

Abstract

Warframe is a free online game with in-game item trading system that allows players to make transactions with other players. When selling in-game items, players must find the value of the item to determine the action that gives the highest profit. However, the value of items keeps changing according to market conditions, so finding the value and determining the most beneficial actions is difficult to do. Today, players search for item values manually by comparing or estimating items values so that the benefits obtained are not maximal. Therefore this research was conducted to create a system that provides recommendations for actions when selling items that are expected to help players determine the action of the item and get the greatest possible profit. Recommended actions are taken based on the results of grouping using the K-Means method, extraction of research datasets from websites using web scraping techniques, and data editing to process data before the grouping process. In this research, several tests were carried out by modifying the distance of the training data day and the distance of the price trend to get the most accurate model. The testing process uses two days of data for days and nine days for price trends to provide results with the best accuracy, namely 89.59108% with silhouette coefficient 0.386854. T The results show that the k-means grouping method provides recommendations for actions that are quite accurate using sales statistics.

Keyword: recommendation, web scraping, clustering, data editing, k-means, silhouette analyst
