

**SANDAKAN PUBLIC HALL MANAGEMENT  
SYSTEM**

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**FACULTY OF COMPUTING AND INFORMATICS  
UNIVERSITI MALAYSIA SABAH**

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**SANDAKAN PUBLIC HALL MANAGEMENT  
SYSTEM**

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**THESIS SUBMITTED IN PARTIAL FULFILMENT  
OF THE REQUIREMENT FOR THE DEGREE OF  
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**FACULTY OF COMPUTING AND INFORMATICS  
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**2015**

## **DECLARATION**

I hereby declare that this thesis, submitted to Universiti Malaysia Sabah as partial fulfillment of the requirement for the degree of Bachelor of Computer Science (Network and System Management). I also certify that this piece of work is completed by my own except some resources, information and references which have been declared in this thesis.

30 JUNE 2015

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## **CERTIFIED BY**

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Madam Salmah Fattah  
SUPERVISOR

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## **ABSTRACT**

Sandakan Public Hall Management System was a web-based reservation system that was developed to facilitate the reservation management for several public hall that located around the Sandakan area. The main objective for this project is to provide an online medium and facilitate the client to do reservation through online reservation system. Secondly, to facilitate Sandakan Municipal Council by generating the statistical report for public hall usage and income report annually and monthly. Thirdly, to provide information for client about the public hall reservation in order to facilitate the reservation processes. The public hall is entirely supervised by Sandakan Municipal Council organization. In this project, the system also provides public hall description such as the reservation rental cost, capacity, location and hall equipment booking. Besides that the system is able to generate reservation receipt after reservation status was approved. The selected System Development Life cycle (SDLC) method for this project was RAD – Prototyping development model. Thus, this project involved the interaction with user and feedback was collected to redesign and reimplement the system to meet the user requirement.

## **ABSTRAK**

### **SISTEM PENGURUSAN DEWAN MASYARAKAT SANDAKAN**

*Sistem Pengurusan Dewan Masyarakat Sandakan merupakan sebuah sistem yang dibina berunsurkan sistem tempahan atas talian yang bertujuan untuk memudahkan pengurusan tempahan beberapa dewan masyarakat yang terletak di sekitar Daerah Sandakan. Tujuan projek ini dilaksanakan adalah untuk memudahkan pelanggan membuat tempahan melalui sistem tempahan atas talian. Selain daripada itu, bagi memudahkan Majlis Perbandaran Sandakan menjana laporan bulanan dan tahunan bagi statistik penggunaan dewan dan pendapatan dewan. Sistem ini juga menyediakan informasi mengenai tempahan dewan masyarakat kepada pelanggan bagi memudahkan proses tempahan dibuat. Dewan-dewan masyarakat berkenaan diletakkan dibawah penyeliaan Majlis Perbandaran Sandakan. Dalam projek ini, sistem ini dilengkapi dengan maklumat seperti kos tempahan dewan, kapasiti dan tempahan perlatan dewan. Sistem ini juga berkemampuan mengeluarkan resit tempahan dewan selepas tempahan diluluskan. Kitaran hayat pembangunan sistem (SDLC) yang diguna pakai bagi proses pembangunan projek ini adalah model Prototaip. Oleh itu, projek ini akan melibatkan interaksi dengan pengguna dan maklumbalas akan diambil bagi tujuan rekabentuk dan pelaksanaan semula sistem tersebut bagi memenuhi kehendak pengguna.*

## CONTENTS

	<b>PAGE</b>
<b>DECLARATION</b>	<b>i</b>
<b>ACKNOWLEDGEMENT</b>	<b>ii</b>
<b>ABSTRACT</b>	<b>iii</b>
<b>ABSTRAK</b>	<b>iv</b>
<b>TABLE OF CONTENTS</b>	<b>v</b>
<b>LIST OF FIGURES</b>	<b>ix</b>
<b>LIST OF TABLE</b>	<b>xiv</b>
<b>CHAPTER 1: INTRODUCTION</b>	<b>1</b>
1.1 Introduction	1
1.2 Problem Background	2
1.3 Problem Statement	3
1.4 Objectives	3
1.5 Scope	4
1.6 Organization of Report	6
<b>CHAPTER 2: LITERATURE REVIEW</b>	<b>8</b>
2.1 Introduction	8
2.2 Public Hall definition	8
2.3 Sandakan Municipal Council Public Hall reservation process	9
2.4 Sandakan Public Hall Management System	12
2.5 The factors that affect human attraction towards using a web application	15
2.6 Review of existing system	16
2.6.1 Sistem e-Tempahan Pejabat SUK Negeri Selangor	16
2.6.1.1 System Operations	17

