GOOGLE PLAY STORE APP

REPORT

By

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"If you want to achieve greatness stop asking for permissions."
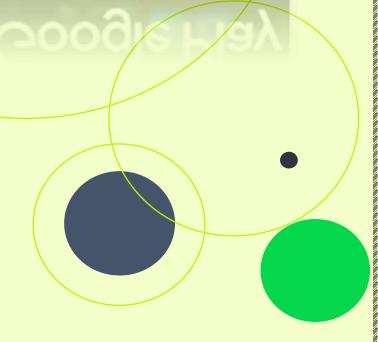
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Problem Summary & Background:

> Parental This Data Analysis is for getting insights about the mobile apps with respect to its future business approaches and development of mobile apps. This study has been summarized from the historical data available from the Google Play store from June 2012 till February 2019. It also helps to know the trend involved in the categories of mobile app availability, usability, and users' expectation.

> This dataset contains information such as names of the mob apps from the Google Play store, categories, Android versions, Rating, Number of reviews, Number of installs, size of the app, when was last updated, and the current version of the mob apps.

Analysis & Solution:

(1) Which is the most used Android version?

Android Version	Count of App
4.1 and up	2451
4.0.3 and up	1501
4.0 and up	1377
Varies with device	1362

> The Most used Android version is 4.1 and up.

(2) Which all categories of mob apps are existing from this dataset?

ART_AND_DESIGN	ENTERTAINMENT	LIFESTYLE	SOCIAL
AUTO_AND_VEHICLES	EVENTS	MAPS_AND_NAVIGATION	SPORTS
BEAUTY	FAMILY	MEDICAL	TOOLS
BOOKS_AND_REFERENCE	FINANCE	NEWS_AND_MAGAZINES	TRAVEL_AND_LOCAL
BUSINESS	FOOD_AND_DRINK	PARENTING	VIDEO_PLAYERS
COMICS	GAME	PERSONALIZATION	WEATHER
COMMUNICATION	HEALTH_AND_FITNESS	PHOTOGRAPHY	
DATING	HOUSE_AND_HOME	PRODUCTIVITY	
EDUCATION	LIBRARIES_AND_DEMO	SHOPPING	

> These all categories of mobile apps are existing from this dataset.

(3) Which is the most installed category of mob app from this dataset?

Category	Sum of Installs
GAME	35086024415
COMMUNICATION	32647276251
PRODUCTIVITY	14176091369
SOCIAL	14069867902
TOOLS	11452771915
FAMILY	10258263505
PHOTOGRAPHY	10088247655

➢ Most installed category of mobile app is "**GAME**".

(4) How many total categories are there?

Total Categories:

33

➢ Total 33 categories of applications are there.

(5) Which apps have got 5-star ratings?

Rating	5

App	
211:CK	
30WPM Amateur ham radio Koch CW Morse code trainer	
420 BZ Budeze Delivery	
AC DC Power Monitor	
Accounting Quiz (AQ) Malaysia	
ADS-B Driver	
Ag Valley Cooperative	
AI Today : Artificial Intelligence News & AI 101	
AJ Blue Icon Pack	
AJ Cam	
AJ Gray Dark Icon Pack	
AJ Men's Grooming	
AJ Rafael Music Lessons	
AJ RETAILS	
American Girls Mobile Numbers	
Anatomy & Physiology Vocabulary Exam Review App	
Android P Style Icon Pack	
AP Art History Flashcards	
APÂ® Guide	
AQ Ria Retail	
Arrowhead AH App	

Total apps which got 5 stars ratings:

270

➢ Total 270 applications are there with 5-star ratings.

(6) Which are the top 10 mob apps based on ratings?

