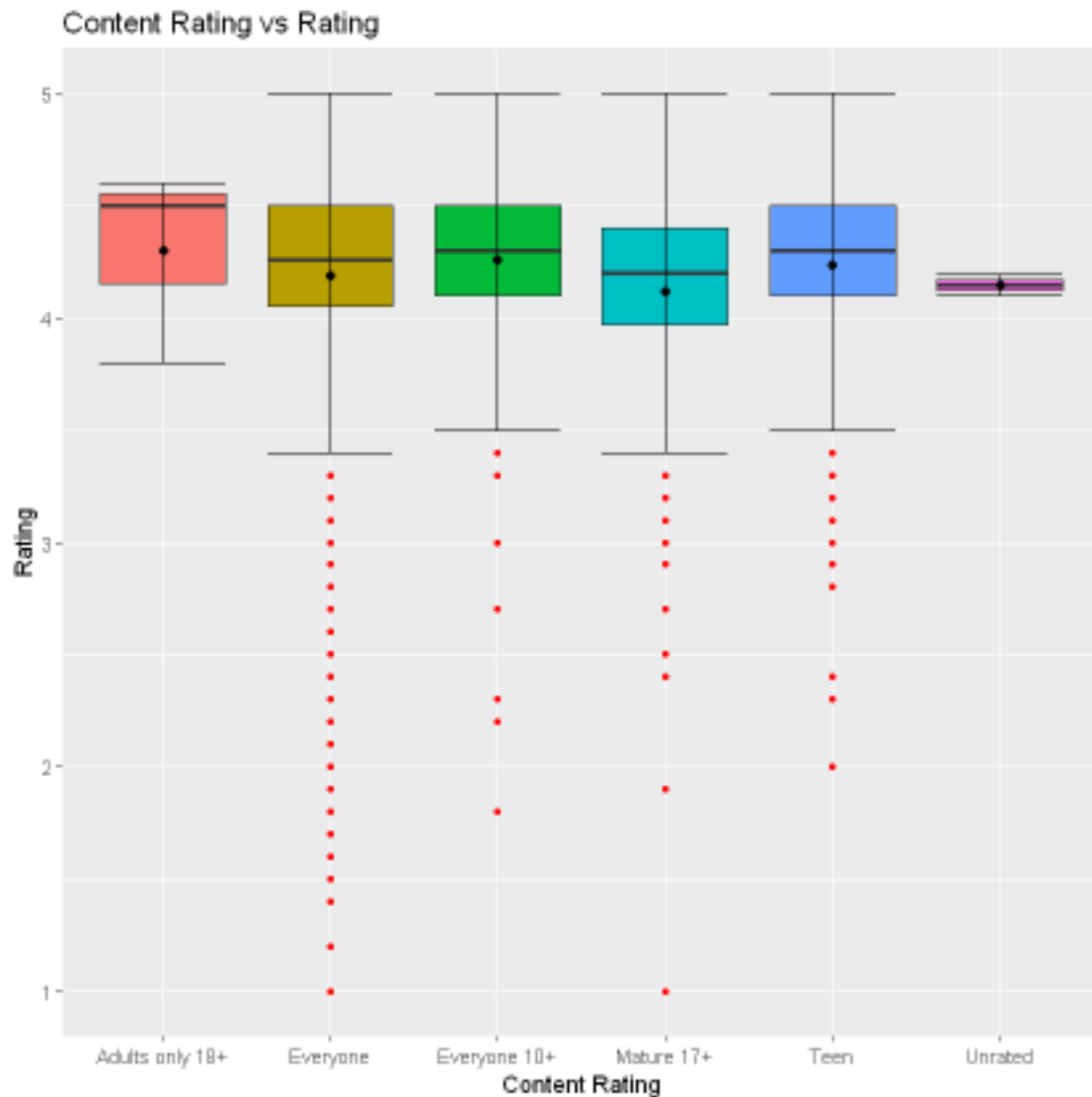


Insights:- where we realize comparing both graphs that the frequency doesn't necessarily mean that it has the highest number of installations where the category itself affect the number of installations not necessarily its frequency.



