

Comparative Analysis of Food Recommendation Systems: Tailoring to Sri Lankan Cultural Events and Traditions

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This study investigated the development of an event-based food recommendation system tailored to Sri Lankan culinary traditions, comparing it with existing systems. The goal of the project was to analyse a way to fill the demand that present systems mainly fail to meet: the need for meal suggestions that are both culturally appropriate and event-specific. In the culinary domain, food recommendation systems have gained popularity for their ability to provide personalized dietary advice based on user behavior and preferences. While some current systems deal with diabetes self-management, health-conscious nutrition, and allergen-free infant food, show strong personalization, and they frequently lack cultural sensitivity and event-specific adaptation. This study examined a variety of approaches, such as content-based algorithms, collaborative filtering, and machine-learning techniques similar to those employed in RecipeMate, emphasizing the benefits and drawbacks of each in terms of contextual and cultural flexibility. Primary data through surveys and interviews with users familiar with Sri Lankan cuisine, along with a thorough literature review, formed the basis of our comparative analysis. Our findings underscore the need for a culturally aware recommendation system that caters to the unique requirements of traditional Sri Lankan events. The study proposes the development of a novel system incorporating user feedback, dynamic profiles, and culturally significant recipes to enhance user satisfaction and engagement. Future work will focus on testing the system's effectiveness across diverse user groups and integrating it with food delivery and e-commerce platforms, aiming to set a precedent for similar applications in other cultural contexts. This approach seeks to merge modern technological capabilities with rich cultural traditions, enhancing the culinary experience for users.

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