2.6.2	E-DEWAN	22
2.6.2.1	System Operations	23
2.6.3	E-tempahan (Majlis Perbandaran Pulau Pinang)	24
2.6.3.1	System Operations	24
2.6.4	e-Tempahan UITM Kota Bharu (Sistem Tempahan Bilik Online)	27
2.6.4.1	System Operations	28
2.7	Comparison of Existing System	29
2.8	Conclusion	31
<b>CHAPTER 3: METHODOLOGY</b>		<b>32</b>
3.1	Introduction	32
3.2	System Development Life Cycle (SDLC)	32
3.2.1	Planning Phase	34
3.2.2	Analysis, Design and Implementation Phase	35
3.2.3	System Prototype	36
3.2.4	Implementation Phase (Out of the cycle)	36
3.2.5	System Phase	36
3.3	Software Requirements	37
3.4	Conclusion	38
<b>CHAPTER 4: SYSTEM ANALYSIS AND DESIGN</b>		<b>39</b>
4.1	Introduction	39
4.2	System Design	39
4.2.1	Context Diagram	40
4.2.2	Data Flow Diagram Level 0	41
4.2.3	Data Flow Diagram Level 1 for each module	43
4.2.4	Entity-Relationship Diagram (ERD)	44
4.3	Database Design	45
4.3.1	Data Dictionary	45
4.4	User Interface Design	51
4.5	Conclusion	56



<b>CHAPTER 5: IMPLEMENTATION</b>	<b>57</b>
5.1 Introduction	57
5.2 Implementation	57
5.2.1 Public Hall Reservation Process	58
5.2.2 Hall Equipment Booking Process	67
5.2.3 Public Hall and Hall equipment cancellation process	71
5.2.4 Staff registration Process	73
5.2.5 Public hall, hall equipment, terms and conditions, e-Dewan staff and public hall reservation schedule Management Process	76
5.2.6 Report generation process	79
5.2.7 Public hall, hall equipment, terms and conditions, additional charges , e-Dewan staff and user manual information	81
5.2.8 Info e-Dewan, user manual and additional charges management	85
5.3 Database implementation	87
5.4 Conclusion	87
<b>CHAPTER 6: SYSTEM TESTING</b>	<b>88</b>
6.1 Introduction	88
6.2 Unit Testing	88
6.2.1 Testing checklist for Admin Module	89
6.2.2 Testing checklist for Staff Module	90
6.2.3 Testing checklist for Guest Module	90
6.3 Integration Testing	93
6.4 System Testing	98
6.5 Acceptance Testing	99
6.6 Conclusion	100

<b>CHAPTER 7: CONCLUSION AND FUTURE WORKS</b>	<b>101</b>
7.1 Introduction	101
7.2 Project advantages	101
7.3 Problem faced during system development	101
7.4 Project constraints	102
7.5 Recommendation for future works	102
7.6 Conclusion	103
<b>REFERENCES</b>	<b>104</b>
<b>APPENDIX</b>	
APPENDIX A Public Hall reservation form	106
APPENDIX B System testing form	108

## LIST OF FIGURES

<b>Figure No.</b>	<b>Page</b>
2.1 Reservation Process Flowchart	10
2.2 Sandakan Public Hall Management System Flowchart	13
2.3 Sandakan Public Hall Management System hall equipment booking Flowchart	14
2.4 Main Page	17
2.5 Reservation Form	18
2.6 Personal Information Form	19
2.7 Additional Equipment reserved	20
2.8 Submission and Agreement process	22
2.9 Reservation Form	23
2.10 Reservation Status	23
2.11 Main page	24
2.12 Choose halls and date availability	25
2.13 Entered Personal information	26
2.14 Reservation Status Check	27
2.15 E-Tempahan Main Page	28
3.1 RAD – Prototyping Development Model	33
4.1 Context diagram for Sandakan Public Hall Management System	40
4.2 Data flow diagram Level 0 for Sandakan Public Hall Management System	41
4.3 Data Flow Diagram Level 1 for Reservation Process	43
4.4 Entity-Relationship Diagram for Sandakan Public Hall	44

