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JUDUL: SISTEM PENGURUSAN BANANG JAYA SESI PENGAJIAN: 2007/08 Sava NOR HANISAH BT. MOHAMAD

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SISTEM PENGURUSAN SEKOLAH BANANG JAYA

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

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY UNIVERSITI TEKNIKAL MALAYSIA MELAKA 2008

C Universiti Teknikal Malaysia Melaka

DECLARATION

I hereby declare that this project report entitled

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ABSTRACT

Sistem Pentadbiran Sekolah Banang Jaya shifts the education's system to the latest technology where management becomes easier, quicker and more efficient. Sistem Pentadbiran Sekolah Banang Jaya,(SPSBJ) is a complete web-based system for administrators, teachers, parents and students, to help schools improve the quality of education, increase student performance and better communicate with parents. Its flexible features that support multiple users, enabling them to record, access reports, as well as manage their student data, and performance records in real-time. Besides that, SPSBJ is able to support decision making which will lessen the work of decision maker as they only need to review and approve the decision. The weakness of the current system that is slow, not user friendly, not flexible, devoid of discipline module make the current system not more efficient. This project is focus on admin module and discipline module and school administration and discipline teacher as target user. Using Iterative Lifecycle methodology, this system is developed using PHP and MySQL as database.

ABSTRAK

Sistem Penurusan Sekolah Banang Jaya menggerakkan sistem pendidikan kepada teknologi terbaru di mana pengurusan menjadi lebih mudah, cepat dan berkesan. Pengurusan Sekolah Banang Jaya(SPSBJ) adalah sistem yang berasaskan web sepenuhnya untuk para pentadbir, guru, ibu bapa dan pelajar, untuk membantu memperbaiki kualiti pendidikan di sekolah, menambah prestasi pelajar dan komunikasi yang lebih baik dengan ibu bapa. Ciri-ciri yang fleksibel yang menyokong pelbagai pengguna, membolehkan mereka merekod, mencapai laporan, serta menguruskan data pelajar dan rekod pencapaian di masa semasa. . Selain itu, SPSBJ turut menyokong dalam membuat keputusan yang mana banyak mengurangkan kerja pembuat keputusan di mana mereka hanya perlu bersetuju dengan keputusan yang dilakukan oleh sistem. Masalah sistem semasa yang lambat, tidak mesra pengguna, tidak fleksible, serta ketiadaan modul disiplin menjadikan sistem semasa menjadi tidak efficient. Skop projek ini lebih tertumpu kepada modul pentadbiran dan modul disiplin serta pihak pentadbir sekolah serta guru disiplin sebagai skop pengguna.Menggunakan metodologi Iterative Lifecycle sistem ini dibangunkan menggunakan bahasa pengaturcaraan PHP dan MySQL sebagai perisian pangkalan data.

TABLE OF CONTENTS

CHAPTER	SUB	JECT	PAGE
	ACK	KNOWLEDGEMENTS	Û
	ABS	TRACT	iii
	ABS	TRAK	iv
	TAB	BLE OF CONTENTS	v
	LIST	T OF TABLES	viii
	LIST	r of figures	x
CHAPTER I	INT	RODUCTION	
	1.1	Project Background	1
	1.2	Problem Statement	2
	1.3	Objective	3
	1.4	Scope	5
	1.5	Project Significance	6
	1.6	Expected Output	7
	1.7	Conclusion	7
CHAPTER II	LIT	ERATURE REVIEW AND	
	PRO	DJECT METHODOLOGY	
	2.1	Introduction	8
	2.2	Facts and Findings	9
	2.2	2.1 Domain	9
	2.2	2.2 Existing System	9

	2.2.3 Technique	14
	2.3 Project Methodology	18
	2.3.1 Approach	18
	2.3.2 Software Development Life Cycle	18
	2.3.3 Database Life Cycle	20
	2.4 Project Requirements	23
	2.4.1 Software Requirement	23
	2.4.2 Hardware Requirement	24
	2.4.3 Other Requirement	24
	2.5Project Schedule and Milestones	25
	2.6 Conclusion	25
CHAPTER III	ANALYSIS	
	3.1 Introduction	26
	3.2 Problem Analysis	27
	3.2.1 Background of Current System	27
	3.3 Requirement Analysis	30
	3.3.1 Data Requirement	31
	3.3.2 Functional Requirement	31
	3.3.3 Non-functional Requirement	33
	3.3.4 Others Requirement	34
	3.3.4.1 Software Requirement	34
	3.3.4.2 Hardware Requirement	38
	3.3.4.3 Network Requirements	39
	3.4 Conclusion	39

