# ONLINEBOOK SYSTEM

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This report is submitted in partial fulfilment of the requirements for the Bachelor of Computer Science (Database Management)

# FACULTY OF INFORMATION AND COMMUNICATIONS TECHNOLOGY UNIVERSITY TEKNIKAL MALAYSIA MELAKA

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# DEDICATION

To my beloved parent, teachers, and friends. You guys are always an inspiration.

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#### ABSTRACT

OnlineBook is a system that provides a service for all kind of booking service. It is a unification of multiple booking systems onto one huge system. It is not like any booking system you have experienced so far, as it is built to be easier and faster for consumer. "Book all in one" as tagline shows that this system is capable to handle any type of booking service.

The main reason we create this service is to provide a space for new and well-established company where they can provide a convenient and fast booking service to the customers. This system unites all the booking service under one roof. Thus, customers don't need to make a several booking or order in different particular system. No more jumping between applications to complete a booking process, plus, within a couple of touch or clicks, all process is done.

People nowadays tends to use smartphone or tablet rather than using other electronic device such personal computer because its compatibleness. Besides that, it is in line with the modern lifestyle because smartphone is everything for most of the people. All the email, contacts, picture, and other data is being kept into smartphone. Smartphone nowadays are easy and convenient to use. It is fast and secure. As the smartphone is very important and personal for everybody, we implement the Onlinebook system into this mobile application. Customer need to register once on the device, and then, just keep using it after that.

# TABLE OF CONTENTS

СНАРТ	TER I : INTRODUCTION	1
1.1	Project Background	1
1.2	Problem Statements	2
1.3	Objectives	2
1.4	Project Scope	3
1.5	Project Significant	4
1.6	Expected Output	5
1.7	Conclusion	5
СНАРТ	TER II : ANALYSIS	6
2.1	Introduction	6
2.2	Problem Analysis	6
2.3	Requirement Analysis	7
2.3	.1 Data Requirement	7
2.3	.2 Functional Requirement	8
2.3	.3 Non-Functional Requirement	13
2.4	Conclusion	14
СНАРТ	TER III : DESIGN	15
3.1	Introduction	15
3.2	High-Level Design	15
3.2	.1 System Architecture	15
3.2	.2 User Interface Design	16
3.2	.3 Conceptual and Logical Database Design	25
3.3	System Architecture	31
3.3	.1 Physical Database Design (scheme level – DDL/DCL)	31
3.4	Conclusion	35
СНАРТ	TER IV : IMPLEMENTATION	
4.1	Introduction	

4.2	Flow Chart of Onlinebook System	.36
4.2.1	1 Flow Chart of the Main System	.36
4.2.2	2 Flow Chart of Sub-Process: Register	.37
4.2.3	3 Flow Chart of Sub-Process: Main Menu	.41
4.2.4	4 Flow Chart of Sub-Process: Search	.42
4.2.5	5 Flow Chart of Sub-Process: Booking	.43
4.3	Conclusion	.48
CHAPTI	ER V : TESTING	. 50
5.1	Introduction	.50
5.2	Test Strategy	.50
5.2.1	1 White Box Testing	.50
5.2.2	2 Black Box Testing	.54
5.3	Conclusion	.56
CHAPTI	ER VI : CONCLUSION	. 57
6.1	Observation on Weakness and Strengths	.57
6.2	System Strength and Weakness	.57
6.3	Proposition for Improvement	.58
6.4	Conclusion	.58
REFERE	ENCES	. 59

# TABLE OF FIGURE

Figure 1: Context Diagram of OnlineBook System	9
Figure 2: Data Flow Diagram Level 0	10
Figure 3: Data Flow Diagram Level 1 – Registration	11
Figure 4: Data Flow Diagram Level 1 - Login	11
Figure 5: Data Flow Diagram Level 1 - Searching	12
Figure 6: Data Flow Diagram Level 1 – Booking	13
Figure 7 : System Architecture	16
Figure 8 : Navigation Design	
Figure 9 : Registration Page	19
Figure 10 : Search Page	20
Figure 11 : Branch's Menu Page	21
Figure 12 : Payment Page	22
Figure 13 : Search Page	23
Figure 14 : Company Page	24
Figure 15 : Order Summary Page	25
Figure 16: Conceptual Database Design	26
Figure 17: Logical Database Design	27
Figure 18: Flow Chart of Main System	
Figure 19: Flow Chart of Sub-Process – Registration	41
Figure 20 : Flow Chart of Main Menu	42
Figure 21 : Flow Chart of Sub-Menu – Search	43
Figure 22 : Flow Chart of Sub-Menu – Booking	
Figure 23 : Warning box triggered as user did not input required data	52
Figure 24 : Message box display message of unmatched account	53
Figure 25 : Menu of choices	55
Figure 26 : Calculation of Total Price	56

