CROSS-SELLING OPTIMIZATION WITH COLLABORATIVE FILTERING ON ANDROID-BASED CAFÉ MENU BOOKING APPLICATION

(Case Study: Kafe Oemah Bapak, Malang)

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ABSTRACT

Cafés are popular venues for socializing and enjoying delicious food; however, customers often encounter challenges such as long queues when placing orders manually. The development of an Android application for this café aims to streamline the ordering process, enhance operational efficiency, and support marketing strategies through cross-selling techniques. This study designs an Android-based ordering system that incorporates the Collaborative Filtering method to offer menu recommendations tailored to user preferences. The system development methodology employed is the Waterfall model, which encompasses the stages of analysis, design, implementation, testing, deployment, and maintenance. This system was developed using PHP for the back end and Dart for the Android front end. Additionally, it is integrated with a payment gateway to facilitate digital payments, expedite the transaction process, and enhance payment security. The ordering process, from login to payment, is designed to operate more efficiently and provide a more comfortable experience for users. Implementing the Collaborative Filtering method is expected to enhance cross-selling strategies through recommendations for products frequently purchased in conjunction, thereby facilitating the transaction process through the integration of the payment gateway.

Keywords: Collaborative Filtering, Android, cross-selling, recommendations, ordering system.