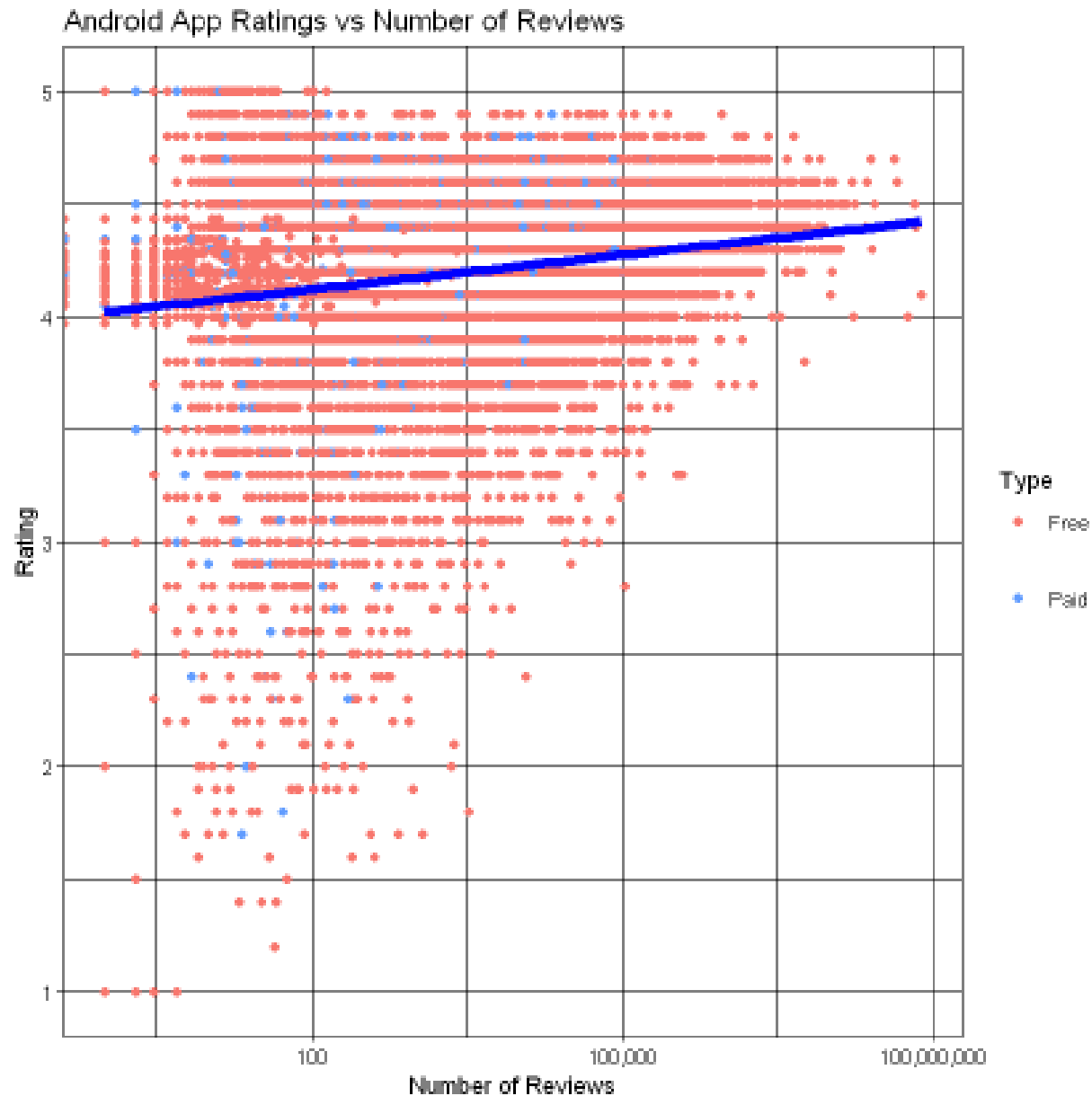
Indexed Line Chart

Insights:- The Price affects the rating where whenever the price of the app is low or free its approaching the rating of 5 as the price goes higher the overall rating decreases and at the highest priced apps exceeds the 4 mark again because the whomever are willing to pay are specialized where its users will have a general feedback to the app