# LIST OF TABLES

Table 1 : Comparison between Onlinebook, Current and Manual System	7
Table 2 : Non-Functional Requirement	13
Table 3 : Logical Database Design	27
Table 4 : Physical Database Design	31
Table 5 : Stored Procedure - insertcustomer	38
Table 6 : Stored Procedure - getcustomerno	39
Table 7 : Stored Procedure - insertpayment	39
Table 8 : Stored procedure - branchlist	42
Table 9 : Stored procedure - branch-company-list	44
Table 10 : Stored procedure - branch-details	44
Table 11 : Stored procedure - branch-service	45
Table 12 : Stored procedure - branch-item	45
Table 13 : Stored procedure - paymentdetails	46
Table 14 : Stored procedure - insertbooking	46

## **CHAPTER I**

#### INTRODUCTION

#### 1.1 Project Background

Mobile application assist customer to book services. Based on The Sun Daily article titled "Malaysia's smartphone rises by 16%" posted on 4 September 2013 state that Malaysia's smartphone penetration has increased by 16% points to 63% this year from 47% in 2012, while tablet penetration has increased almost three-fold to 39% from 14%, according to a recently-concluded analysis by Ericsson Consumer Lab in Southeast Asia and Oceania. This show the increase rate of smartphone user among Malaysian. In addition, people nowadays tends to use smartphone or tablet rather than using other electronic device such personal computer because its compatibleness. Besides that, it is in line with the modern lifestyle because smartphone is everything for most of the people. All the email, contacts, picture, and other data is being kept into smartphone. Smartphone nowadays are easy and convenient to use. It is fast and secure.

Onlinebook System is a website that provides a service of booking that unify all kind of booking service into one website. All types of business that need to used booking service can use it without need for them to develop website for their own. So, it is like a medium for company and customer to do business. The main purpose of Onlinebook System is to create a new medium for company to provide a booking service for customer. As the smartphone is very important and personal for everybody, Onlinebook system is implemented into this mobile application. So, it can be used almost everywhere that have internet connection and enhance the usage to the highest.

#### 1.2 Problem Statements

Time is a limit for quite most of the people. They would not spend their precious time waiting for long queue to get something. They need an application that can reduce the queue as people nowadays are less forbearing with this problem. Furthermore, traditional manual booking is not twenty four hours service as most of it is limited for office hours only.

People are working, thus they doesn't have time for booking while they are working. Next, customer needs a simple and easy booking system that is providing all-in-one booking service. Most of booking system provided in the market is complicated and difficult to use. On the other hand, newly established company are struggling to cope with the competitors. They need big budget to build a booking system for their own and also need budget to promote their system to the public.

#### 1.3 Objectives

There are several objectives to develop Onlinebook system. Below are several of them:

• To develop an online booking system that unify all kind of booking service available on the market

- To help company to reduce cost for developing a booking system
- To save time of customer to book a service

## 1.4 Project Scope

This project is divided into two scopes. One of the scope is user scope who are using this system, and the other is system modules which are part of the Onlinebook system.

- User scope
  - o Customer
    - User that use this system to book a service available in the system
  - o Branch admin
    - User that use this system to manage service booked by customer for the specified branch
  - Company admin
    - User that use this system to manage service booked by customer for whole branch owned by the company
- System Module
  - o Login
    - Verify the user and password for security purposed.
  - o Registration
    - Create a login for customer to start book a service
    - Add user information into system database

- o Search
  - Quick find available service in the system for user to book
- o Booking and payment
  - Book available service provided by company and branch
  - Select desired item offered along a service
  - Calculate the total charge for service booked
  - Pay the bill by charging into one of the payment registered

#### 1.5 Project Significant

Onlinebook system will bring a lot of benefits to both customer and company. For customers, this system can help to save a lot of time and cost. This is because of the unification of all booking system available on the market that this system provides. User also do not need to waste time and money going to the place hopefully to gamble for a decent service that are not sure is it available or not. Moreover, they can book anytime they want as it is online and the booking process is handling by the computer.

For company, Onlinebook system helps most of the booking service for the company or specified branch. Most of company do not need to wasting money develop a booking system just for the company to facilitate work. A newly established company that are tried to compete with others can reduce a cost to grow the business further. More customers can book service as the system manages the booking process faster and efficient.

