

**AMBULA - A MOBILE APPLICATION SOLUTION TO
PROMOTE SRI LANKAN FOOD CULTURE**

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Abstract

Tourism plays a crucial role in Sri Lanka's economy, contributing significantly to the country's Gross Domestic Product. The tourism sector encompasses various sub-sectors, including Food Tourism, also known as Gastro-Tourism, which is a popular and effective method of promoting destination loyalty by combining cultural and culinary experiences. Despite Sri Lanka's diverse and flavourful cuisine, there has been little momentum to propagate resulting-showing growth and visibility on the global food stage. This thesis aims to study the underuse of Gastro-Tourism in Sri Lanka and propose a digital solution that enables tourists to have an authentic and transparent experience of Sri Lankan cuisine while also expanding the market opportunities for Small and Medium-sized Enterprises (SMEs). The research approach adopted for this study includes a mixed-methods approach, incorporating a literature review, interviews with domain experts, and a survey of both tourists and vendors. The findings underscore the significance of culinary experiences for tourists and highlight the potential of technology in promoting Sri Lankan cuisine. The application prototype developed for this project, "Ambula," leverages features such as Image Classification via Machine Learning, a recommendation module based on dietary and allergy requirements, and a portal for vendors to advertise and sell their food products. The application prototype was designed based on user feedback and evaluated using usability and functional testing. Moreover, development methodologies, such as Incremental and Iterative development, PRINCE2, OOA, and RUP, were utilized to manage the project effectively. The results of the project demonstrate that the application can enhance gastronomic experiences and contribute to the development of sustainable tourism practices for tourists, vendors, and other stakeholders involved in Sri Lanka's tourism industry.

Keywords: Gastro-Tourism, Tourism, Sri Lanka, Food, Tourists, Vendors, SMEs, Machine Learning, Recommendation module, E-Commerce.