

ABSTRACT

User reviews on gaming platforms such as Steam have become a crucial source of information for potential players before making purchasing decisions. Due to the varied nature of user opinions, sentiment analysis is essential for processing and interpreting these reviews. This study investigates the application of sentiment analysis to RPG game reviews on Steam, aiming to assist users by summarizing reviews through sentiment results and providing insights into the general perception of a game. To achieve this, the study applies sentiment analysis using Word2Vec and Support Vector Machine (SVM). It focuses on evaluating the impact of lemmatization during preprocessing and analyzing the performance of Word2Vec in sentiment classification. Word2Vec transforms review text into vector representations that capture semantic relationships, enhancing the model's ability to understand context. Meanwhile, SVM is chosen as the classifier for its effectiveness in distinguishing between positive and negative reviews and handling high-dimensional data. The system developed uses Word2Vec with 300-dimensional vectors combined with an SVM Polynomial classifier, resulting in the best performance among the tested models. The final model achieves a macro-average F1-score of 88.6%, indicating a strong capability in accurately classifying sentiments in user reviews. These results highlight the potential of combining word embedding and machine learning techniques for analyzing sentiment in gaming platforms.

Keywords: sentiment analysis, Word2Vec, SVM, Steam, RPG