These are the top 10 mobile apps based on ratings: Having 500000000 to 1000000000+ installs		These are the top 10 mobile apps based on sum of ratings as there are same app with different versions:	
Installs	(Multiple Items)	Installs	(Multiple Items)
App	**Max of Rating**	**App**	**Sum of Rating**
Clean Master- Space Cleaner & Antivirus	4.7	Candy Crush Saga	30.8
Security Master - Antivirus, VPN, AppLock, Booster	4.7	Subway Surfers	27
Google Duo - High Quality Video Calls	4.6	Temple Run 2	25.8
SHAREit - Transfer & Share	4.6	Viber Messenger	21.5
My Talking Tom	4.5	Google Photos	18
MX Player	4.5	Instagram	18
Microsoft Word	4.5	Google Drive	17.6
UC Browser - Fast Download Private & Secure	4.5	Pou	17.2
Subway Surfers	4.5	imo free video calls and chat	17.2
Instagram	4.5	Snapchat	16
Google Photos	4.5	Hangouts	16
Google	4.4	Google News	15.6
Dropbox	4.4	UC Browser - Fast Download Private & Secure	13.5
Google Drive	4.4	My Talking Tom	13.5
Flipboard: News For Our Time	4.4	MX Player	13.5
WhatsApp Messenger	4.4	Microsoft Word	13.5

➢ These apps have best ratings on basis of their installations and all the available versions on play store.

Methodology:

The following methods are followed in our data analysis-

1. **Data Collection:** We downloaded the csv dataset from Kaggle:
2. https://www.kaggle.com/datasets/lava18/google-play-store-apps
3. **Data Cleaning & organization**: The collected data is cleaned and organized in a comprehensive manner. The date and time are converted into suitable formats and organized, and thorough understanding of the data dictionary is done to do necessary analysis.
4. **Data Analysis:** Using Excel formulas we performed necessary calculations. The obtained data is visualized using Excel tools like Pivot table graphs and charts.
5. **Conclusions:** On the basis of our analysis, we identified the trends and more opportunities for business growth.

Project scope & Goals:

- ➢ Identify problem background.
- ➢ Determine most used Android version.
- ➢ Determine categories of mobile apps are existing from this dataset.
- ➢ Determine installed category of mobile app.
- ➢ Find applications which have 5-star ratings.
- ➢ Find top 10 mobile apps based on ratings.

KPIs:

- ➢ Application Name and Category.
- ➢ Rating, Size and Installations of an application.
- ➢ Type and Price of an application.
- ➢ Content rating and genre of an application.
- ➢ Android version and last update date of an application.

Concepts used:

The key approach used in the Parental Leave analysis is mainly Excel based concepts.

1. Data Import: Excel allows us to import data from various sources, such as CSV files, databases, or other spreadsheet formats.
2. Data Cleaning: Excel provides tools to clean and prepare data for analysis. Here, we checked for blanks and used "Find and Replace" to correct errors or inconsistencies in the data also we changed NULL to appropriate mean value in order to avoid mathematical errors while doing calculations.
3. Sorting and Filtering: Excel allows us to sort and filter data based on specific criteria. We sorted data on the basis of number of leaves and other fields for analysis. Filtering enables us to display specific subsets of data based on certain conditions or values.
4. Formulas and Functions: Excel's formula and function capabilities are essential for performing calculations and deriving insights from data. Functions such as SUM, COUNT, VLOOKUP, AVERAGE, IF, sorting, filter, Text to Columns and conditional formatting are used in this analysis to calculate totals and perform conditional analysis.

5. Pivot Tables: Pivot Tables are a powerful feature in Excel for summarizing and analyzing large datasets. Pivot Tables allow for easy exploration and visualization of data.
6. Charts and Graphs: Excel provides a range of chart types (bar charts, line charts, pie charts, etc.) to visually represent data. By creating charts and graphs, we visually analyzed patterns, trends, and disparities in the data.

Conclusion:

➢ This project's main goal is to make the calculation and understanding of the results simpler. The project aims to create a clear and accurate analysis of the dataset. In conclusion, the Play Store application data analysis would have provided valuable insights into various aspects of app performance and user behavior. These conclusions can help developers make informed decisions, improve their apps, and create a better experience for users in the highly competitive app market.

Project Owner:

➢ Neel Balar
➢ 20th July, 2023