## Management System

4.5	Sandakan Public Hall Management System Main Page	51
4.6	Admin and Staff Log in page	51
4.7	Staff registration page	52
4.8	Personal Information required for reservation page	52
4.9	Public hall information page	53
4.10	Contact detail page	53
4.11	Hall Equipment reservation page	54
4.12	Admin page (List of user)	54
4.13	Staff page (Search for list of reservation based on date)	55
4.14	Staff page (List of reservation based on date requested)	55
5.1	Front page	58
5.2	Log in page	59
5.3	“Kemudahan & Kadar” menu	59
5.4	Step 1 - Public Hall Reservation Process (Types of Public Hall, Start and End Date and time reservation)	60
5.5	Step 1 - Public Hall Reservation Process (Check Reservation Date Availability – Validation)	60
5.6	Reservation Schedule	61
5.7	Step 2 - Reservation form	61
5.8	Message prompt request for extra hall equipment booking	62
5.9	Select the types of hall equipment	62
5.10	Step 3 - Choose types of hall equipment and insert the Quantity	62
5.11	Step 4 - Customer Personal Information form	63
5.12	Step 5 – Submit the Reservation form	63
5.13	Step 6 – Print the Reservation receipt form with booking	64

Number	
5.14	Successful message 64
5.15	Check the reservation status (Insert booking number) 65
5.16	Reservation status 65
5.17	Reservation status (Error message) 65
5.18	Staff main page 66
5.19	Reservation list 66
5.20	Reservation detail 67
5.21	Reservation update detail 67
5.22	Step 1 and 2 – Hall equipment booking 68
5.23	“Kemaskini” button 68
5.24	Insert hall equipment quantity 68
5.25	Step 3 – Customer Personal Information form 69
5.26	Step 4 – Submit the booking form 69
5.27	Step 5 - Print the Booking receipt form with booking 70
Number	
5.28	“Tempahan” menu 70
5.29	Hall equipment booking list 71
5.30	Guest main page (Cancellation link) 71
5.31	Reserve cancellation page 72
5.32	Error message (empty field detected) 72
5.33	Successful message (Cancellation process success) 72
5.34	Log in page 73
5.35	Log in page (error message) 73
5.36	Staff registration page 74
5.37	Staff registration page (error message) 74

5.39	Successfully staff registration	75
5.40	"Senarai Pengguna" menu	75
5.41	System user list page	75
5.42	Staff registration status link	76
5.43	Staff registration status page	76
5.44	"Pengurusan" menu	77
5.45	Public hall management page	77
5.46	Hall equipment management page	78
5.47	Terms and conditions management page	78
5.48	e-Dewan staff management page	78
5.49	Public hall reservation schedule	79
5.50	Reservation schedule error message	79
5.51	Report generation link	79
5.52	Public hall usage statistics page ("Statistik" menu)	80
5.53	Public hall income report page ("Pendapatan" menu)	80
5.54	"Keseluruhan" and "Bulanan/Tahunan" link	80
5.55	Utility and rate page (List of Public Hall)	81
5.56	Utility and rate page (Public Hall Description)	81
5.57	Utility and rate page (List of Public Hall equipments)	82
5.58	Utility and rate page (Public Hall equipments description)	82
5.59	Utility and rate page (Terms and Conditions)	83
5.60	Utility and rate page (List of additional charges)	83
5.61	Contact page	84
5.62	Help page (Step-by-step to make a public hall reservation and hall equipment booking)	84
5.63	"Bantuan" menu	85

5.64 Edit page for e-Dewan information	85
5.64 Edit page for step-by-step on how to make public hall reservation and hall equipment booking	86
5.65 e-Dewan additional charges management	86
5.66 e-Dewan delivery charges management	86
5.67 Database "pubhall"	87
6.1 Acceptance testing satisfactory level bar	100

