

# **Inspiration, Data & Design Discussion**

## **Inspiration:**

As an extension of my second homework, I will continue the theme of video games and digital entertainment by looking at apps on the Google Play store. Regardless if you are an app developer looking to make a quick buck or an advertiser looking to maximize your reach to your target audience, knowing what kind of app is crucial for success. I found this dataset off Kaggle and it contains all the information necessary for me to make a dashboard, were anyone can use it to find the most popular and successful apps for any given category. This dataset contains close to 10,000 apps with around 13 variables.

#### Chart Discussion:

The first chart that viewers of my dashboard will see is the tree plot. It is designed to give the user a general sense of the app landscape. We can see that Family and Game apps dominate the market with close to 1/3 of all apps on the Google Play store belonging to these two categories alone. The second chart to the right is a dumbbell chart and is designed to show users the discrepancy in quality between paid and free apps. Despite there being an obvious difference between the two payment models, we can see that the gap is actually pretty small, possibly hinting at the success of the freemium business model. The third chart to the right is a simple linechart that shows the number of new apps being released over time by category. It is designed to give a general sense of how number apps exploded over the past few years. The last plot to the bottom is a scatter plot, which is designed to show each app based on their rating versus total number of installations. The size of the dot is based on the number of reviews, so the bigger a dot, the more vetted it is, and the more trustworthy the review is. While the line chart and scatter plot may seem crowded at first, users are instructed & encouraged to filter the charts by category using the treemap or the categories in the dumbbell chart. This will significantly declutter the scatterplot and lineplot, making it super easy for readers to view the trend of the selected category.

For filtering, users can click on any of the categories within the treeplot or dumbbell chart to filter the scatterplot and line plot. The website is automatically updated to reflect the selected category. If a user is interested in a particular app shown in the scatter plot, he/she can click on it, and the website again will search up the app for him/her in the browser window. To facilitate the ease of resetting the whole thing, there is a lightbulb installed at the top of the dashboard, where users can easily reset any selection and the browser by simply clicking it. The goal of this dashboard is ease of use and minimalism.

### General aesthetic/artistic choices:

Clean and concise is the name of the game, and precisely what I prioritized for my graphs. I removed as much chart junk as possible while still keeping the graphs legible. Simple descriptions were included underneath titles to guide the user to use the filtering features, while legends are built into the graphs wherever possible to minimize ink. As most of my data is nominal and not ordinal, interval, or ratio, I decided to use different distinct colors instead of gradient color pallet to visually emphasize the differences. The colors were all chosen to be neutral and familiar, and intensity was turned down to make them easier on the reader's eye. The background is kept a pure white to keep everything to a minimal. Texts are either dark black or a soft grey to ensure contrast, legibility, and ease of reading. A final check was made to make sure that I removed all "chart junk" (e.g., unnecessary tick marks, axis lines, titles, axis labels) as I went through the class slides and tweaked my chart as needed (e.g., on principles of perception.

## Typical user:

A typical user of my dashboard can either be a normal person trying to explore the top apps within certain categories. For example, a child trying to find the top rated and/or most popular game out right now. Or, it could be a 60 year old grandad trying to find out what communication apps he should learn to keep in touch with the younger members of his family. On the other hand, this dashboard can also be used for someone in an advertising agency to find the most popular and successful apps, that are in-line with whatever they are trying to advertise. The filtering allows them to find the apps to pay for advertising in order to maximize their reach to their intended audience. This dashboard has both B2B and B2C uses.

Dataset link: <a href="https://www.kaggle.com/lava18/google-play-store-apps">https://www.kaggle.com/lava18/google-play-store-apps</a>