

**ONLINE RESTAURANT RESERVATION SYSTEM  
MODULE ADMINISTRATOR RESERVATION**

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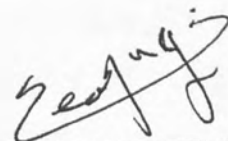
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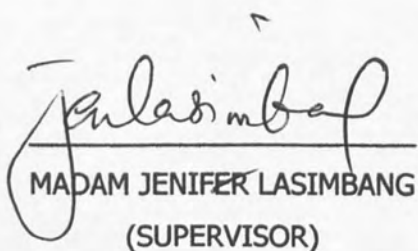



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## ABSTRAK

Selaras dengan perkembangan teknologi maklumat yang semakin pesat pada hari ini, internet telah menjadi satu alat penyebaran maklumat dan juga sebagai satu medan untuk menjalani urusiaga. Dengan menyedari hakikat dan peluang ini, idea untuk membina satu sistem yang berdasarkan laman web telah dikeluarkan. Online Restaurant Reservation System yang dibangun memainkan peranan penting dalam memberi cara alternatif kepada pelanggan restoran berhubung dengan perkara membuat tempahan. Sistem ini dibangun dengan tujuan untuk memaparkan maklumat tentang restoran dan juga menyediakan fungsi membuat tempahan melalui internet. Dengan ada sistem ini, pengurusan antara pelanggan dengan pekerja dan tuan restoran boleh dibaiki. Selain itu, tuan restoran boleh mengemaskini maklumat restoran manakala pelanggan boleh mendapat maklumat atau membuat tempahan melalui sistem ini pada mana-mana tempat yang ada perkhidmatan internet dan pada bila-bila masa sebab sistem ini beroperasi 24 jam. Laporan ini akan menerangkan module administrator reservation di mana banyak melibatkan urusan antara pangkalan data.



## ABSTRACT

Parallel to the rapid development of information technology, internet has become an alternative tool for distributing information and doing the business. Seizing this opportunity, the idea of developing a web base reservation system was generated. The Online Restaurant Reservation System will play in important role to give the user an alternative way dealing with restaurant reservation. The objective of construction this web base system is to provide the restaurant information and reservation function to the restaurant's customers. By the system, it can improve the restaurant management between customer and the restaurant owner. Beside this, it also provide a function that the restaurant owner can update the information about the restaurant though the system. Furthermore, the system is a web base system, so it can function 24 hour at any places that provide the internet service. The focus of this thesis is on module administrator reservation where are most in dealing with the database to update, delete and add data in the system.



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## CHAPTER 1

### INTRODUCTION

#### 1.1 Introduction

This project report is the documentation of a system entitled "*Online Restaurant Reservation*". Development of this system is to facilitate all the users of the particular restaurant for getting the information about the restaurant and manage the restaurant in an alternative way and parallel to the rapid development of the information technology. The user of this system is divided in two big groups, the first group is customers and other is restaurant owners and the staff of the restaurant.

This chapter is divided into 6 sections i.e. first is the introduction which describes the chapter introduction. The second section is problem background, third section is the problem statement, fourth section is the objectives, fifth section is the project scope and lastly is the organization of this whole reports. In problem background will discuss why the system is needed to build and what the problems are faced by the current system and problem statement is the summary of the problem background. The objectives section will explain why the system is need to build and what is needed in the system. Organization of the report is described the entire chapter that include in this documentation of the final year project.



## 1.2 Problem Background

### 1.2.1 More Expensive to Promote the Business

Regarding to the improvement of the science and technology today, there are many advantages of using the internet to distribute information, even in business application. Content published on the internet is immediately available for browsing by millions of users and cheaper if compare with other methods like the doing the advertisements through the new paper, program television, poster or other to promote the business. This kind of methods will waste a lot of human energy and also wasting a lot of resource in the earth.

### 1.2.2 Unsystematic

These kinds of traditional techniques like walk in booking and phone in booking are unsystematic. It because all the information is progress will be record by manually where are the technical problems often occurs which cannot avoid easily and it may influence the management of the restaurant. So, with the system it also can bring a lot of benefit to the restaurant owner and customers. The owner can manage the restaurant at anytime and anywhere through the system like update the information of the restaurant and view the name list of the reservation. The customers can check the latest information about the restaurant directly. So, the management of the restaurant will be more systematic and efficient.

### 1.2.3 Time Constrain

Nowadays, almost all the people is rush for time, they may not have time to go by the restaurant to restaurant to compare the price of food by using traditional technique, which are either manually or phone asking. Customers sometimes might go to the restaurant when the restaurant is closed or when it is fully booked without realization. So, by using this system the customer can compare





the price of food and doing the reservation in more convenience way because the online system is available 24 hour per day. With the system, all users can use the service every time and every place.

