

ABSTRACT

Video game updates are not uncommon for game developers. Updates are generally done by fixing deficiencies, one of which is by looking at video game reviews from users. Steam is a digital video game distributor service that allows users to buy video games online. In 2021, Steam had 132 million monthly active users and 69 million daily. With so many users using Steam, the number of reviews produced is certainly large. Game developers will have difficulty concluding which aspects will be prioritized for improvement because the data obtained is very large and varied, making it difficult to analyze. Therefore, a way is needed to analyze the review data obtained. One way is to use aspect-based sentiment analysis. In this study, researchers will find out how to analyze update priorities and find out what aspects should be prioritized for updates based on the data used by researchers. The method for analyzing update priorities in video games is carried out in several stages, starting from loading raw data, collecting the required data, identifying sentiments, data cleaning, data transformation, data mining, model evaluation, model implementation, to determining priority aspects. This study uses a logistic regression algorithm where the results of sentiment analysis in each aspect obtained an accuracy value of 91% for the Control & Gameplay aspect, 98% for the Sound aspect, 78% for the graphics aspect, 94% for the Story & Characters aspect, 90% for the replayability aspect and 82% for the Others aspect. The aspects that are prioritized for updating in order from the highest to the lowest are the Others aspect, the Replayability aspect, the Control & Gameplay aspect, the Story & Characters aspect, the Graphics aspect, and the Sound aspect.

Keywords— sentiment analysis, machine learning, text mining, reviews, video game reviews