

# Capstone Project – I

## Play Store App Review Analysis

In the mobile app industry, the only constant element is “*change*”.

In the ever-evolving app development economy, what is popular today can be absolutely out of order tomorrow.

Mobile apps are everywhere in the world. we will do analysis of the Android app market by comparing over ten thousand apps in Google play store across different categories

### **Problem Definition:**

The Play Store apps data has enormous potential to drive app-making businesses to success. Actionable insights can be drawn for developers to work on and capture the Android market.

Each app (row) has values for category, rating, size, and more. Another dataset contains customer reviews of the android apps.

To Explore and analyze the data to discover key factors responsible for app engagement and success.

In this EDA project of Play store have two datasets:

1. Playstore.csv - it contains all the details of the applications of Google Play store. There are 64295 apps in row wise and 13 features of column that describe each app.
2. User\_reviews.csv - it contains max up to 320 reviews for each app, with use of the users review the following attributes are made
  - Sentiments (Positive, Negative, Neutral)
  - Sentiment Polarity (-1 to 1)
  - Sentiment Subjectivity (0 to 1)

### **Expletory Data Analysis Done by Following Steps:**

At first, importing necessary library classes for our future analysis, followed by deep study about provided dataset by checking unique values, converting the data types, removing special characters and removed duplicated app to do analysis in correct way.

After examining null & missing values from the dataset we directly went deep into the visualization steps.

we worked with Dataset as follows:

- Category wise apps present in the Play Store by bar plot
- Comparison between category and installation of apps by bar plot
- Overall user's ratings of the apps by box plot.
- Content rating wise apps present in play store by pie chart.
- Comparison between content rating and installation of apps by bar plot
- Apps in Play store by their type in pie chat.
- Category wise free and paid apps in present in Play Store by bar plot.
- Relationship size and ratings of the apps by joint plot.
- Relationship price and ratings of the apps by joint plot.
- Checking correlation between columns.
- Percentage of Sentiment reviews in apps by pie chart.
- Sentiment polarity of apps.
- Sentiment Subjectivity of apps.
- Top 10 Categories of Positive Reviews Sentiment
- Top 5 apps of Most Reviews
- Comparison Between Genres vs Installs
- Rating among the apps in Play store
- Categories wise content Rating (Everyone & Teen)

## **Contributor Roles**

### **1. Rajakumaran S ( [rajakumaransrs@gmail.com](mailto:rajakumaransrs@gmail.com) )**

- Upload dataset to Google colab from google drive.
- Describe the dataset and explained to team members.
- Data cleaning process.
- Removing special character, Correction of data types and remove duplicated data from the list.
- Data Exploration Visualizations
  - Top Categories in Play Store
  - Content Ratings in Play Store
  - Effect of Size and Price in Rating
  - Top 10 Categories of Positive Reviews Sentiment
- Merging both Dataset and Cleaning Process
- Conclusion

**2. Bhoopalan M.S( [bhoopalanms@gmail.com](mailto:bhoopalanms@gmail.com) )**

- Upload dataset to Google colab and explain dataset to team members.
- Analyze null values and filter them.
- Data cleaning.
- Correction of data types
- Data Exploration Visualizations
  - Percentage of Review Sentiment
  - Sentiment Polarity
  - Sentiment Subjectivity
  - Categories wise paid and free apps
- PowerPoint presentation

**3. Gowtham R( [Gowthamrama97@gmail.com](mailto:Gowthamrama97@gmail.com) )**

- Data wrangling
- Data Cleaning
- Data Visualizations
  - Content Rating vs Installs apps
  - Paid vs Free Apps in Play store
  - Categories vs Installs
  - Top 5 apps of Most Reviews
- Project summary

**4. Ranjith R ( [ranjithrajutp@gmail.com](mailto:ranjithrajutp@gmail.com) )**

- Upload dataset to Google colab and explain dataset to team members.
- Analyze null values and filter them.
- Data cleaning.
- Data Visualizations
  - Comparison Between Genres vs Installs
  - Rating among the apps in Play store
  - Categories wise content Rating (Everyone & Teen)
- Technical Write up

<b>GitHub Repo link:</b>
<a href="https://github.com/Rajakumaran-S/Play_Store_EDA-Capstone_Project-1">https://github.com/Rajakumaran-S/Play_Store_EDA-Capstone_Project-1</a>