Box Plot

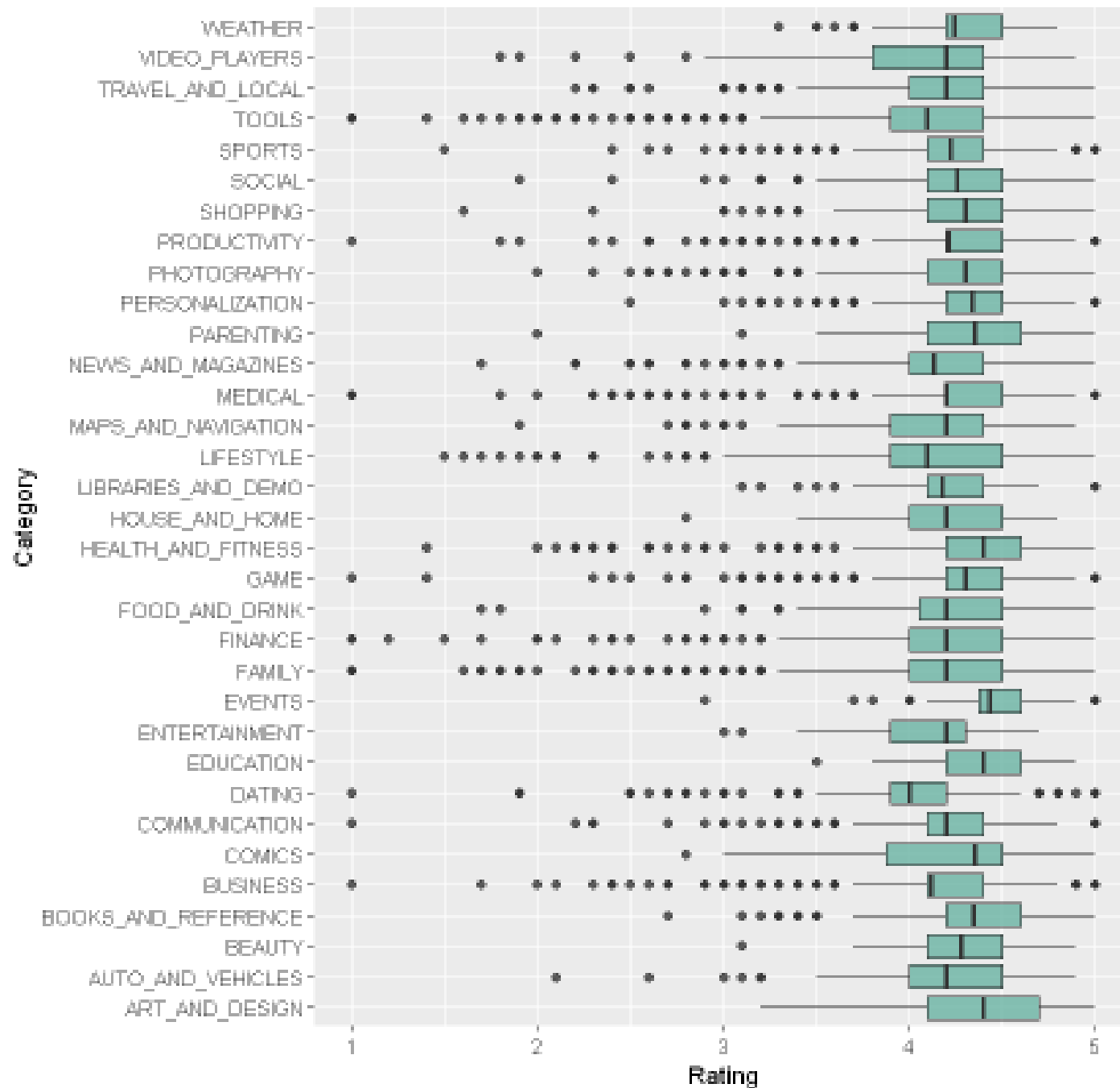
1. Adults+18 and rating values boxplot this distribution is right skewed
 - that is showing adults have bias in their rates of apps
2. Everyone and Everyone 10+ and mature 17+ and teen and Rating the distribution is approximately symmetric but there are many outliers in the rating of each boxplot
 - That is showing the rates of each of one may be not closely symmetric because every one has own opinion on apps that make outliers appears, and median is equally in each boxplot we can use there rating median as good metric
3. Unrated we have lack on data in this content



