

1. Introduction

Video games have become increasingly popular lately, with hundreds to thousands of new games released in various genres each year [1]. The convenience of buying and storing video games digitally, offered by gaming platforms such as Steam and Epic Games, has contributed to the rising popularity of video games [2]. Steam is a platform that provides services for purchasing video games, creating tournament servers, video streaming, and social media features that allow users to interact with each other, ultimately creating a large gaming ecosystem that exists today [3]. Steam also provides a feature to write video game reviews so that users can share their opinions and gaming experiences. When writing a review, users have the option to label it as either "Recommended" or "Not Recommended". The amount of time a user spends playing a video game while writing a review is also tracked. Steam reviews give insight into player reception, with an overview of the proportion of positive reviews displayed on the Steam Store page. This summary is often cited on third-party sites and in news and social media discussions. However, such overall summaries do not reveal the key issues reported by reviewers, or changes in their perceptions over time [4]. The reviews written by users can also contradict the labels they provide. For example, a user might write a positive review but choose the "Not Recommended" button, and vice versa. Therefore, the opinions from the reviews written by users will be classified through sentiment analysis.

Sentiment analysis is a method for studying opinions, feelings, emotions, evaluations, and attitudes of a person toward another entity, such as products, services, organizations, individuals, issues, events, and topics [5]. Sentiment analysis can be done with various methods, one of which is using the K-Nearest Neighbor (KNN) method. Sentiment analysis using the KNN method can achieve high accuracy [6]. In research [7], the KNN method reached an accuracy level of 96.8%.

The large number of features in sentiment analysis can lead to decreased classification performance; therefore, a feature selection process is necessary [8]. One feature selection method is Chi-Square. In research [9], Chi-Square can improve classification performance accuracy from 73.33% to 93.33%. This study will analyze sentiment in video game reviews using the KNN method with Chi-Square feature selection. The reviews were obtained by scraping the page of a video game on Steam, specifically Disco Elysium. The result of this study is a sentiment analysis of Disco Elysium video game reviews, and knowing the performance of using the KNN method with Chi-Square feature selection in sentiment analysis. By using sentiment analysis, the "Recommended" and "Not Recommended" buttons are no longer needed, eliminating any contradictions between the reviews users write and the labels they provide.