# ANALYZING PLAYER FEEDBACK IN STEAM REVIEW ACROSS GAME GENRES

SAFIRA NURUL IZZA

UNIVERSITI TEKNOLOGI MALAYSIA

# CHAPTER 5

# DISCUSSION AND FUTURE WORKS

## 5.1 Introduction

This chapter will present the achievements that have been achieved based on the previously established research framework. This chapter also includes a discussion of the insights obtained through Exploratory Data Analysis (EDA. Finally, future plans that will be implemented after this research will also be mentioned.

## 5.2 Achievements

There are several significant achievements made in this study. A dataset of 100,000 player reviews across five different game genres was collected from the Steam Community platform using web scraping approach. The dataset then went through a data cleaning process where missing values, duplicate data, and non-English reviews were removed. Furthermore, to facilitate the analysis process, all review content was converted to lowercase, and commonly used words or stop words were removed.

The next process was implementing Exploratory Data Analysis (EDA), where EDA provided important insights into sentiment trends, review length, and player behaviour, highlighting positive and negative feedback across genres. The study also introduced several features that were created after understanding the patterns and relationships between datasets. Lastly, the initial implementation of sentiment analysis using VADER.

## 5.3 Discussion

During conducting the EDA process, several patterns and relationships between variables were obtained after the datasets were processed. The FPS genre stood out with the highest level of dissatisfaction, indicated by a consistently high percentage of negative reviews, censored text, and refund requests. This suggests the need for deeper investigation into the issues players experience with games in this genre, such as technical performance or gameplay quality. The study also encountered some limitations including the handling of outplays in play time and length of the reviews, the characteristics of censored text and compatibility issues with data collection tool including Selenium and WebDriver.

## 5.4 Future Works

The future plan to continue the sentiment analysis process in this study is to implement the VADER model for the whole datasets. After that, to improve the results of sentiment analysis, more sophisticated machine learning models such as BERT will be used. Further analysis is also needed to understand the relationship between features such as hours played, refunds, and sentiment, so that it can provide useful insights for game developers. Further research into how elements such as graphics, storylines, or gameplay mechanics affect player reviews can also produce specific recommendations to improve product quality.

## 5.5 Conclusion

In conclusion, this chapter has explained the various achievements that have been achieved in this study. Discussion on the insights gained from the analysis has also been presented in detail. Lastly, the development plan that will be implemented in the next phase of the project has also been discussed.