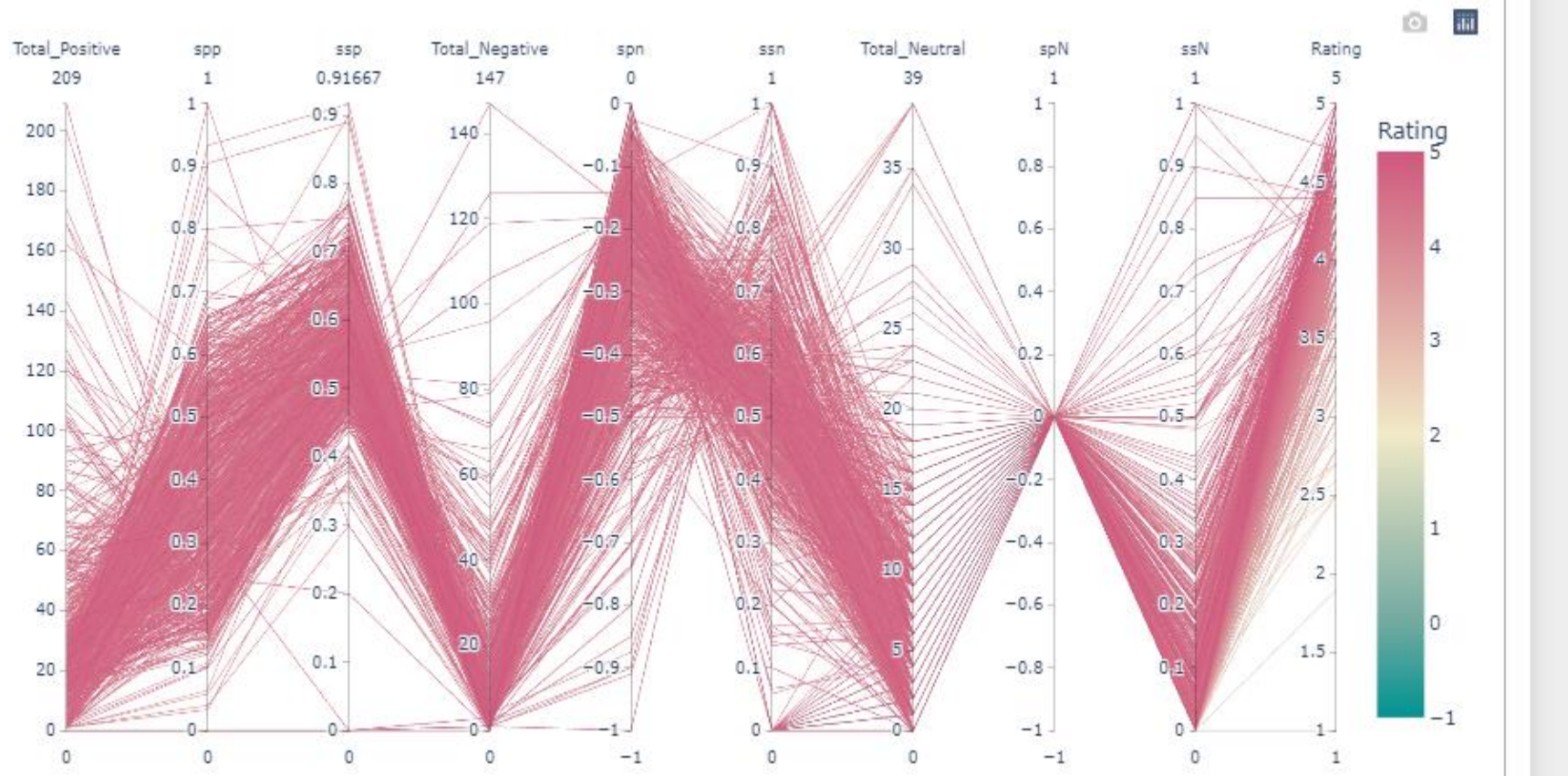
Insights:- The number of reviews and rating and as the line shows the general trend of the data where it approaches 5 as the reviews increase where as we can vaguely predict that the rating may be 5 when the reviews increase infinitely.