CHAPTER IV	DES	IGN		
	4.1	Introduction	40	
	4.2	High-Level Design	41	
	4.2	.1 System Architecture	41	
	4.2	2 User Interface Design	42	
		4.2.2.1 Navigation Design	43	
		4.2.2.2 Input Design	44	
		4.2.2.3 Output Design	45	
	4.2	.3 Database Design	45	
		4.2.3.1 Conceptual and Logical Database Design	45	
		4.2.3.2 Business Rules	47	
		4.2.3.3 Logical Database Design	48	
		4.2.3.3.1 Normalization	48	
		4.2.3.3.2 Data Dictionary	49	
		4.2.3.4 DBMS Selection	49	
	4.3	System Architecture	50	
	4.3	.1 Software Design	50	
	4.3	.2 Physical Database Design	57	
		4.3.2.1 Data Definition Language (DDL)	57	
		4.3.2.2 Design Security Mechanism	58	
	4.4	Conclusion	59	
CHAPTER V	IMP	LEMENTATION		
	5.1	Introduction	60	
	5.2	Software Development Environment Setup	60	
	5.2	.1 Database Development Environment Setup	62	
		5.2.1.1 Configuring Database Connection	62	
		5.2.1.2 Assigning Admin Login	63	
	5.3	Database Implementation	64	
	5.3	.1 Restricting and Sorting Data	64	
	5.4	Software Configuration Management	65	

	5.4	.1 Configuration Environment Setup	66
	5.4	2 Version Control Procedure	67
	5.5	Implementation Status	67
	5.6	Conclusion	68
CHAPTER VI	TES	TING	
	6.1	Introduction	69
	6.2	Test Plan	69
	6.2	.1 Test Organization	70
	6.2	.2 Test Environment	71
	6.2	.3 Test Schedule	72
	6.3	Test Strategy	73
	6.3	.1 Classes of tests	73
	6.4	Test Design	74
	6.4	.1 Test Description	74
	6.4	.2 Test Data	79
	6.5	Test Result and Analysis	80
	6.6	Conclusion	81
CHAPTER VII	PRO	JECT CONCLUSION	
	7.1	Observation on Weakness and Strength	82
	7.2	Propositions for Improvement	84
	7.3	Contribution	85
	7.4	Conclusion	85
	Refe	rences	86

viii

87

Bibliography

LIST OF TABLES

TAE	BLE TITLE	PAGE
2.1	Software Specification	24
3.1	SPSBJ Functional Requirement	31
3.2	SBSBJ Non-functional Requirement	34
3.3	Software Requirement for server side	35
3.4	Software Requirement for client side	37
3.5	Hardware requirement	38
3.6	Network Requirement	39
4.1	Design Security Mechanism	59
5.1	Development Environment for SPSBJ	61
5.2	Configuration Environment Setup	66
5.3	Version Control Procedure	67
5.4	Project Implementation Status	68
6.1	Personnel requirement for testing activities	71
6.2	Testing Environment Hardware	71
6.3	SPSBJ System Test Schedule	72
6.4	Integration and System Test	76
6.5	User Acceptance test- Teacher	77
6.6	User Acceptance test- Admin	78
6.7	Test Data for SPSBJ system	79
6.8	Summary for Test Result	80

ix

LIST OF FIGURES

FIG	URE TITLE	PAGE
2.1	Sample Interface of SManS	10
2.2	Sample Interface of TMS School Management System	12
2.3	Sample Interface of SMM	13
2.4	Main components of a Decision Support System, DSS	16
2.5	Iterative Lifecycle Model	20
2.6	Database Life Cycle (DBLC)	20
2.7	A summary of activities in the database initial study	21
2.8	Two views of data: business manager and designer	22
3.1	Context Diagram of Current System (SMM)	27
3.2	DFD Level 0 of Current System (SMM)	28
3.3	Context Diagram for Current System (EMIS)	28
3.4	DFD Level 0 for Current System (EMIS)	29
3.5	System Decomposition Diagram	33
4.1	System Architecture of SPSBJ	42
4.2	Navigation Flow of SPSBJ	44
4.3	ERD of SPSBJ	46
4.4	Context Diagram for SPSBJ	50
4.5	DFD Level 0 for SPSBJ	51
4.6	DFD Level 1 Process 1, Discipline	52
4.7	DFD Level 1 Process 2, Administration	55
4.8	create database sbj	57
4.9	create trigger	58
5.1	Software Environment Setup	61

