Mobile App Profiles

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***Abstract* - In this paper, our group analyzes mobile applications to find the most successful apps in terms of profitability and downloads. By using historical data, we can see the common genres and themes of the apps to predict which ones are trending at the time. This project should allow us to determine patterns that mobile applications use to drive success into what they do. Determining trends will aid in the mobile application creation process, ideally leading developers to create applications that help them earn income and promote the creation of quality applications.**

I. Objective

The mobile application market has grown substantially as smart phones and tablets have cemented themselves in the functions of everyday life. In 2024 alone, the industry is predicted to earn $935 billion in revenue worldwide. This takes into account many categories of applications, including games, social media, entertainment, and many others[1]. Given this statistic on the economical impact of mobile applications, curiosity arises as to which applications are most successful, and what aspects make them so.

The objective of this project is to determine which mobile applications are the most successful in order to determine what categories of mobile applications perform the best. Our plan is to research revenue that is generated by these applications, being from downloads and ads. We will also explore the number of downloads for applications, providing another determinant of success other than money. We intend to chart this information in a way that allows us to draw conclusions on what might make one application category more successful than another.

II. Motivation

Analyzing these top mobile applications for patterns leading to profitability provides insight into the modern mobile application ecosystem. Our motivation is to understand the economics of these applications to help provide useful insights for developers seeking to increase the profitability of their future applications or current ones.

III. Responsibilities

Our team consists of 4 members. Each of us will be responsible for portions of the coding, project proposal, and presentation along with the given tasks.

- Research into the best dataset and code found on Kaggle for the best datasets for apps
- Research into where we could track revenue of each ads and the calculations
- Develop methods on figuring out how these things tie together and work on the proposal/presentation
- Develop code and find ways we can manipulate the data to draw certain conclusions

IV. Timeline

- October 3rd - Turn in completed Project Proposal
- October 4th - Begin working on code to implement on dataset
- October 17th - Find the best datasets for the mobile applications
- October 24th - Implement code with dataset and organize outputs

- November 1st - Finish up code that analyzes targeted data of mobile applications
- November 2nd - Begin work on paper and presentation, conveying results
- November 22nd - Finalize code by tweaking results and draw conclusions
- December - Present project

V. Outcome

We hope to have identified the key aspects that make a successful mobile application by the project's conclusion. Our research into the mobile application market will allow us to accomplish our goal of providing insight into how a mobile application developer can generate more revenue and create a more successful application.

References

[1] J. Galiya, "Beyond Digits: Exploring Mobile App Impact with Statistics and Insights," Radixweb, https://radixweb.com/blog/mobile-app-usage-statistics (accessed Sep. 24, 2024).

Example Project Proposal

App Profile
Objectives/Methods

We're planning to analyze historical data from app markets to understand what makes apps successful. With Python, we'll clean the given datasets and use frequency tables, averages, etc. to identify trends that make the app successful. The overall goal is to condense the data into certain categories to understand what the app is doing to make revenue. Our overall goal is to find which apps are making the most revenue and what categories they are from, so if we are planning to create the app, we can follow that trend to make more money.

- Analyze revenue data from popular apps
- Use Python functions to execute functions that condense data
- Condense data and understand trends