Google Play Store Pricing Report and Analysis

Introduction

This report analyzes data collected on 10841 apps in the Google Play store. For this user story, I am reporting on the number of free and paid apps in the following three categories: Entertainment, Social, and Productivity. I will be reporting the total number of apps in these categories, both free and paid; the highest and lowest priced of the paid apps in these categories; and the top 5 highest priced apps in these categories.

Body

Data

This report was written using MyJupyterNotebooks. First I imported Pandas, MatPlotLib, Seaborn, and Numpy to analyze and write reports on the data, and imported the Google Play store app data from a .csv file. Next, I requested the number of rows and columns (10841 and 13), the data types of each column (all were strings or “object” except for the rating column which was a float), and the column names ('App', 'Category', 'Rating', 'Reviews', 'Size', 'Installs', 'Type', 'Price', 'Content Rating', 'Genres', 'Last Updated', 'Current Ver', and 'Android Ver'). Because the client only requested the data for apps with a Category of “Entertainment,” “Social,” or “Productivity,” next I created a new dataset with only those categories.

Method

First I separated the Free and Paid apps from each other. Then I requested a count of each app, free and paid, in each category. From there, I removed the $ symbol from the Price column because it was causing an issue with the sorting. After that, I sorted the Paid table by price. Finally, I grouped the Price table by category and returned only the highest price and lowest price apps in each category.

Results

After retrieving 149 total, I grouped the apps by content rating in my Entertainment table and printed a count of each, which returned 39 in the Everyone category, 5 in the Everyone 10+ category, 96 in the Teen category, and 9 in the Mature 17+ category.

Analysis

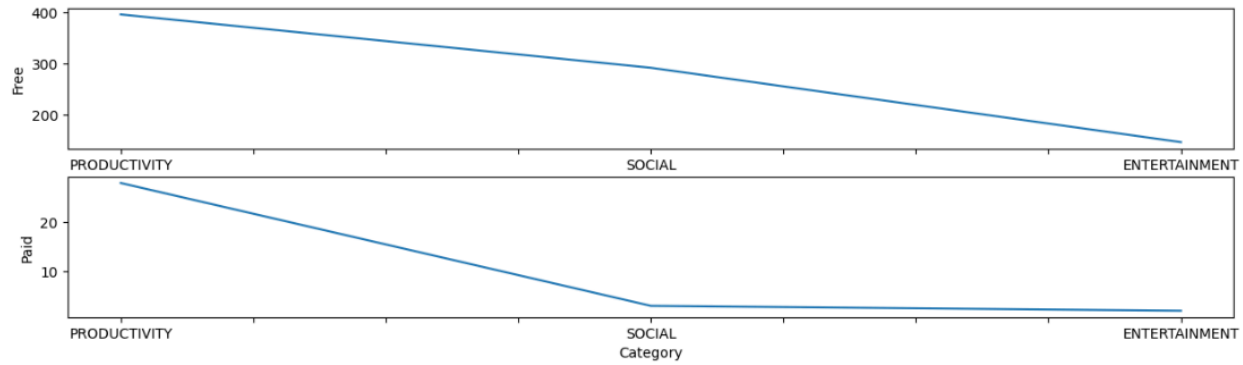
```
freeCategory=free['Category'].value_counts() #get a count of free apps for each category
print(freeCategory)
```

```
Category
PRODUCTIVITY     396
SOCIAL           292
ENTERTAINMENT    147
Name: count, dtype: int64
```

```
paidCategory=paid['Category'].value_counts() #get a count of paid apps for each category

print(paidCategory)
```

```
Category
PRODUCTIVITY     28
SOCIAL            3
ENTERTAINMENT     2
Name: count, dtype: int64
```



```
#Shows highest priced app in each category
topPaid.first()
```

Category	App	Type	Price	Genres
ENTERTAINMENT	My Talking Pet	Paid	4.99	Entertainment
PRODUCTIVITY	cronometra-br	Paid	154.99	Productivity
SOCIAL	Ak Parti Yardım Toplama	Paid	13.99	Social

```
#Shows lowest priced app in each category
topPaid.last()
```

Category	App	Type	Price	Genres
ENTERTAINMENT	Meme Generator	Paid	2.99	Entertainment
PRODUCTIVITY	BI Barcode Scanner	Paid	0.99	Productivity
SOCIAL	WhatsFake Pro (Ad free)	Paid	0.99	Social

```
#Show top 5 paid apps
sorted.head()
```

	App	Category	Type	Price	Genres
6692	cronometra-br	PRODUCTIVITY	Paid	154.99	Productivity
5307	Ak Parti Yardım Toplama	SOCIAL	Paid	13.99	Social
8211	ACCDB MDB DB Manager Pro - Editor for MS Access	PRODUCTIVITY	Paid	8.99	Productivity
8616	MC.Fitting	PRODUCTIVITY	Paid	8.49	Productivity
10450	Police Field Interview FI Card	PRODUCTIVITY	Paid	7.99	Productivity

Conclusion

Out of 868 total apps in either the Entertainment, Productivity, or Social categories of the Google Play store, 835 were free and 33 were paid. Entertainment showed 147 free and 3 paid; Productivity showed 396 free and 28 paid; and Social showed 292 free and 3 paid. Of the paid apps, “My Talking Pet” was the highest priced in the Entertainment category at $4.99; “cronometra-br” was the highest paid in the Productivity category at $154.99; and “Ak Parti Yardim Toplama” was the highest paid in the Social category at $13.99. “Meme Generator” was

the lowest priced in Entertainment at $2.99; “BI Barcode Scanner” was the lowest priced in Productivity at $0.99; and “WhatsFake Pro (Ad free)” was the lowest priced in Social, also at $0.99.

The highest priced 5 apps in these three categories were “cronometra-br” at $154.99 in Productivity, “Ak Parti Yardim Toplama” at $13.99 in Social, “ACCDB MDB DB Manager Pro - Editor for MS Access” at $8.99 in Productivity, “MC.Fitting” at $8.49 in Productivity, and “Police Field Interview FI Card” at $7.99 in Productivity.