5.2	Configuration of database connection	63
5.3	Configuring User Privilege	63
5.4	Restricting and Sorting Data	65

LIST OF APPENDICES

Appendix	TITLE	PAGE
Appendix A	Gantt Chart	88
Appendix B	Input Design	90
Appendix C	Output Design	94
Appendix D	Data Dictionary	97
Appendix E	Normalization	103
Appendix F	Table Creation	109
Appendix G	User Manual	114

xii

CHAPTER I

INTRODUCTION

1.1 Project Background

Education is central to development and a key to attaining the millennium development goals. It is one of the most powerful instruments for reducing poverty and inequality and lays a foundation for sustained economic growth. Both individuals and countries get benefit from education process. For individuals, the potential benefits lay in general quality of life and in the economic returns of sustained, satisfying employment. For countries, the potential benefits lie in economic growth and the development of shared values that underpin social cohesion.

Sistem Pengurusan Sekolah Banang Jaya (SPSBJ) will be developed under the education industry. With SPSBJ, education management will move to the latest technology where transactions can be done online and management is more flexible and manageable. SPSBJ is proposed to assist all the basic functions (add, update, delete, search) added with report generator. In addition, SPSBJ will support decision making in determine the punishment of discipline problem based on demerit point.

Sistem Pengurusan Sekolah Banang Jaya (SPSBJ) is an online system for Sekolah Banang Jaya that will integrate the current system used; 'Sistem Maklumat Murid' (SMM) and Education Management and Information System (EMIS) where both systems are currently being used by Malaysia Education Ministry. SPSBJ will be developed in PHP scripts with Apache as the application server and MysQL as the database server. It will focus on student's educational information profiles of schools, teachers and students, and students achievements such as exam marks, discipline and co curriculum and also attendance for the student. SPSBJ also provide interaction among parent and teacher about the information of student discipline with each parent will be registered and information their children only can be accessed.

1.2 Problem Statement(s)

From the analysis that has been made on the current systems, few problems were identified which are:

i. Performance of the current systems are slow and not efficient

Two different systems to manage information of a school make the current systems' management becomes slower and not efficient. Some data were found to be redundant where user has to enter the same data in both systems. In addition, teachers still need to use the traditional filling method.

ii. Constrains in accessibility

Users can access the system from certain places only and different workstation will have different databases and results.

iii. Poor access control

Non effective access control is provided on the current systems where anybody can access the system and do transactions. Furthermore, add, edit and view are done on the same form which may cause lack of data availability and integrity.

iv. Does not have student discipline management

The current system there was no module for student discipline management where this module can be using by discipline teacher to manage and monitor student discipline performance.

v. Fixed content

All data and contents of both current systems are fixed which means system will need to be updated, or reprogrammed if there is any additional change in content or data.

vi. Communication between teacher and parents.

Parent has limited time to spend with their child teacher to discuss about children education performance and discipline problem.

1.3 Objective

SPSBJ is a new system that is developed based on the problems arises on the current systems. The objectives of SPSBJ are:

i. To make data processing and accessing faster

Integrating both of the systems avoids data redundancy which will make better and faster data processing and accessing. This will make the traditional filling method unnecessary.

ii. To make the system online

SPSBJ is accessible anywhere if a specific machine (computer) has an internet connection; all data are stored in the same database.

iii. To support access control

For security purpose, SPSBJ appears with login function where all users will need an ID to access the system. In addition, SPSBJ differentiate forms for adding, updating and searching functions according to the access level.

iv. To generate student's discipline reports

SPSBJ will automatically analyze specific records and generate reports assisted with graphs.

v. Backup and Recovery

Existing system do not have backup for making copies of database so that these additional copies may be used to restore the original after a data loss event. Backup are useful primary for purpose to restore state following a disaster that called as disaster recovery and the second purpose when is it using to restore small number of files or full backup database after they have been accidentally deleted or corrupted.

1.4 Scope

This section will explain the scopes of Sistem Pengurusan Sekolah Banang Jaya including the target users, modules of the system, where to implement and specific platform used.

1.4.1 Target User

i. Discipline Teacher

Teachers can do the transactions (add, update, delete, search) for students discipline details and view reports of students in the school.

ii. School Administrator

This level of user consists of school's administrators (Headmaster / headmistress / principle, vice principals). These users can do transactions of teachers' as well as viewing students' report and graph. School administrator also can use role and privileges function to divide and control user access. Administrator also can monitor user of this system using transaction log

1.4.2 Modules

i. Manage Student Discipline

SPSBJ manage student discipline. Teacher can update discipline information such as demerit point; category of discipline problem and etc. Teacher also can create report for the student and the Decision Support System (DSS) will determine type of punishment based on demerit point. Administrator can add new discipline problem, update or delete the discipline information, so that parents and schools can efficiently manage and track the discipline level of students. SPSBJ is able to analyze student's discipline achievements and generate reports

ii. Admin module

Administrator is able to do backup and recovery. Mainly purpose of backup is to restore a state following a disaster (called disaster recovery). The second is to restore small numbers of files after they have been accidentally deleted or corrupted. ^(en.wikipedia.org/wiki/Backup_and_Recovery, 2008). Administrator can use role and privileges function to divide and control user access and also can monitor user of this system using transaction log.

