

FUTSAL COURT MANAGEMENT SYSTEM

WAN AINUR AFEEQA BT WAN AZMI

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University Malaysia Pahang

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ABSTRACT

Futsal Court Management System (FCMS) is developed to give an efficient system to the Chendering Futsal Court management. In the existing system, customer needs to come to the futsal court to make a booking. However, by using FCMS, they can make the online booking anywhere and anytime. This system is covering online booking for customer and online system for staff. This system is for the customers to booking court and other resources, view court availability via online system. Besides that, by using GSM modem, a confirmation message will be sent to customer's mobile after they made the online booking. Based on the existing system, all the booking data, equipment data, staff profile and others will be stored manually in a log book. This is dangerous because the probability the data will be lost or damage is high. So, Futsal Court Management System is also developed for all the booking and management data can be stored in database which will be more secure.

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ABSTRAK

Futsal Court Management System (FCMS) adalah direka untuk menyediakan satu sistem pengurusan yang berkesan kepada Chendering Futsal Court. Pada sistem yang sedia ada, pelanggan perlu hadir ke gelanggang futsal untuk membuat tempahan. Walaubagaimanapun, dengan adanya FCMS, pelanggan boleh membuat tempahan secara atas talian (online) pada mana-mana tempat dan bila-bila masa. Sistem ini meliputi tempahan atas talian untuk pelanggan dan sistem atas talian untuk staff. Sistem ini adalah untuk pelanggan menempah gelanggang dan sumber-sumber lain menggunakan sistem atas talian. Selain itu, dengan menggunakan GSM modem, satu mesej pengesahan akan dihantar kepada pelanggan selepas mereka membuat tempahan atas talian. Berdasarkan kepada sistem yang sedia ada, semua maklumat tempahan, maklumat peralatan, profil staff dan lain-lain maklumat disimpan di dalam satu buku log. Ini agak merbahaya kerana kemungkinan untuk maklumat tersebut hilang atau rosak adalah tinggi. Jadi, FCMS juga adalah direka untuk semua maklumat tempahan dan maklumat pengurusan disimpan didalam satu database supaya lebih selamat.

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TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	SUPERVISOR'S DECLARATION	ii
	STUDENT'S DECLARATION	iii
	DEDICATION	iv
	ACKNOWLEDGEMENT	v
	ABSTRACT	vi
	ABSTRAK	vii
	TABLE OF CONTENTS	viii
	LIST OF TABLES	xii
	LIST OF FIGURES	xiii

1 INTRODUCTION

1.1	Background	1
1.2	Problem Statement	3
1.3	Objectives	4
1.4	Scope	5
1.5	Thesis organization	6

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2 LITERATURE REVIEW

2.1	Overall Manual System	9
	2.1.1 Manual Booking Process	10
	2.1.2 Data Recording System	13
2.2	Web – Based System	15
	2.2.1 MySQL	16
	2.2.2 Hypertext Transfer Protocol	18
	2.2.3 Hypertext Preprocessors	19
2.3	SMS System Using GSM Modem	20
2.4	Table of Summary	23

3 METHODOLOGY

3.1	Project Methodology	27
	3.1.1 Planning Phase	29
	3.1.2 Analysis Phase	30
	3.1.2.1 Flowchart	31
	3.1.2.2 Use Case	34
	3.1.2.3 Design Phase	35
	3.1.3.1 Interface Design	36
	3.1.2.4 Implementation Phase	38
	3.1.2.5 Maintenance	39
3.2	Project Requirement	39
	3.2.1 Software Requirement	40
	3.2.2 Hardware Requirement	41
3.3	Conclusion of Methodology	42



4**IMPLEMENTATION**

4.1	Section Program and Interface	44
4.1.1	Homepage	44
4.1.2	Gallery	46
4.1.3	Location	48
4.1.4	About Us	50
4.1.5	Contact Us	52
4.1.6	Customer Home	54
4.1.7	Customer Profile	56
4.1.8	Customer Booking	58
4.1.9	Staff Home	60
4.1.10	Add Booking	62
4.1.11	Add Equipment	64
4.1.12	Register Form	66
4.2	Database	
5.1	4.2.1 Admin Table	69
5.2	4.2.2 Customer Table	69
5.3	4.2.3 Staff Table	70
5.4	4.2.4 Booking Table	70
	4.2.5 Equipment Table	71

