

## ABSTRACT

The Restaurant Table Booking System is an innovative web-based application developed using ASP.NET. Following a structured Software Development Life Cycle (SDLC) methodology ensures efficiency, quality, and reliability throughout the software process. Designed to revolutionize table reservations in restaurants, this system addresses the inefficiencies of traditional methods, providing a seamless and user-friendly interface for customers and staff. By harnessing technology and prioritizing user experience, security, and scalability, this application aims to streamline the booking process and improve accessibility. Customers can effortlessly browse available tables based on preferences such as date, time, and party size, and make real-time reservations with instant confirmation notifications and personalized emails. Restaurant staff can manage reservations, allocate tables, and track availability through a dedicated administrative interface. Prioritizing user experience, security, and scalability, the application streamlines the booking process and improves accessibility. Integration of location-based services allows customers to explore nearby restaurants, and advanced analytics offer insights into reservation trends and customer preferences. The development process addresses both functional and non-functional requirements, ensuring the system meets user needs and adheres to performance, security, and usability standards. Rigorous testing, including unit, integration, and user acceptance testing, ensures robustness and reliability before deployment.