Abstract

Barbercome is an application that connects customers with barbers online. One of the challenges faced by this application is that customers often feel confused when trying to find the barber who best suits them. The implemented solution is the development of a content-based filtering recommendation system that accurately provides recommendations based on data obtained from both customers and barbers. The evaluation conducted for this study involved interviews with participants and assessments using three evaluation metrics: Precision, Recall, and F1-Score. The interviews were conducted face-to-face with questions related to the participants' experiences when selecting a barber. Afterward, participants were also asked about their experiences in choosing a barber after being provided with a list of barbers recommended by the recommendation system. The interactions that participants had with the recommendations during the barber selection process were recorded and stored in the Barbercome database. The results of these interactions, which can be categorized into True Positive, False Positive, and False Negative, were used as the basis for calculating the evaluation metrics. The interview results indicated that the issues participants faced when trying to book a barber, namely the difficulty in making a choice, were successfully resolved by using the recommendation list created by the recommendation system. The results from the evaluation metrics were 33.33% for Precision, 100% for Recall, 33.33% for Precision@K, 100% for Recall@K, and 50% for F1-Score. These results indicate that the implementation of the recommendation system as a solution to the difficulty of choosing a barber can be considered successful.

Keywords: content-based filtering, TF-IDF, cosine similarity, recommendation system, barbercome