#### 1.2.4 Occur Misunderstanding

For restaurant, the booking is still doing through manually or done by phone booking or fax booking. Through this kind of traditional system may cause misunderstanding between customer and the owner when dealing with booking. It will happen when technical problem occur or sometime is artificialness like sometime the phone service is not clear so may cause the staff who record the information of the customer will record the incorrect information.

#### 1.2.5 Outdated Information

By traditional way for booking, customer cannot get the most updated information except phone in or go to the restaurant to for enquire. So, with the system it provides a place where the restaurant owner can put all the updated information and can be view by all users anytime and anywhere. Beside that, customers can check the status of booking before go to the particular restaurant.

### 1.3 Problem statement

Nowadays, the booking of the restaurant is still done manually or done through phone booking. For owner view, this kind of system is less systematic and is more expensive to promote the business to the public. For customer view, this kind of system is lack convenience because it cannot provide the newer information about the restaurant to all users, and it has time constraint like at business hour only. Beside this, it may easily cause misunderstanding between customer and owner when dealing with booking. With the system customer can find out what they need through the system and the owner can manage the





restaurant at anytime and anywhere like update the information of the restaurant and view the name list of the reservation.

#### **1.4 Objectives**

The purpose of the project is build a system that can give a clearly and short information about the restaurant and it can receive feedback from the users. Through the system, it can improve the restaurant management between customer and the restaurant owner.

Beside this, this system is also a flexible system where at first all the tables in the database are empty. This purpose is to let the system can be use by any restaurant by adding their restaurant information. It also provide a function that the restaurant owner can update the information about the restaurant. So, the system is able to provide the latest news to the public about the restaurant. Furthermore, the system can also provide an alternative way for customer and restaurant owner to deal with booking and restaurant management without the limitation of the time and place.

#### **1.5 Project Scope**

Target group of this project is for all the people who are interest to have a meal or have an activity at restaurant and net surfer who decides to travel to a particular destination can view on the restaurant to get to know the restaurant. It can be as a way to promote the restaurant to traveler from foreign country. Beside this, the owner of the restaurant and the staff-staff are also the user for this system. With the system, they can manage the restaurant in more systematic way.

User scopes are customers and owner and staff of restaurant. For the project purpose, one database was created to save the entire customer list,



booking list, menu list, room list, table list and staff list. This project will be divided into several parts or modules.

i. Information and login module

This part was included all the information about the restaurant. The information is about the background of the restaurant, photo gallery, map, collecting feedback for the user and have several link to other website which have related to the restaurant so that the user can easily get all the information they need. Beside this, this part is also including the function of customers and administrator login logout.

ii. Menu and event calendar module

In this part, the users were able to view all the menu, special offer and event of the restaurant. Only the administrators can alter the information like add or delete the menu, special offer or the event of the restaurant. In this part, event calendar is provided.

iii. Customer reservation module

In this part was able to let the customer to do the reservation. The customer can choose the menu, date, time, and the seat place freedom with the condition that at the same moment no one is booking before them.

iv. Administrator reservation module

This part is only deal with the administrator. In this part the administrator is free to alter all the information. For example, add or delete the booking list, add or delete the table and functional room. With special interface, the administrator can access the database through the

administrator login and make the changes inside the database. All the data that change will affect the interface related. With this function, our team can update the system more systematically.

This project was developed by a team where each team members will be responsible to develop different modules as follows.

Chua Weng Ing	: Administrator reservation module
Tan Chia Chiun	: Menu and event calendar module and customer reservation module
Leong Sie Ping	: Information and login module and customer reservation module

This report focuses on the administrator reservation module.

## 1.6 Organization of the Report

This project report was written in seven chapters as below:

Chapter 1: Introduction is the chapter provides introduction, problem background, problem statement, objectives, objective of building the system, project scope and organization of the report.

Chapter 2: Literature Review is the chapter for doing the review of existing systems, concepts or methods related to the system for the purpose doing the discussion and doing comparison with the system out team decide to build. It also included techniques, technologies, methods or equipments that was applied on the system.





Chapter 3: Methodology, in this chapter will reviewing or explaining what methodology is used to build the system. It also contains software and hardware requirements.

Chapter 4: System Analysis and Design was explaining the data flow diagram, class diagram, user case diagram, interface design, database design and lastly are application design.

Chapter 5: Implementation, in this chapter is discussing what are the development environments, application development, encoding of the system and lastly are the discussion of module development. Screenshots also included in this chapter.

Chapter 6: Testing, in this chapter, type of testing performed, testing strategy and testing results are included.

Chapter 7: Conclusion, this is the last chapter in this report. In this chapter the summarization for the whole project and result acquired. Beside this the problem that facing during the duration of the project will be discuss, the advantage of doing the project, recommendations for future works will also be discuss in this chapter.





## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The purpose of this literature review is to give an explanation of what has been published on a topic by scholars and researchers about the project before. It is an important step for information collection for this project. The purpose for writing the literature review is to convey the knowledge and ideas that have been established by the topic, and what the strengths and weaknesses in a piece of writing. Literatures review is not just a descriptive list of the material available, or a set of summaries.

In this chapter, the literature reviews is done based on the article that has been obtained. It will include the concept of e-commerce, which will describe what is mean by e-commerce and how it influences the online reservation system. Then is discuss about the advantages and disadvantages for using the traditional booking system and online reservation and the security of the system that need to take care for ensure the efficiency of the system.

Beside this, this chapter will do the comparison with the current system or existing system. It will discuss base on the current system and software application which is using for build a web base system.

Last in this chapter will be the conclusion for this chapter.



## 2.2 Literature Review Base on Article

### 2.2.1 Concept of E-commerce

E-commerce could be defined as a business relationships between computer to computer, individual to computer or computer to individual that given a location for exchanging the information or value. In e-commerce, the trading partners are interact through electronic communications and automated computer systems.

*"Recently, the national statistical agencies of Canada, the USA and Australia are beginning to release data about the use of the Internet for e-commerce for their respective countries", (Statistics Canada, 1998, 1999, 2000, 2001a) "Internet retailing is capable of redefining the way in which goods and services are marketed, sold and distributed. However, the Internet also has the potential to disrupt many existing business models and to invent entirely new types of businesses and market opportunities"(Ghosh, 1998).*

Moreover, Narrowline Media Research group reported that 94 per cent of Internet users are English-speaking (*The Economist*, 1999). "Metcalfe's law of networks" states that the value of a network rises with the square of the number of terminals attached to it (*The Economist*, 1996). Metcalfe's principal summarizes much of the methodological difficulties that underlie research attempting to estimate the size and growth of Internet commerce.

The most significant economic problem for the e-commerce retailer is the fact that most Internet users access the Internet not for buying products but to get free content and send e-mail.

Ecommerce, or Electric Commerce, is one of the most important aspects of the internet to become apparent. It allows people to exchange goods and services immediately and with no barriers of time or distance. Any time and anyway, you get or buy almost anything you want through internet. However, the way to create a successful online system can be a difficult and confusing if you are no understood the concepts and principles of the e-commerce. This in





the reason why doing the information about the e-commerce is the part of literature review.

### 2.2.2 Traditional Reservation versus Online Reservation

Traditional reservation restaurant are include walk-in booking, call-in booking, or by fax-in booking which is familiar to all restaurant's customers. By existing the online reservation system will give an alternative choice to the customers to do the reservation through internet. The implementation of traditional reservation for a restaurant is depending on the customer relationships that require customized connections between owner and the customers. Setting up these connections can be costly, and time-consuming. Beside this, doing reservation manually may cause confusing between customers and owner and less systematic.

Benefits of Web service include faster time to market, convergence of disparate e-business initiatives, a significant reduction in total cost of ownership, and easy to use software tailored for trading partners. Online reservation is more flexible, decentralized Internet based applications that allow restaurant to create new products and services faster than existing methods (Dumbill, 2002; Fieldman, 2002; Fonseca, 2002; Glass, 2000; Goodwin, 2002).

The shift from traditional reservation to online reservation requires broad organizational and managerial changes as well as the development of new technology, promoting broad organizational and managerial changes. (Siriginidi Subba Ra,2000).

The information that collected is gives our team a big support to build this project. It is because through the information that founded, it got a lot of benefit by using the online system if compare with the traditional system.



### 2.2.3 Security

This system is run on the Internet, which is a naturally insecure environment. The system architecture is open, unmonitored and shared. So, have a good security for the system is important. The barriers and security concerns in Web services include lack of established standards, discovery, reliability, transactions, manageability, testing and accountability.

There are a few ways the risks in web services occur: (Pauline Ratnasingam, 2002)

- i. Denial of service attacks could bombard Web sites with an overwhelming amount of traffic, creating an effective logjam that denies service to legitimate users.
- ii. Hacking the domain network server.
- iii. Spoofing an application.
- iv. Listening to the Internet.
- v. Lying about identity.
- vi. Gaining access can allow the intruder to make transactions or view data they were not authorized to do.
- vii. Denying a transaction or action.
- viii. The global methods for describing and finding business services are not universal.

As a conclusion, security is a major problem as a hacker can alter or modify any component of an application – using man-in-the middle or session hijacking – and can potentially control or destroy the application. Some regard certain applications as not needing security. For example, a calendar of this project may be part of an application for airline ticket reservations and could be adversely affected if the function was hacked. Imagine thousands of people issued tickets for incorrect dates. For any Web services scheme to work, attention must be paid to rigorous authentication, integrity, non-repudiation, encryption and security matters that enforce technology trust.





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