

**KINDERGARTEN MANAGEMENT SYSTEM FOR TASKA ANAKKU  
COMEL UMP**

**AZIRA BINTI YACOB**

**Thesis submitted in fulfillment of the requirements for the award of the  
bachelor of Computer Science (Software Engineering)**

**Faculty of Computer Systems and Software Engineering  
UNIVERSITI MALAYSIA PAHANG**

**18 JUNE 2012**

Created with



**nitro<sup>PDF</sup>professional**

download the free trial online at [nitropdf.com/professional](http://nitropdf.com/professional)

## ABSTRACT

This project is about kindergarten management system (KMS) that will transfer manual system to computerized system. This system focused on staff and teacher task. This system will use RAD methodology in development process. Tools will be used are Adobe Dreamweaver CS3 as system interface development and XAMPP as database platform. This system is generating as to accomplish the objectives that are to develop a prototypes of kindergarten management system, to centralized a database in manage modules teachers, students and staff information and to produce documentation and report generation.

There are seven modules in this system, registration, student record, event, news, fees, Q&A Session and activity. Staff will manage the student and teacher registration, event, fees, news, Q&A Session and activity. Teacher can manage student registration, student attendance, view event and student record. For public user, they can view student activities, news and ask question at the contact interface. The question will sent to staff and staff will reply the message. Public can view the response from staff at the Q&A interface.

## ABSTRAK

Projek ini adalah berkenaan sistem pengurusan taska yang daripada sistem manual kepada sistem berkomputer. Sistem ini fokus kepada staf dan guru. Sistem ini menggunakan RAD methodology dalam proses pembangunan. Alat yang digunakan adalah Dreamweaver CS3 untuk sistem laman web dan XAMPP sebagai penyimpanan data. Sistem ini menyempurnakan objektif untuk membina rangka sistem pengurusan taska, untuk penyimpanan data dalam mengurus modul maklumat guru, pelajar dan staf dan menghasilkan dokumen dan repot.

Terdapat tujuh modul dalam sistem ini iaitu pendaftaran, rekod pelajar, peristiwa, berita, yuran, sesi soklan dan aktiviti. Guru boleh mengurus pendaftaran pelajar, kehadiran pelajar, melihat peristiwa dan rekod pelajar. Untuk pengguna orang awam, mereka boleh melihat aktiviti pelajar, berita dan menanya soklan di laman perhubungan. Soklan itu akan dihantar kepada staf dan staf akan membalas mesej itu. Orang awam boleh melihat reaksi daripada staf.

## TABLE OF CONTENTS

<b>DECLARATION BY CANDIDATES.....</b>	<b>i</b>
<b>ACKNOWLEDGEMNET.....</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>viii</b>
<b>LIST OF TABLES.....</b>	<b>x</b>
<b>LIST OF APPENDIX.....</b>	<b>xii</b>

### 1. INTRODUCTION

1.0	INTRODUCTION.....	1
1.1	PROBLEM STATEMENT.....	2
1.2	OBJECTIVE.....	3
1.3	SCOPE.....	3
1.4	THESIS ORGANIZATION.....	4

### 2. LITERATURE REVIEW

2.1	INTRODUCTION.....	6
-----	-------------------	---

Created with



download the free trial online at [nitropdf.com/professional](http://nitropdf.com/professional)

2.2	KINDERGARTEN MANAGEMENT.....	7
2.3	STUDIES ON EXISTING SYSTEM.....	11
2.4	SUMMARY ON PROGRAMMING TOOLS.....	17
2.5	SUMMARY OF SCRIPT LANGUAGE.....	22
2.6	STUDIES ON DATABASE.....	25
2.7	SOFTWARE DEVELOPMENT METHODOLOGIES...	28

### **3. METHODOLOGY**

3.1	INTRODUCTION.....	34
3.2	THE RAPID APPLICATION DEVELOPMENT (RAD)..	35
3.3	REQUIREMENT PLANNING PHASE.....	37
3.4	USER DESIGN PHASE.....	38
3.5	CONSTRUCTION PHASE.....	44
3.6	CUTOVER PHASE.....	58

### **4. IMPLEMENTATION**

4.1	INTRODUCTION.....	59
4.2	CODING EXPLANATION.....	59
4.3	PUBLIC.....	60
4.4	TEACHER.....	66
4.5	STAFF.....	74

### **5 EXPECTED RESULT AND DISCUSSION**

5.1	INTRODUCTION.....	81
5.2	EXPECTED RESULT.....	82
5.3	RESULT ANALYSIS.....	82
5.4	ADVANTAGES AND DISADVANTAGES KMS.....	83