## LIST OF TABLES

<b>Table No.</b>		<b>Page</b>
2.1	Sandakan Municipal Council Public hall information	11
2.2	Public hall Utility charges	11
2.3	Comparison of Existing systems	29
3.1	Summary of software requirements	37
4.1	Data dictionary for Table "user"	45
4.2	Data dictionary for Table "hall"	46
4.3	Data dictionary for Table "hallreserve"	46
4.4	Data dictionary for Table "contact"	47
4.5	Data dictionary for Table "equipment"	47
4.6	Data dictionary for Table "customer"	48
4.7	Data dictionary for Table "add"	48
4.8	Data dictionary for Table "equipmentbook"	49
4.9	Data dictionary for Table "bookproduct"	49
4.10	Data dictionary for Table "delivery"	49
4.11	Data dictionary for Table "terms"	50
4.12	Data dictionary for Table "steps"	50
4.13	Data dictionary for Table "info"	50
4.14	Data dictionary for Table "about"	50
6.1	Testing checklist for administrator	89
6.2	Testing checklist for staff	90
6.3	Testing checklist for guest module	92
6.4	Testing checklist for Guest Module integration testing	93
6.5	Testing checklist for Staff Module integration testing	95



6.6	Testing checklist for Admin Module integration testing	97
6.7	Testing checklist for system testing	98
6.8	Testing checklist for acceptance testing	100

## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Introduction**

Chapter 1 introduces the overview and general background of this project with the title 'Sandakan Public Hall Management System'. This project is about a reservation system that developed to manage the public hall reservation that put under the supervision of Sandakan Municipal Council organization.

Literally, this chapter can be divided into six different sections. The first section is the general review and introduction of this chapter. Then, the second section would be the problem background that explained and provides the reasoned regarding the need of this project. Section three is the problem statement that summarizes and discussed the current problem encountered. Section four states the objective of this project to solve the problem faced in problem statement. After that, the fifth section explained the scope of this project that contains user modules and project modules. Finally, the final section concludes the organization of the report.

The purpose of this project is to facilitate Sandakan Municipal Council to manage the public hall reservation. Thus, the Public Hall Management System was developed to help the Sandakan Municipal Council client to make a public hall reservation for any indoor occasion either formal or informal event. Besides that, client can make a reservation on the halls equipment such as tables, fans, chair and other equipments needed for the events.

## 1.2 Problem background

Sandakan Municipal Council was a government organization that has been given mandate to supervise and administer the Sandakan area and also the residents. Other than that, the organization also aims to manage the Sandakan resident welfare and also in charge in the development of the Sandakan City. Thus, Sandakan Municipal Council has provides a lot of facilities especially for the Sandakan residents. For example such as dry and wet market, Tamu, Public Hall, parking and so on.

Sandakan Public hall was build in order to prepare for small and large event such as exhibition event, weddings, competition, sports and many more. Therefore, Sandakan public hall reservations are open to anyone to organize an event that needs an indoor facility. There were several public hall located around Sandakan and those halls were manages and guarded under Sandakan Municipal Council. Today's, they were four halls which are 'Dewan Masyarakat Sandakan', 'Dewan Sibuga Batu 5', 'Dewan Sibuga Jaya Batu 8' and lastly 'Dewan Sri Gum-Gum'. Continue by that, several staff was placed in each public hall that responsible to handle the reservation process and the public halls welfare.

Currently, Sandakan Municipal Council was practicing a manual method for reservation process. Client who wanted to make reservation can either download reservation form from Sandakan Municipal Council official website or come to 'Dewan Masyarakat Sandakan' (center) then handed it to the staff in charge (Public Hall Clerk – Mrs. Aisah). Then, they need to fill in the reservation forms and then wait for reservation approval that later would be informed by the public hall clerk. Problem occur when they are many reservation forms, related document that need to be store using a filing system .Therefore, it is very troublesome to search and find a specific forms when many reservation would take place from day-to-day.

On top of that, the description about the public halls such as rental cost, location, capacity and halls equipment booking are not stated clearly by the organization thus make it harder for client to make a reservation. On top of that, in order to do reservation, client needs to come to the "Dewan Masyarakat Sandakan" (center) that located at the center of Sandakan City that would which takes about 25 minutes to travel and public hall clerk receive a lot of complaint that the public hall reservation center was too far. Lastly, the report for public hall income also was calculated manually by public hall clerk.

### **1.3 Problem Statement**

**i. Client need to travel about 25 minutes to the center.**

Currently, in order to do reservation client itself needs to come to the "Dewan Masyarakat Sandakan" (center) which takes about 25 minutes to travel. Thus, a lot of client complaint that it was too far because client had to travel to the center for about two times to through the old method. First, to fill in the form, send it and wait for approval within 24 hours and second times is the payment process.