5**RESULTS AND CONCLUSION**

5.1	Result	73
5.2	Conclusion	74

REFERENCES

Appendix	75
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LIST OF TABLES

TABLES NO	TITLE	PAGE
2.1	Table of Summary	25
3.1	Software Requirement	40
3.2	Hardware Requirement	41

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LIST OF FIGURES

FIGURE	TITLE	PAGE
2.1	Manual Booking Process	11
2.2	Manual Recording Data in Logbook	14
2.3	Architecture of SMS System	22
3.1	System Development Life Cycle (SDLC)	28
3.2	Flowchart for Users	32
3.3	Flowchart for Admin	33
3.4	Use Case Diagram	35
3.5	Sketch of System Interface (Menu Form)	36
3.6	Sketch of System Interface (Login Form)	37
3.7	Sketch of System Interface (Booking Form)	37

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4.1.1	Homepage of FCMS	44
4.1.2	Gallery Interface	46
4.1.3	Location Interface	48
4.1.4	About Us Interface	50
4.1.5	Contact Us Interface	52
4.1.6	Customer Home	54
4.1.7	Customer Profile	56
4.1.8	Customer Booking	58
4.1.9	Staff Home	40
4.1.10	Add Booking	42
4.1.11	Edit Equipment	44
4.1.12	Sign Up Form	46
4.2.1	Admin Table	69
4.2.2	Customer Table	69
4.2.3	Staff Table	70

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4.2.4	Booking Table	70
4.2.5	Equipment Table	71

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CHAPTER 1

INTRODUCTION

This chapter is an overview of the research. It gives guideline start to the readers to understand what the research is all about. The problem statement, objectives, scope and thesis organization are explained detail in this chapter.

1.1 Background

The system named as “Futsal Court Management System”.It is divided to the two main services which are to support online management system and integrate with GSM modem to give confirmation message to the customer.

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Nowadays, futsal has become one of the major sport in many country. It is being one of the favourite sport among teenagers, adult and kids, including mans and womans. That is why we can see a lot of futsal court has been opened everywhere.

As in Chendering Futsal Club, many other futsal court today still use the manual booking system. This system is quite unfriendly to the user. By using the current system, users need to call or come to the futsal club by themselves to check the availability and to book the court which is wasting their time if the court is not available. Sometimes, there are happens the clashing when the booking data is not organized nicely. The booking data of the current system will be stored manually and it has a high probability that the data might lose or broken. Besides that, there are still so many lackage of using the current booking system.

The other problem is the management of court resources and staffs. Though the number of staffs and resources are not as big as other company, but, they are still need to be organized systematically since the staffs need to work until 6 a.m everyday.

That is why, the system is need to be replaced with a new system which is more systematic and user friendly.

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1.2 PROBLEM STATEMENT

One of major problems related to the futsal court is about their booking service. Besides that, the management services also need to be conducted efficiently.

1. Most of people today having a busy lifestyle. Time is becoming one of the priceless thing. They have no much time to do such a complicated job for no result. However, basically, the people or person must come to the Futsal Court to book court and other resources. And what if at the same time, all of the court has fully booked. For sure, they are just wasting their time.

2. The owner also keeps or records their booking data in a log book. The chance and probability the data might lose are high. Another problem that occur are when the team want to booking the futsal court, there are always happens the clashing between another teams. This scenario happens because the manual system does not have a proper management to handle it.

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3. Besides that, most of the futsal court is open for night and day. That means their worker needs to work in shift. And it is quite complicated to manage their staffs manually. That is why the futsal court management need a system which can arrange the schedule automatically.

Based on the problems that occur, this project will give benificial to the owner of Futsal Court or the people in order to make a management more efficient and follow up with the technology using nowadays. This system also will make the organization became so easy and faster.

