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| **North South University**  Department of Electrical & Computer Engineering  **Project Proposal**  **Spring 2019** **Project Name : Restaurant Reservation System** **Course Code : CSE299**  **Course Title : Junior Design Course**  **Course Instructor : Shaikh Shawon Arefin Shimon ( SAS3)**  **Section : 04**  **Group Number : 02** | |
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**Introduction:**

Restaurant Booking System is a simple and easy-to-use online restaurant reservation system with all the functionality needed to reserve a table online.  
You can easily manage guest inquiries, send emails and SMS reminders, and accept online payments and much more.  
  
A restaurant reservation software with an easy web based and password protected admin panel accessible from any computer with an internet connection. Through the admin panel even users with no programming skills can manage reservations, table availability and payments and set email auto responder.

**Tools:**

* Powerpoint
* BALSAMIQ OR OTHER UX DESIGN TOOLS.
* Piazza (For communication)
* GIT
* GITHUB
* TRELLO
* Microsoft word/EXCEL

### **Benefits of an online reservation system**

Traditionally, restaurants have managed their reservation systems with a reservation book, which means they received the reservations via telephone calls and wrote them down in a book. Nowadays, as a consequence of the massive use of the Internet and its benefits, experts have seen the opportunity and great added value of creating online reservation systems, and already many restaurants have replaced the traditional format with these new systems.

An important advantage of online reservation systems is the flexibility they offer when making a reservation. When reservations are managed in the traditional way, patrons will only be able to call a restaurant to make a reservation during operational hours. On the contrary, when reservations are managed through an online reservation system, customers will be able to make their reservation at any time and from any place they choose. In general, patrons will have a better experience when making an online reservation, because it will be a quick process, the service will be available 24/7, and the system will provide all the necessary information in order to make the desired reservation with tranquility.

Restaurants will experience a great number of benefits when using an online reservation system. Some of these benefits translate into a decline in incoming phone calls, a better control of the capacity of the restaurant and the number of reservations one will be able to accept, and a number of handy statistics and reports that will help to analyze the business in interesting ways.

These benefits arise from a wide range of management tools provided by online reservation systems, like operational reports, floor management software, customer reservation histories, and customer databases that include customer data and preferences, and grow with each new table booking. Restaurants will also be able to track cancellations, and manage walk-in and waitlists in a better way, eliminate overbookings, and create target email and postal mailings with the information from the customer database. Some online reservation systems include integrated email marketing tools

* **Better idea of how busy a night will be:** Whether or not a restaurant will have a dinner rush with open tables is an unknown fact, but taking reservations will give owners a better idea of how busy or quiet their nights will be. And, if in fact, they have a low number of reservations, this will give them enough time to come up with a special to market on social media accounts to encourage customers to come out and spend money.
* **Prepare chefs for a rush:** On the contrary, if the reservation schedule is showing that they're going to be packed, chefs and kitchen staff will have a fair warning to be prepared for an incoming rush at a specific time. Also, hostesses making the reservations, or seating walk-in customers, will also be able to space the seating times out enough so that the kitchen doesn't get slammed all at once.
* **Reduce waiting time:** Not only are restaurant reservations beneficial to owners and kitchen staff, but they help make the dining experience for customers more enjoyable. When a party books a table for 6:00 p.m. on a Friday, they can expect to be seated pretty close to that time, reducing their wait. Remaining on top of reservations and getting guests seated as closely to their time slot as possible will result in happy customers that are sure to return!

**Working Flow on App:**

1. Splash

2. Login

3. Register

4. Navigation

5. Map

6. Firebase

7. Payment System

8. Restaurant List

**Analysis of our App with customer view point:**

There is no shortage of excellent restaurant apps on the Android platform, but we are going to develop an extremely unique and useful one. Yes, our project name is Restaurant Reservation System based on location.

We loves delicious food and cuisine crazily. However, like many other big funs of food, We sometimes find it hard and time consuming to find a featured and unforgettable food restaurant. So developing a Restaurant Reservation System app is absolutely a good idea for all food funs.

Our app is a great restaurant app to have on hand when visiting a new city. The app uses the Android Phones built-in GPS to find nearby restaurants. So after you have installed our app, it will acquire your current GPS location information from the GPS device. After you log in our app, you will have a welcome flash. Then you will be displayed with the main menu of our app. Now, you could make a choice if you want to use your current location to search the nearby restaurants or you want to use the keyword address you type in to search the restaurants. After you have made your decision and press the search button, the result will be displayed with a lot of highly recommended restaurants. Then you can see the excellent and distinguish features of our app, you could browse a full list of restaurants by cuisine styles you prefer, price range and customers' feedback rate. After you have chosen a specific restaurant and tab that restaurant, you could get detailed information about it, for example, its location, its telephone number, its food menu, its promotion activity, its available coupons, etc. In all, you could make decision according to the list which you like and then enjoy delicious food provided by our Restaurant Reservation System .

If you are hesitating about so many attractive restaurants and could not make a decision, do not worry. Our app could provide a random pick function to help you make a decision. You could choose several restaurants you like most or you do not choose just use all the restaurants on the full list, our app would give you an answer by randomly choosing a restaurant for you.

Another key feature of our app is that after you have chosen the restaurant you like, our app would search for available coupons or promotion activities related with this restaurant on the Internet. If you like the coupons gathered by our app, you could chose to download it and print it out. By using these coupons and knowing these promotion activities, you could plan your deals and make a choice more flexibly and wisely.

After you have enjoyed the wonderful food in our Restaurant Reservation System, you may want to record this unforgettable experience by some photos. Yes, we have prepared this service for you on our app. You could take a photo of the delicious food or the beautiful restaurant by using our app. Then you could easily upload these photos to your Facebook or twitter and share the happiness with your friends and family.

Finally, you are welcome to give a rating or leave a feedback on our app about the restaurant after you have finished enjoying the food. You could write down your feel, your opinion and your advice about the restaurant or you could just give a rate to indicate it is a five star or zero star restaurant. After you publish these information, other customers could see it and make a decision according to it. In this way, you could communicate and share information with other big funs of food.

**Conclusion:**

Restaurant Booking System is a fully supported, affordable, and scalable solution for anyone who needs an online table reservation.