1.5 Project Significance

As mentioned in the problem statement, the current systems used are stand alone systems. SPSBJ is developed in order to make the system online and will be accessible from anywhere that has internet connection. In addition, integrating both of the current systems will cover the data redundancy and make data processing and accessing faster.

SPSBJ is a system that can manage student's educational information effectively. This project more focuses in discipline module and admin module. SPSBJ can generate reports from student's discipline record and keep track with the current and previous discipline records. Furthermore, this system will support decision making in determine type of punishment based on demerit point.

1.6 Expected Output

It is expected that SPSBJ will facilitates the management of all information as stated above excellently, support decision making in determine type of punishment, and all reports and analysis should be able to be printed. Besides, the system must have a user-friendly interface to simplify all kind of users to use and understand the system.

1.7 Conclusion

This chapter has introduced the project in its background, objectives, scopes, as well as the project significant and expected output. It's purposed to clarify introduction development for the project. The next activity to be carried out is to complete the chapter II.

Chapter II consists of fact and finding, project methodology, project requirements and project schedules and milestones. In order to complete this chapter, a lot of effort needs to be done on research about proposed title, including study on related journals, research reports, and articles.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

This chapter will discuss about literature review and project methodology that is related to the project. A literature review is a body of text that aims to review the critical points of current knowledge on a particular topic.

According to Cooper (1988), a literature review uses as its database reports of primary or original scholarship, and does not report new primary scholarship itself. The primary reports used in the literature may be verbal, but in the vast majority of cases reports are written documents. The types of scholarship may be empirical, theoretical, critical/analytic, or methodological in nature. Second a literature review seeks to describe, summarize, evaluate, clarify and/or integrate the content of primary reports (Wikipedia).

Therefore, researches and analysis an existing system or current system have to be done in order to build a good system. Good system always comes after enhancement of existing system. For this project, literature review serves the purpose of gathering information related to the development of web-based house rental advertising system. This review will focus on the current existing system. The result of the review will serve to better equip the developer with knowledge relevant or essential in the design and planning of the system. It will also discuss the approach that will be used for this project and related research and information about the approach, methodology and tools that will be used to develop this project.

2.2 Facts and Findings

This section will discuss about facts and findings that are related to the development of this project. It will explain mainly on the system's domain, existing systems and techniques that are applicable but not used for the development of SPSBJ.

2.2.1 Domain

Due to the many general terms used for these sub-chapters, domain for this analysis references might be defined as a realm or range of knowledge. After some research and finding process, the domain of this project is more concentrate on data management and administration and it is targeted to be used at primary schools.

2.2.2 Existing System

This section will discuss related systems that existed which are used as references. Fifth existing systems are chosen. The first system is School Management System by HeadmasterSoft. The second system is Online School Management System by TMS Solutions. The third system is 'Sistem Maklumat Murid' by SK Chukai , Kemaman. Finally, Student's Educational Information Management System (SEIMS) by faisal imran.

9

2.2.2.1 Case Study 1

School Management System (SManS) by HeadmasterSoft is a standalone system developed in Visual Basic environment with Microsoft Access database. The system offered in 3 packages, Basic (free), Pro (purchase) and Unlimited Custom Pack (purchase) and is downloadable at http://headmastersoft.com.

SManS is targeted to be used by teachers in managing school's information. It covers student information management and enrollment, class information management, teacher information management, attendance control, staff information management and reporting.

The interfaces used for this system is attractive and also user-friendly. The functions developed are useful where it has class, student, teacher and employee's enrollment. In addition, user can also store pictures at the profiles section and reports can be generated.

However, this system is more practical for private school management because it keeps employees information. Stand alone based system that used is not suitable for these days where people tend to move to online systems. Not to mention that this system does not support any decision making.

Figure	2.1	represents	the	main	screen	01	the	School	Management	System.

 New View Tools	Reports Help			1
2	R	29	2	Qui
Classes	Add Class	Students	Add Student	Enrolled Students
0-	-	-	0	0
	222	AL.		*

Figure 2.1: Sample Interface of SManS

10