5.5 CONSTRAINT.....	83
<b>6 CONCLUSION</b>	
6.1 SUMMARY.....	85
6.2 ARCHIEVED OBJECTIVE.....	85
6.3 SUMMARIES ABOUT COMPARISON BETWEEN RAD MODEL & ITERATIVE PROCESS MODEL.....	86
<b>REFERENCES.....</b>	<b>87</b>

## LIST OF FIGURES

FIGURE 2.1: Rapid Application Development (RAD) Model.....	28
FIGURE 2.2: Iterative Process.....	32
FIGURE 3.1: Flow of Rapid Application Development (RAD).....	37
FIGURE 3.2: System Flow of Kindergarten Management System.....	39
FIGURE 3.3: Functions available in KMS.....	41
FIGURE 3.4: Sequence Diagram in Kindergarten Management System.....	42
FIGURE 4.1: Childs Details Form.....	60
FIGURE 4.2: SQL for Insert Child Details.....	61
FIGURE 4.3: Parent Details Form.....	62
FIGURE 4.4: SQL for Insert Parent Details.....	63
FIGURE 4.5: Contact Details Form.....	64
FIGURE 4.6: SQL for Contact Details.....	64
FIGURE 4.7: Q&A Session Form.....	65
FIGURE 4.8: Event Form.....	66
FIGURE 4.9: SQL for Insert Event.....	67
FIGURE 4.10: SQL for Delete Event.....	67
FIGURE 4.11: View Event Form.....	67
FIGURE 4.12: Search Child Form.....	69
FIGURE 4.13: SQL for Search Child.....	69
FIGURE 4.14: Search Child View Form.....	63
FIGURE 4.15: Record Child Form.....	70
FIGURE 4.16: Insert Record Form.....	71

FIGURE 4.17: SQL for View Child.....	71
FIGURE 4.18: View Record Child Form.....	72
FIGURE 4.20: Fees Form.....	74
FIGURE 4.21: Insert Fees Form.....	75
FIGURE 4.22: SQL for View Child.....	75
FIGURE 4.23: View Fees Form.....	76
FIGURE 4.24: SQL for View Fees.....	76
FIGURE 4.25: New Activity Form.....	77
FIGURE 4.26: SQL for upload picture.....	78
FIGURE 4.27: Activities Form.....	79
FIGURE 5.1: Homepage of Kindergarten Management System (KMS).....	82



## LIST OF TABLES

TABLE 2.1: Advantages and disadvantages of the RAD model approach.....29

TABLE 2.2: Advantages and disadvantages Iterative process model.....32

TABLE 2.3: Comparison between RAD model and Iterative process model.....33

TABLE 3.1: Software Requirement.....46

TABLE 3.2: Hardware Requirement.....47

TABLE 3.3: Staff Table.....49

TABLE 3.4: student Table.....49

TABLE 3.5: student1 Table.....50

TABLE 3.6: teacher Table.....52

TABLE 3.7: teacher1 Table.....53

TABLE 3.8: event Table.....54

TABLE 3.9: activity Table.....54

TABLE 3.10: contact Table.....55

TABLE 3.11: fees Table.....56

TABLE 3.12: fees1 Table.....56

TABLE 3.13: record Table.....57

TABLE 3.14: record1 Table.....58

TABLE 4.1: Child Details Table.....61

TABLE 4.2: Parent Details Table.....63

TABLE 4.3: contact Details Table.....65

TABLE 4.4: Event Table.....68

TABLE 4.5: Record Table.....73

TABLE 4.6: Fees Table.....77

Created with



download the free trial online at [nitropdf.com/professional](http://nitropdf.com/professional)

TABLE 4.7: Activity Table.....80

TABLE 6.1: Comparison between RAD model and Iterative process model.....86

## LIST OF APPENDIX

APPENDIX A: GANTT CHART.....	91
APPENDIX B: SOFTWARE DEVELOPMENT PLANNING (SDP).....	93
APPENDIX C: SOFTWARE REQUIREMENTS SPECIFICATIONS (SRS).....	94
APPENDIX D: SOFTWARE DEVELOPMENT DESIGN (SDD).....	95

## CHAPTER 1

### INTRODUCTION

#### 1.0 Introduction

A kindergarten is important places to produce a good student, who will be become quality citizen for the country. Therefore managing kindergarten effectively and efficiently needs more attention. Good kindergarten are kindergarten that have good management system. With this system, the performance of kindergarten will be improved. For example in the management of data or information that kindergarten should be managed consistently. This allows all the events or records are, kept well and safe and can be reviewed when necessary.