1.2 OBJECTIVES

The main aim of this project is to design, develop a system which would assist the people who love to play futsal and futsal court owner. The overall objectives of the project are:

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1. To develop a web-based system of futsal court booking that will integrate with the GSM modem.
2. To give confirmation message to the customer to approve booking.
3. To save or record all booking data information in a database system which is more secure.

1.4 SCOPE

The system is developed for the several different scopes.

1. Customer – Enable customers booking court and other resources by using online system.
2. Staffs – Edit equipments and all court's management by using online system.
3. Database – To store all the booking data securely.

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1.5 THESIS ORGANIZATION

This thesis consists of six (6) chapters. Chapter one (1), discuss on introduction of this project. This chapter has several parts such as introduction, problem statement, objectives, scopes and thesis organization.

Chapter two (2) is literature review that will explain the previous projects that have been done on baseline online system. This chapter consists of two parts, i.e., studies on current or existing system and explains about hardware and software requirement that have been used to implement this project. For this chapter, the related information can get via book, internet, article, journal and others.

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Chapter three (3) is methodology. This chapter will discuss the proposed approach and the entire draft of the project that taken in the development of this project. It also will explain the justification of the proposed approach, hardware and software requirements. This topic also explains project development that has designed.

Chapter four (4) to chapter six (6) is about the implementation and design the system according to research and methodology that has been done in chapter one (1) to chapter (3).

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CHAPTER 2

LITERATURE REVIEW

This chapter will explain briefly on the research study of web-based online booking system. The manual process of booking system in Chendering Futsal Court also will be discussed. This includes the process flow, data storage, and booking technique by using manual system and web-based system..The other scope of this chapter is a summary of existing online booking system.

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In case study, three (3) studies have been done in order to finish this project. The research are including the following scope:

- Manual System
- Web – Based System
- Summary of existing System

2.1. Overall Manual System

Chendering Futsal Court is one of the famous courts in Kuantan. It receives a lot of customer everyday to rent the court including some of futsal equipments such as , ball, net, and others. The number of customers will increase during peak hour that is from 7.00 p.m to 9.00 p.m, at the midnight from 12.00 a.m to 6.00 a.m, and on the weekend.

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However, as in many other futsal courts today, the current system in Chendering Futsal Club that has been used by the staffs and customers are only the manual system. This manual system operates by recording all the booking data in a log book and will be shown on a white board in the office. Procedure and policy for each module in the manual system will be discussed in the subtopic below.

2.1.1. Manual Booking Process

By using the current system, users need to call or come to the Chendering Futsal Court by themselves to check the availability of the court. After that, staffs need to check the logbook to see the recorded booking data. If the court is available at the needed time, customers can proceed with their booking process. And staffs will update the booking data in their logbook. However, if the court is not available and has been booked, the booking process will automatically terminate and rejected.

