results

February 4, 2025

1 Analysis of 'Learn HTML - Pro' App Reviews on Play-Store.

1.0.1 By: Abdulrahman Hamzat

1.1 Table of Contents

Project Overview
Dataset Summary
Insights
Summary of Analysis
Limitations
Conclusions and Recommendations

1.2 Project Overview.

The reviews and ratings of "Learn HTML-Pro" app on playstore were extracted and analyzed. The entire project was carried out in four stages, and a separate notebook file for each one. Stage One: This involved the development of a Python script that can automatedly scrape the available ratings and reviews of any app on Play Store. Stage Two: Extraction of additional data, using Google-Play-Scraper, to supplement and validate the gathered data from stage one. Stage Three: Data integration, cleaning, and exploration. Stage Four: Presentation of visualizations and insights.

1.2.1 Dataset Summary

The dataset has 104 rows and 10 columns namely: review id; username; star rating; date; review content; thumbsup; device; app version; sentiment label; and sentiment score.

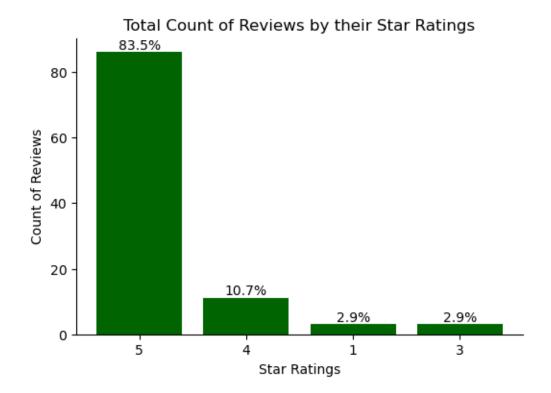
Column Description

- 1. Review Id: A unique row identifier.
- 2. Username: Name of the app reviewer.
- 3. Star Rating: The count of star ratings given by a reviewer.
- 4. Date: Day, month and year of a review.
- 5. Review Content: Contains the texts of each review.
- 6. Thumbsup: The count of people that found a review helpful.
- 7. Device: Phone users or tablet users of the app.
- 8. App Version: The app version rated by a reviewer.
- 9. Sentiment Label: Contains positive or negative result of the sentiment analysis of a review.
- 10. Sentiment Score: Shows the corresponding score of the sentiment labels.

1.3 Insights

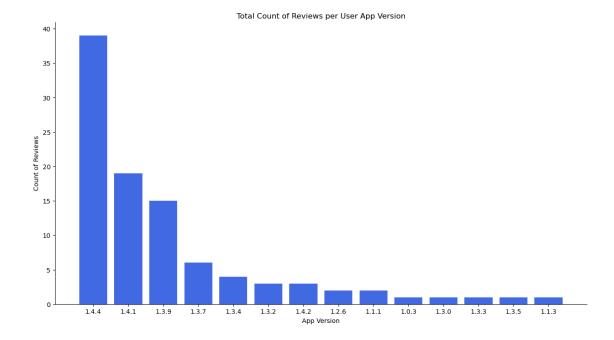
1.3.1 1: What is the most frequent star rating of the app?

83.5% of the reviewers gave a 5-star rating making it the most frequent star. 10.7% of the reviewers gave a 4-star, while the least star ratings are 1 and 3. No reviewer from the dataset gave a 2-star rating.



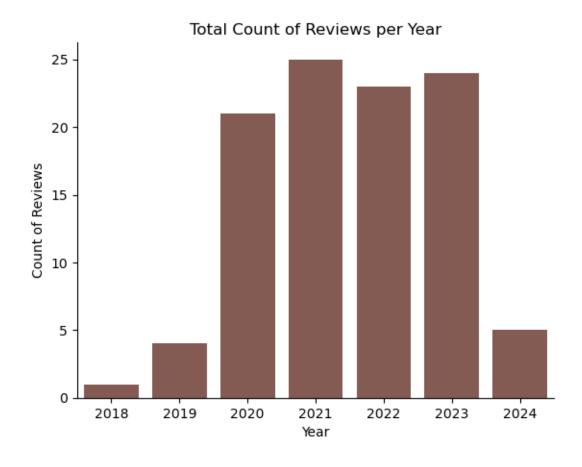
1.3.2 2: What release versions of the app got the most reviews?

The latest version of the app (v.1.4.4) had the most reviews from about 40 users. Versions 1.4.1 and 1.3.9 also have relatively high number of reviews. The other versions, including the earliest versions, were reviewed by 5 or lesser number of users.



1.3.3 3: Does the app popularity increase yearly?

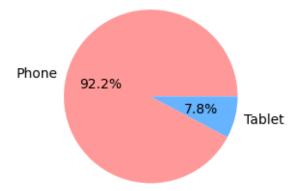
Yes, it does increases yearly up to year 2021. It maintained a relatively high count of reviews in year 2023 after a slight decrease in the previous year, then a sharp decline occured in 2024.



1.3.4 4: On what device type is the app most frequently installed?

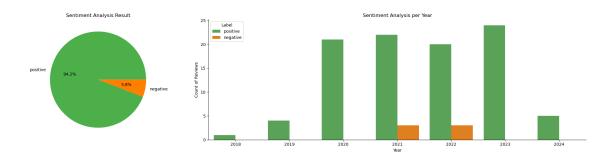
A very high majority of installations are on phones compared to the very few installations on tablets.





1.3.5 5: Are the users satisfied with the app?

The app users are quite satisfied with the app with 94.2% of the reviews being postive remarks. 5.8% of the reviewers were dissatisfied in years 2021 and 2022 only.



1.4 Summary of Analysis

83.5% of the reviewers gave a 5-star rating of the app.

The latest versions of the app had significantly higher count of users reviews.

There's a noticeable increase in app reviews each year, with a significant number of reviews observed from 2020 to 2023, but a sharp decline in 2024.

92.2% of the app reviewers use phones, while the remaining 7.8% use tablets.

Lastly, there are 94.2% positive reviews and 5.8% negative ones which were present in years 2021 and 2022 only.

1.5 Limitations

The dataset has 104 rows which amounts to about 21% of the total count of reviews with ratings for the app on Play Store. Both the webscrape at stage one using Selenium, and that of stage two using Google-Play-Scraper library gave the same set of review data. Hence, this partial extraction may be likely due to some restrictions on Play Store. However, the insights drawn from this dataset give a glimpse of the whole picture which could have been derived if the full dataset was available.

1.6 Conclusions

Many subscribers of the app gave 5-star ratings, and even more wrote positive reviews signifying that the app users considered it great! Also, the app's popularity inreased over time and relatively high in the year 2020 through 2023, and it's mostly installed by phone users. Finally, there were negative reviews of the app in the year of its last update (2022) and the year before.

1.7 Recommendations

The app developers should release new updates of the app to ensure its continuity and to boost its popularity as the latter appears to have declined in the year 2024.