## 7SENG013C Software Development Project

## Restaurant Management System with Food Combination Suggestions

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## Abstract

The aim of this project is to develop a comprehensive software solution for restaurant management that incorporates a food bundle suggesting facility. The proposed system aims to enhance the customer experience by providing personalized and customized food bundles based on historical ordering patterns and customer's budget. To achieve this, the software will employ machinelearning algorithms to analyze customer data, such as past orders, to generate tailored food bundle recommendations. These recommendations will be based on customer's food buying behaviors in different budget categories. Additionally, the system will provide top selling food analytics to restaurant owners and managers, enabling them to make data-driven decisions for menu planning, pricing, and inventory management. The development process will follow the agile software development methodology, allowing for iterative development and continuous improvement. The software will be built using modern technologies and frameworks using Springboot to ensure scalability, reliability, and ease of maintenance. The anticipated outcomes of this project include improved customer satisfaction, increased revenue through upselling opportunities. The proposed software solution has the potential to revolutionize the restaurant industry by offering a personalized dining experience and facilitating efficient management of food bundles. This report will provide a detailed analysis of the project's requirements, architecture, implementation, and evaluation. It will also highlight the challenges faced during development. Ultimately, the project aims to contribute to the advancement of restaurant industry by integrating intelligent food bundle suggestions.