

ABSTRACT

Sentiment analysis of user reviews is an essential process to understand feedback on digital products. This study develops a system to classify sentiments from user reviews of the Wuthering Waves game collected from the Play Store. The input consists of review text, and the output is a sentiment category: either positive or negative. This topic is important because many user reviews remain unanalyzed, making it difficult for developers to gain accurate insights. Additionally, unprocessed reviews hinder potential users from quickly evaluating the application's quality. Therefore, an automated system is needed to interpret user sentiments effectively.

The proposed solution involves automated data collection, text preprocessing and transformation, class balancing using oversampling, and sentiment classification using a tree-based ensemble algorithm. The system is implemented as a web-based application where users can input text and instantly receive sentiment predictions, along with visualizations such as wordclouds and evaluation matrices. Experimental results show that the system achieves a classification accuracy of 82.25%. The main contribution of this research is the integration of a sentiment analysis model into an interactive and user-friendly web interface that provides real-time predictions.

Keywords: *sentiment analysis, classification, app reviews, interactive web, random forest, performance evaluation*