Scatter plot

Category vs Rating



Insights:- shows the distribution of the rating of each category where it shows the general bias of each category rating if its either symmetric or left,right skewed and the the outliers of the rating of each category showing its general trend and rating heirarchy



Parallel Coordinates Chart

Shows Apps where we can see a general trend where the negative reviews are lower than the positive which can encourage upcoming developers for not being afraid of introducing their new app where seeing the the polarity of the general negative reviews they are closer to 0 than -1 which is their max polarity value which means that they aren't heated as much.

App	Installs	Rating	Category
Instagram	1000000000	4.5	SOCIAL
Subway Surfers	1000000000	4.5	GAME
Instagram	1000000000	4.5	SOCIAL
Google Photos	1000000000	4.5	PHOTOGRAPHY
Google Photos	1000000000	4.5	PHOTOGRAPHY
Instagram	1000000000	4.5	SOCIAL
Instagram	1000000000	4.5	SOCIAL
Google Photos	1000000000	4.5	PHOTOGRAPHY
Subway Surfers	1000000000	4.5	GAME
Subway Surfers	1000000000	4.5	GAME
Subway Surfers	1000000000	4.5	GAME
Subway Surfers	1000000000	4.5	GAME
Subway Surfers	1000000000	4.5	GAME
Google Photos	1000000000	4.5	PHOTOGRAPHY

Top 10 apps installations

	Total_Positive	Sentiment_Polarity_Positive	Sentiment_Subjectivity_Positive	Total_Negative	Sentiment_Polarity_Negative	Sentiment_Subjectivity_Negative
count	816.000000	816.000000	816.000000	816.000000	816.000000	816.000000
mean	28.275735	0.380286	0.562737	9.810049	-0.250719	0.492146
std	25.332996	0.146997	0.103250	14.123537	0.170856	0.205514
min	0.000000	0.000000	0.000000	0.000000	-1.000000	0.000000
25%	15.000000	0.275976	0.519889	2.000000	-0.336944	0.438221
50%	23.000000	0.375337	0.564173	6.000000	-0.232156	0.522822
75%	32.000000	0.489190	0.618312	12.000000	-0.142123	0.604297
max	209.000000	1.000000	0.916667	147.000000	0.000000	1.000000

Total_Neutral	Sentiment_Polarity_Neutral	Sentiment_Subjectivity_Neutral	Rating
816.000000	816.0	816.000000	816.000000
5.950980	0.0	0.087398	4.220956
5.970484	0.0	0.145493	0.419453
0.000000	0.0	0.000000	1.000000
2.000000	0.0	0.000000	4.000000
4.000000	0.0	0.020833	4.300000
9.000000	0.0	0.125000	4.500000
39.000000	0.0	1.000000	5.000000