#### 1.6 Expected Output

Onlinebook system should be able to handle all sort of booking service provided by company to the customer. This system also should be able to calculate total bill charged for the service and item ordered by customer correctly including a correct government charged along with the service and item price.

#### 1.7 Conclusion

In conclusion, Onlinebook is a website designed for mobile phone user that are suitable to use with all sorts of browser. Thus it can be used almost anywhere whether on the move or even in long queue which that phone need to have internet connection. Next chapter will discuss about the analysis done to extract functional and non-functional requirement.

5

## **CHAPTER II**

## ANALYSIS

#### 2.1 Introduction

Analysis phase is where a clear view of the system that should be developed is seen. This chapter start with the problem analysis that discuss and identify the problem encounter with current and manual system nowadays. This chapter will show all of the analysis of system during observation of the problem analysis.

#### 2.2 Problem Analysis

The analysis conduct is on the current and manual system used by the company nowadays to handle the booking process of the company. Through this analysis, problem encountered by the current and manual system will be identified. In identifying the problem encountered, a solution will be proposed on how to handle the problem encountered by the current and manual system.



Onlinebook System	Current System	Manual System
24 hour	24 hour	Service limited to office
		hour
Service not limited to a static	Service is limited to	Service is on the place
place as long as internet is	computer that connected to	
available	internet	
All booking service are under	Every booking service are	Every service provided by
a same site	developed and provided by	its organization
	its organization	
Time Saving	Time Saving	Need to queue for service
Easy to used	Complicated	Take a lot of time and work
One user for all kind of	One user for every different	One user for one service
booking service	service	
Cheap Cost	High Cost	Cheap Cost

Table 1 : Comparison between Onlinebook, Current and Manual System

## 2.3 Requirement Analysis

Requirement analysis is divided into data requirements, functional requirements and non-functional requirements. Data requirements specify a mandatory data type for the data input and output from the system. Functional requirements specifies on the function or module of the system. Non-functional requirements defines constrains criteria on how the system will do the work.

# 2.3.1 Data Requirement

Data requirement is a requirement that specify the data need to be used by the system as a data input and data output. Data requirement is based on specific type of user. For Onlinebook System, there will be one type of user. Data input for customer:

- Name
- Password
- Email
- Birth Date
- Phone number
- Credit card Number

## 2.3.2 Functional Requirement

Functional requirement describe about the flow and function of Onlinebook System. This requirement contains the main process for each module. Context diagram and Data Flow Diagram below show how Onlinebook System are functioning.

# 2.3.2.1 Context Diagram



Figure 1: Context Diagram of OnlineBook System





Figure 2: Data Flow Diagram Level 0



Figure 3: Data Flow Diagram Level 1 - Registration



Figure 4: Data Flow Diagram Level 1 - Login

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Figure 5: Data Flow Diagram Level 1 - Searching



Figure 6: Data Flow Diagram Level 1 – Booking

# 2.3.3 Non-Functional Requirement

Non-functional requirement defines constrains possesses by Onlinebook System. There are several non-functional requirement possesses by Onlinebook System.

REQUIREMENT	DESCRIPTION
Accessibility	Onlinebook system is accessible through all sorts of browser

**Table 2 : Non-Functional Requirement** 

	and operating system without having customer or company to
	install it inside the hardware.
Availability	Onlinebook are always available because it is install inside
	the Microsoft server.
Disaster recovery	All the data are safe if the specific company or branch are
	facing human or natural disaster because the system are not
	implement into a physical computer of the company
Efficiency	All sorts of booking service are handle efficiently through the
	server. Thus, there is no problem to handle big load of data
	on a time
Effectiveness	All calculation of the bill are correctly calculated
Price	The price charged for customer and company are very cheap
	thus it is not burden anyone
Portability	Onlinebook can be open in all kinds of browser whether in
	mobile phone, tablet, or PC but mobile phone are
	recommended due to graphic design.
Reliability	Onlinebook should no bug during data transmission
Security	Online authenticated user can log in into the system. All
	transaction are secured
Usability	Interface are very easy to use thus cut time for user to
	complete transaction

## 2.4 Conclusion

In conclusion, though analysis on the manual system and current system, it provide a clear understanding on requirement need to possess by Onlinebook System. The data requirements, functional requirements and non-functional requirement of the system need to be extracting in order to create a better system. In the next chapter, the design phase of the system will be discussed in details.