**ii. The public hall income report was produce regularly but none for public hall usage statistics.**

The report for all Sandakan public hall income was prepared regularly. Even though the income report was practically produce but the statistics for the public hall usage was never being produced.

**iii. Public halls rental cost, location, capacity and hall equipment booking is not stated clearly.**

The description regarding public halls rental cost, capacity, location and halls equipment booking such as tables and chair, fan, red carpet and other equipments for the whole Sandakan public halls supervised by Sandakan Municipal Council were not stated clearly as client need to either pay a visit to the center or make phone call asking for the details.

### **1.4 Objectives**

**The objectives for this project are:**

- i. To provide an online medium and facilitate the client to do reservation through online reservation system.
- ii. To facilitate Sandakan Municipal Council to generate report for public hall usage statistic and income report annually and monthly.
- iii. To provide information for client about the public hall reservation in order to facilitate the client to make reservation.

## **1.5 Scope**

In this section, it consists of two major scopes which include user module and project module. User module explained about the type of user involve and also their roles in this system while project module summarizes the modules of Sandakan Public Hall Management System.

### **1.5.1 User Module**

User module consists of three main users that comprises of IT Officer (Administrator – Mr.Abu Hj Lele), Staff (Public Hall Clerk – Mrs. Aisah) and customer (Guest).

### **1.5.2 Project Module**

#### **a) Reservation processes and status**

Client was able to view on the public hall description (Public hall rental cost, location, capacity and hall equipment booking). Before reservation form can be submitted client also able to check and reserve available reservation date. Sandakan Public halls reservation form includes the reservation and personal details. The reservation information includes chosen public hall, purpose (event), date and time. While personal details include name, address, identity card number and contact number. Then, the reservation status need to be confirmed by the Public hall Manager (Mrs. Vianny) or the staff (Public Hall Clerk – Mrs. Aisah) and client could check reservation status through the system.

#### **b) Manage hall equipment and public hall**

The hall equipment and public hall information updates would be handled by public hall clerk itself in Sandakan Municipal Council. The processes involve the adding, edit and delete the hall equipment and public hall information.

**c) Halls Equipment booking**

Halls equipment booking such as tables and chair, fan, red carpet and other equipments can be booked after reservation and personal details has been fill in. The equipment can either be booked during the reservation process or separated. The booking request was done by client while the staff would responsible to approve the request.

**d) Generate reservation receipt**

After reservation status was approved client need to print out the receipt which contains the total payment. Then, client can make their payment to the 'Dewan Masyarakat Sandakan' (center) together with the receipt as a proved.

**e) Generate income report**

The system will generate the statistic report regarding public halls used and also the income report either monthly or annually. Then, the report generation would only available to administrator and staff only.

## **1.6 Organization of Report**

This section basically summarizes the content of each chapter present in this report. Overall, this report contains 7 chapters.

### **1.6.1 Chapter 1: Introduction**

This section introduces the project purpose and background. This chapter includes the introduction, problem background, problem statement, objectives, project scope and organization of report.

### **1.6.2 Chapter 2: Literature Review**

This chapter review on the existing system, concepts and methods comparison that are related to this project. It also includes the techniques and concepts that will be applied on the project.

### **1.6.3 Chapter 3: Methodology**

This chapter reports approaches and overall framework taken in building the Public Hall Management System. It would also comprise of the techniques that will be applied in the design and implementation of the project. This chapter also contains justification regarding the methods used and software and hardware requirements.

### **1.6.4 Chapter 4: System Analysis and Design**

This chapter overall explained about the system analysis and design for Sandakan Public Hall Management System. This chapter also includes the system architecture and system requirements that follow the user requirement.

### **1.6.5 Chapter 5: Implementation**

This chapter reports the result of this project in details where screenshots was shown to show the workflow of this project.

### **1.6.6 Chapter 6: Testing**

This chapter reports on several types of testing used to the system. Therefore, each module for this project is tested and then the result would be analyzed.

### **1.6.7 Chapter 7: Conclusion and Future works**

This chapter overall summarizes the project and also the result. In this chapter, the limitations, advantages and recommendation for the future works also included.



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e-Tempahan UITM Kota Bharu (Sistem Tempahan Bilik Online)

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