Online Restaurant Reservation System

*Design a system for users to make online reservations at restaurants, view availability, and receive confirmation emails*

Overview of the Project:

Previously we discussed the Online Restaurant Reservation System which seeks to develop an innovative web-based program that enriches the dining experience for both customers and restaurant staff. We talked about how customers can make smooth online reservations,check table availability and receive speedy confirmation emails. Moreover the proposal also focused on the background, methodology, resources,budget,reporting and risks. There were a few objectives, for example automating the sending of confirmation emails using the user’s information from the website,creating a standardized display of available tables in the restaurant for the specified time slots,etc. After analyzing and calculating the budget we got a total of $101,600.

Problem Statement:

There are restaurants that still utilize the old reservation methods such as phone calls or walk-ins. This often results in miscommunication,double bookings or prolonged waiting for confirmations. While managing reservations manually, sometimes restaurants overbook too. As customers cannot view the available time slots, they have to contact the restaurant multiple times which can cause exasperation. When users do not receive immediate confirmation notification it leads to unreliability. Customers struggle with canceling since they have to contact the restaurant directly. It often leads to mismanagement and missed rebooking opportunities as restaurants cannot immediately update availability after cancellation. Furthermore, restaurants fail to manage their resources constructively resulting in deteriorating revenue. The online reservation system will enable users to view available tables, make reservations with ease with an interactive interface. Most importantly, they can cancel and modify their booking through the online portal.This system will widely benefit the restaurant too. They can remind and confirm customers automatically to maintain effective communication.In addition to that, it's possible to acquire data and insights to enhance efficiency and raise customer satisfaction.

Proposed solution:

Our aim is to maximize table management while improving the dining experience for clients and restaurant employees. In order to achieve that, the system will have a well-designed user interface. It will have a list of restaurants, reservation form and user account management. The list of restaurants will contain location,contact information, running hours etc. Booking form will mainly focus on date and time along with other reservation details. Customers can create their own accounts and use it to modify anything related to the reservation. A cancellation link or button will be available beside the reservations.A database will be used to store information, and reservations for flexibility. Upon cancellation the reservation status will be updated to “Canceled” in the database and free up that time slot. It is essential to place a safe authentication, guaranteeing data security via encryption, and adhering to privacy laws. SMS service will be used to send reminders whereas emails will be used for automatic confirmation right after booking. Both SMS and emails can also be used to send notification of successful cancellation of booking.Reservation management tools are needed for checking upcoming reservations and getting in touch with customers if needed.