Before this, information or data that recorded in kindergarten is doing as manually. Staff need to recorded in books and keep it in rack. This will make the record sometime lost and not consistent in order when they want to find old record of student or staff or teachers' data. This will cause lot of time in searching for just single information.

Kindergarten Management System (KMS) for Kindergarten Ump is the system that will develop to make staff at the kindergarten easier to manage data and others user tasks such as new teacher record and new student record that register. This system also will make sure the data will arrange consistently. Staff will insert the information that they want to keep and after that the data will be a record and also can update and delete.

Teacher will also use this system in order to manage student record and achievement during their study and learning at the kindergarten. Teacher will always update the student record if it has any data changes in their student data. The Kindergarten Management System (KMS) gives staff and teachers the ability to easily and cost-effectively manage every aspect of data gathering and reporting by automating routine administrative and classroom functions. The development of this management system is trying to fix the arrangement of data and also to computerize the data to make sure the data is safely stored and will never lost.

### **1.1 Problem Statement**

The management information previously done manually. But today, people more concerned about speed and speed in dealing with something and want it done in consistent and simple. With development of software, it can help people solve problems.

For kindergarten information management, the most common problem that always happen is information gathered not consistent. This is because any information store in place like rack should not be possible to loss. Method of using paper or manual way also invited to loss information. It is also occur damage to the paper. Extensive use of paper cause lost and waste time.

The other problem is time consuming that kindergarten administrator used when manually filled the form and to find the specific paper or information. This is like when kindergarten administrator or teachers want to find the student record, they need a long time to find the old record. Data may be redundant if the name of student is similar and not match with what actually they want to find.

## 1.2 Objectives

The objectives of the project are:

- i. To develop a web based application for kindergarten management based on design developed in UML.
- ii. To centralized a database in manage modules teachers and students
- iii. To produce documentation and report generation

## 1.3 Scope

The system will be done according to the scope of Kindergarten Management System (KMS) which are state as below:

- a) The system will develop through using Software Engineering approach include typical stages of software development as well as producing requirement document like:
  - i. Software Requirement Specification (SRS)
  - ii. Software Development Plan (SDP)
  - iii. Software Design Document (SDD)
  
- b) The scope is divided into two modules:
  - i. System function for staff
    - Make registration for new teachers and students.
    - Manage teachers and students attendance.
    - Insert, update and delete news and event.
    - Manage activities students

- Manage Q&A session for parents and public comments for activities students
  - Students fees management
  - Generate and print report for students fees
- ii. System function for teacher
- Student evaluation record
  - Manage student registration
  - Events for teachers
  - Manage student attendance.

## 1.4 Thesis Organization

This thesis consists of six (6) chapters. Chapter 1 will discuss on introduction to the system. The discussion consists of system overview. Problem statement discuss on the problem that faced by the current system. On objectives, the reasons of the development of project are listed. Scope of the project is discussed on project and user limitation.

Chapter 2 is literature review which will discuss on current system and the technique or the software that is used on the current system.

Chapter 3 will discuss on system methodology. It will be discuss on the method that is used to develop the system and project planning. On this chapter also will discuss the needs of the project such as the software and the device that are needs to develop the system.

Chapter 4 will discuss on project implementation. This chapter will discuss on design of project development which include of database use, database method which is using MySQL statement.

Chapter 5 will discuss on discussion and result that receive from the data and data analysis, project constrain and, fix and suggestion of the system. Project analysis will discuss on project objective which continuously with project problem. Constraints categorized into two parts; development constraints and system constraints.

Chapter 6 will discuss on conclusion of the project. This is including the conclusion of the data that are received and conclusion of the methodology and used research implementation.



## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter will explain about the detail review of the project that chosen. This will review more detail about the kindergarten management and discuss the existing system that have been developed before.

A kindergarten is a school or class for young children usually four to six years old that prepares them for first grade and that develops basic skills and social behavior by games, exercises, music, simple handicrafts, etc. Most countries have systems of formal education, which is commonly compulsory. Kindergarten also means an institution for the instruction of children or people under age.

Manage means to direct or control the use of handle. It is also means to direct the affairs or interests of. Manage also means to succeed in accomplishing or achieving, especially with difficulty, contrive or arrange. Management means the act, manner or practice of managing, handling, supervision, or control. It is also means the person or persons who control or direct a business or other enterprise and skill in managing executive ability.

