Data Representation Assignment (DS 899)

on

Google Play Store Applications analysis.

Jimut Bahan Pal 22D1594

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1 The different visualizations of the dataset

Figure 1 shows the distribution of categories of application and their number (sizes) in google play store. We can see that the category of family and games are the most widely used.

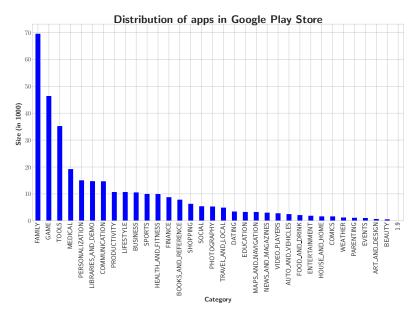


Figure 1: Distribution of Categories of Application in play store.

Figure 2 shows the ratings obtained from different categories of applications in Google Play store for free apps. Similarly, for paid

apps, we can see that some of the category does not have any ratings as shown in Figure 3. The difference (in Figure 4) shows that the overall rating for free apps is more than the paid apps.

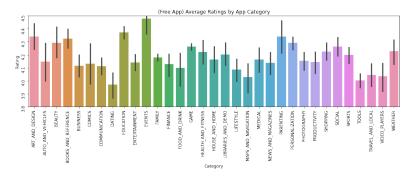


Figure 2: Ratings distribution of free applications.

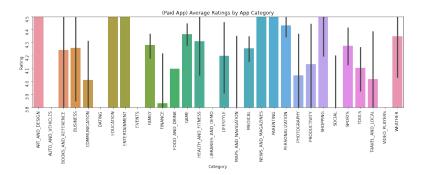


Figure 3: Ratings distribution of paid applications.

A brief overview of the dataset is shown in Table 1. Note, that this is a multi-dimensional table, and we have only given description of those items which can be grouped by properly in the table.

The graphical abstract for the title is shown in Figure 5.

Acknowledgements

The author is thankful to Prof. Shyam Karagadde for the stimulating discussions he has shared for analyzing and representing datasets.

Table 1: A brief overview of the dataset.

| Category | Average Ratings | Installs (in 1 Million) | No. of Applications |
|---------------------|--------------------|-------------------------|---------------------|
| 1.9 | 19.0 | - | 1 |
| ART AND DESIGN | 4.358064516129032 | 50.0 | 65 |
| AUTO AND VEHICLES | 4.190410958904109 | 122.83333333333333 | 85 |
| BEAUTY | 4.2785714285714285 | 150.0 | 53 |
| BOOKS AND REFERENCE | 4.346067415730337 | 121.21739130434783 | 231 |
| BUSINESS | 4.121452145214521 | 109.8157894736842 | 460 |
| COMICS | 4.155172413793103 | 75.0 | 60 |
| COMMUNICATION | 4.158536585365853 | 130.29577464788733 | 387 |
| DATING | 3.9707692307692306 | 172.68627450980392 | 234 |
| EDUCATION | 4.389032258064516 | - | 156 |
| ENTERTAINMENT | 4.126174496644295 | - | 149 |
| EVENTS | 4.43555555555555 | 173.375 | 64 |
| FAMILY | 4.1922724670864335 | 161.14617940199335 | 1972 |
| FINANCE | 4.13188854489164 | 171.2549019607843 | 366 |
| FOOD AND DRINK | 4.1669724770642205 | 97.2777777777777 | 127 |
| GAME | 4.286326344576117 | 130.76388888888889 | 1144 |
| HEALTH AND FITNESS | 4.277104377104377 | 108.533333333333333 | 341 |
| HOUSE AND HOME | 4.197368421052632 | 65.85714285714286 | 88 |
| LIBRARIES AND DEMO | 4.178461538461539 | 151.66666666666666 | 85 |
| LIFESTYLE | 4.094904458598726 | 156.3333333333333334 | 382 |
| MAPS AND NAVIGATION | 4.051612903225807 | 126.0 | 137 |
| MEDICAL | 4.1891428571428575 | 123.80254777070064 | 463 |
| NEWS AND MAGAZINES | 4.1321888412017165 | 117.55102040816327 | 283 |
| PARENTING | 4.3 | 55.0 | 60 |
| PERSONALIZATION | 4.335987261146497 | 125.31372549019608 | 392 |
| PHOTOGRAPHY | 4.19211356466877 | 160.51724137931035 | 335 |
| PRODUCTIVITY | 4.211396011396012 | 120.94680851063829 | 424 |
| SHOPPING | 4.2596638655462185 | 192.8333333333333334 | 260 |
| SOCIAL | 4.255598455598456 | 119.5609756097561 | 295 |
| SPORTS | 4.223510971786833 | 104.1388888888889 | 384 |
| TOOLS | 4.04741144414169 | 173.0208333333333334 | 843 |
| TRAVEL AND LOCAL | 4.10929203539823 | 138.2 | 258 |
| VIDEO PLAYERS | 4.0637500000000001 | 248.0 | 175 |
| WEATHER | 4.244 | 304.0 | 82 |
| | | | |

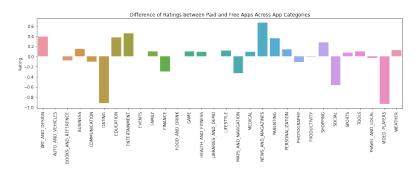


Figure 4: Difference of Ratings between paid and free apps.



Figure 5: Graphical Abstract on the given topic.