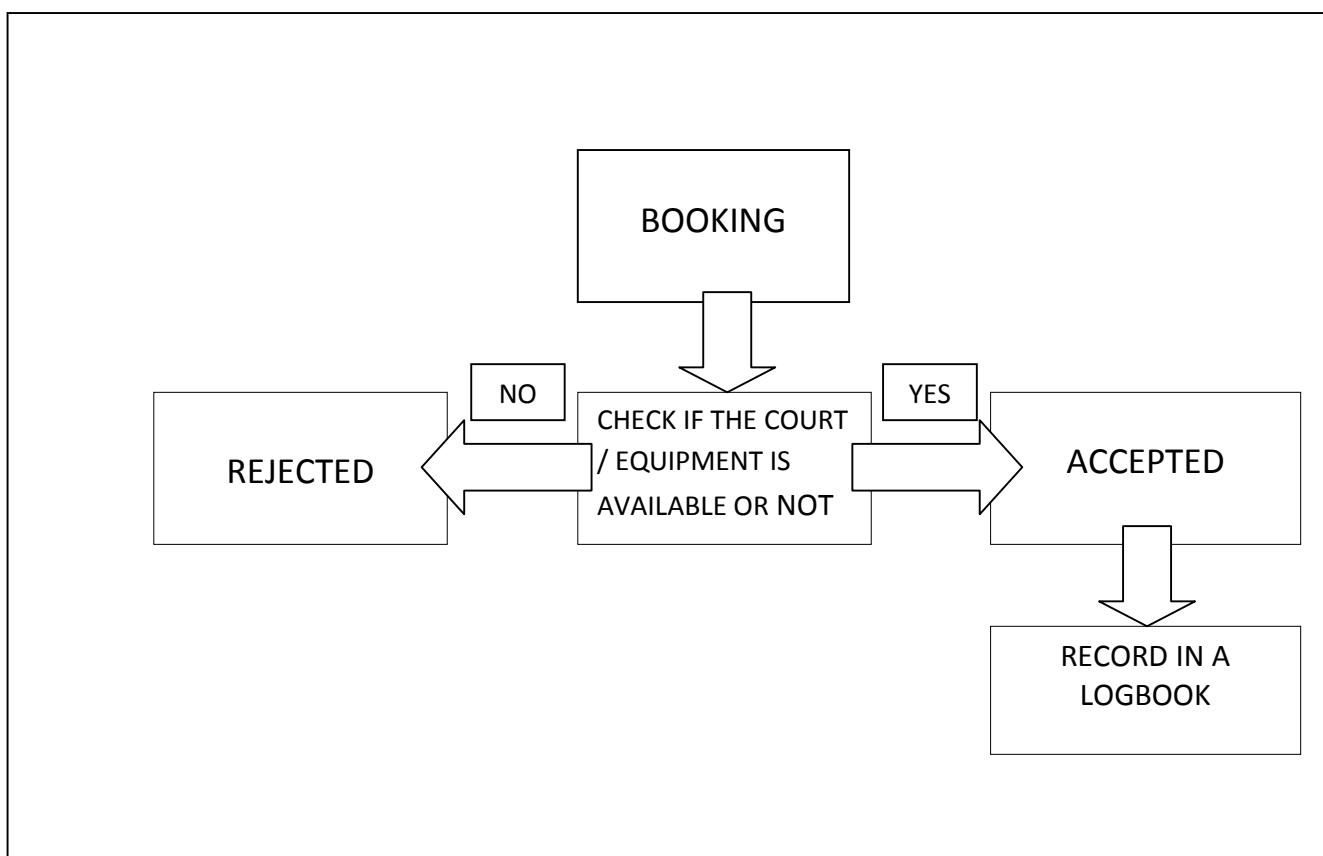
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The flow chart of manual booking process is as shown in the figure below.



2.1 Manual Booking Process

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This kind of booking data is improper for both; the customers and the staffs. The customers is wasting their time to come to the court by themselves to check the availability of the court, especially when the court has been booked. The staffs also have to do uneasy jobs by checking the booking data in a logbook by themselves. Besides that, they also need to update the data each time the customers do the booking.

Sometimes, the staffs may do some error in checking or recording the data. Maybe sometimes they are too sleepy or tiring to work all over the day. At the condition, they will do mistakes. Any error should not have been done at this kind of company in order to keep the profit gain each day.

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2.1.2 Data Recording System

Currently, all the data in Chendering Futsal Court will only be recorded in a logbook and files. All the data is including the booker's name, booking hour, booking date, phone number, and other equipment used, name of the staffs who record the data and some of the staffs data. The booking data is recorded according to date and hour. Figure below is an example on how the booking data has been recorded in the logbook.

However, by using this system, sometimes there are happens clashing if the data is not organized carefully. Other than that, the possibility of the data might be broken or lost is also high.

In order to secure the data, all the booking data is need to be saved in a perfect storage database such as MySQL.

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05 OCTOBER 2011				
Court Hour	Court A	Court B	Staff's Name	Others.
00.00 – 01.00	Mohd. Asyraf 017-9023412 Shoes – 4 pairs		Khairul Fahmi	-
01.00 – 02.00				
02.00 – 03.00				
03.00 – 04.00				
04.00 – 05.00				

Figure 2.2 Manual Recording Data in a Logbook

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