

Secure online restaurant reservation system computer science essay

[Technology](#), [Computer](#)



Secure Online Restaurant Reservation System with Secure Sockets Layer is an online system that supports Android based and desktop system. This system is to replace the traditional method of reservation (offline system) which is pen-and-paper. At the same time, it is developed to reduce the workload of staff and ease the customers to make a reservation at anytime and anywhere.

Today, most of the people can easily access the web with their smartphone, desktops or laptops, and tablets. Since everyone is able to use their devices to access the internet, online services are very common in their daily life. But, there are differences of screen resolution of these devices and the traditional web design is unable to fit the content in any size of screen. Therefore, the proposed system can resolve the problem by using jQuery Mobile.

jQuery Mobile is a touch optimized web framework that widely use in smartphones, tablets and computer. [1] It is compatible with major mobile and desktop platforms. Its feature are automatic scale to any screen size, minimize the script for lay out pages and creating the important features that needed in the proposed system. [2]

Secure Sockets Layer (SSL) is a technology that provides a secure connection between web server and web browser. [3] The proposed system implements SSL in order to protect customers details such as phone number that need to submit to the server. Also, it used to secure the single sign on (SSO) of users to prevent unauthorized access, where SSO is mechanism that

provides user authentication and authorization which allows user access all computers and systems without enter multiple passwords. [4]

1. 2 Problem Background

Nowadays, lots of restaurants are still using the traditional method for table reservation. For example, a customer makes a booking through a phone call or goes to the restaurant on the spot. These are the easiest ways for reservation. But, it seems outdated in this new era of technology as it does not include of any current technology.

In facts, many problems occurred when customers who want to make a booking through a phone call. For instances, the customers do not have the contact of the restaurant, restaurant's staff was not able to answer the booking phone call during peak hour as well as communication problems between staff and customer due to their difference of languages spoken.

Besides, phone technical issues are one of the problems. For example, telephone network congestion, low signal strength and noise. This may lead the customers unable to call or difficult to have a clear conversation. All of the above problems may affect the reputations and income of the restaurant.

Despite there are few restaurants provide online reservation services. But, these online restaurant systems are improper to be accessed using android operating system. In other word, android phone user are facing problem such

as loading webpage slowly and inefficient of use the main features due to limitation of screen size.

1. 3 Project Aim

This project is to design and develop a secure online restaurant reservation system with Secure Sockets Layer (SSL) that supports Android-based and desktop systems.

1. 4 Objectives

There are three objectives in the project:

To study the existing of online restaurant reservation system.

To design and develop an online restaurant reservation system that support both Android-based and desktop systems.

To evaluate the system performance, usability and security to the proposed system.

1. 5 Scope

The scopes of this project are stated below:

This work uses Station One Caf   which located at Skudai, Johor Bahru for a case study in developing the proposed system.

The system only supports Android, Tablet devices and Desktop.

The system implements Secure Sockets Layer (SSL) for securing single sign on (SSO).

1. 6 Importance of Project

The main purpose of this project is to develop secure online restaurant reservation system with SSL for both Android-based and desktop systems. The proposed system is a new architecture of restaurant reservation system which have providing online services, addition of features in the current systems and development in smartphone operating system (Android). Its advantages are capable to handle concurrent access for many users, no technical experience to run the system, fast ordering service, and provide secure access for single sign on (SSO) through Secure Sockets Layer (SSL). By using this reservation system, the customers are able to escape from phone line congestion, dine on time and gain the experience to use the online services.

1. 7 Report Organization

This section shows the structure of this report. The table 1. 1 has presented all the chapterâs titles and their description respectively.

Chapter

Title

Description

1

Introduction

Introduces the purposed system and explains the existing problem background as well as the outcome.

2

Literature Review

Provides analysis of current system and briefly describes the technology used.

3

Methodology

Presents the method of project implementation and the system requirementâa,â? s elements in term of software, hardware and user.

4

Requirement Analysis and Design

Illustrates the system modules, user interface design and system flows.

5

Conclusion

Concludes the whole report and give recommendation for future work.

Table 1. 1 Report Organizations

1. 8 Summary

This chapter has described the overview of the project as well as its problem background. It also has pointed out the aim, objectives and project scope of the project. Lastly, this chapter has figured out the importance of the project and those benefited from it.