## 2.2 Kindergarten management

Kindergarten management is arranging and using human and material resources and performances available for education for the transmission of skills, knowledge, vocation and culture via efficient teaching, learning research its dissemination and utilization for a better society. The definition of management can be broadly classified into four groups: [1]

- i. **Process Kindergarten:** The process Kindergarten defines management in terms of functions undertaken by the manager in an integrated way to achieve organizational purposes. Management is to forecast and plan, to organize, to command, to coordinate and to control. All other definitions of management related to this kindergarten are marginal additions, deletions, or elaborations of the functions listed out in the above definition.
- ii. **Human Relations Kindergarten:** This kindergarten emphasizes the human aspect of organization and conceives it as a social system. It is a social system because managerial actions are principally concerned with relations between people. In fact, management is concerned with development of people and not the direction of things. The essence of this kindergarten is well reflected in the definition to which management is the accomplishment of results through the efforts of other people.
- iii. **Decision Kindergarten:** The Decision Kindergarten defines management as rule-making and rule-enforcing body. In fact the life of a manager is a perpetual choice making activity and whatever a manager does, he does through his decisions. Moreover, decision making power provides a

dynamic force for managers to transform the resource of business organization into a productive and cooperative concern.

- iv. **System and Contingency Kindergarten:** According to this kindergarten, organizations like any living organism must adapt themselves to their environments for survival and growth. Thus, management involves designing organizations adaptable to changing markets, technology and other critical environmental factors. The systems theory of organizations are organic and open systems consisting of interacting and interdependent parts and having a variety of goals. Managers are supposed to maintain balance among the conflicting objectives, goals and activities of members of the organization. He must achieve results efficiently and effectively. According Contingency Kindergarten there is no best way to design organizations and manage them. Managers should design organizations, define goals and formulate policies and strategies in accordance with the prevailing environmental conditions.

Different kindergartens of thought defined management differently due to three reasons:

- i. Difference in perspectives of management and organization theories
- ii. Shifts in emphasis in the study of the organization from economic and technical aspects to conceptual and human aspects
- iii. Focus on internal and external environments of the organization.

### 2.2.1 Benefit of Kindergarten Management

- i. Achievement of Goals/Objectives: A kindergarten must have goals or objectives to be achieved by the kindergarten performance itself. Kindergarten organizations must strategize well and proper planning and that planning should be followed and achieved to prove that the plan is successful.
- ii. Investment Return: Each item is made must have a reason included in the planning for the success of a kindergarten. Each kindergarten has a specific mission to be achieved. Investments should be worth it because it will benefit all parties. Each investor must expect to invest in a good yield. As well as that happens to a kindergarten. If a good or great investment made to improve the performance of the kindergarten itself, then it is worthwhile because it will pay off.
- iii. Support Service
- iv. Feedback
- v. Project Sustenance

## 2.2.2 Good Management Practices

### 2.2.2.1 Definition

Good management is difficult to define for practical, theoretical and abstract reasons. It may also mean different things at the individual, group, organizational and common levels of observation. Most managers have little difficulty in defining good management at the individual workers level. Whether they are in the private or public sectors, their eyes are fixed firmly on productivity.[2]

### 2.2.2.2 Good Kindergarten Management Practices

There are four good management practices in kindergarten:-

- i. **Policies:** set the framework for decision-making in schools. Good management ensures that policies are developed, kept up to date, and are understood by all staff.
- ii. **Plans:** are the blueprints for action, which set out how the aims and policies will be achieved. Policies need plans to turn them into realities. Good management creates and implements plans to cover relevant areas of kindergarten operations.

- iii. **Procedures:** are the step-by-step instructions on how to carry out tasks, how to carry out policy and implement plans. Good management develops procedures and ensures that they are followed.
- iv. **People:** are the resources whose make the operations of the school possible. Good management provides for the needs of people.[3]

## 2.3 Studies on Existing System

### i. Krista(The schools for kids)

Happy Holidays  
- 12th March 2011

**Krista™**  
The School for kids

Krista Capable Programme  
OPEN 1998

Franchisee Login | Franchise Roadshow | About Us | Krista

About Us | The Programme | Centre / Schools | Franchise Opportunities | Highlight / Gallery | Careers | Contact Us

**Student Registration**

**Krista Student Registration Form**  
Please complete and print out this Application form. Submit it to the nearest Krista Centre for enrollment.

Choose:   
 Class:   
 Session Preferred:

**Child's Particulars**

Name:   
 Other Name:   
 Date of Birth:   
 Sex:   
 Home Address:

This childcare which was started in early childhood education is currently involved in the management and research and development of education programmed and systems, and also managing centers of early

childhood education. The affiliations with institutions of learning of international standing has enabled Krista Higher Learning Sdn Bhd to proudly offer suitably developed programmed of intrinsic value for people involved in educating children of early childhood years. These programmed developed from an invaluable wealth of childhood education knowledge and experiences, has benefited educators, care givers and parents alike. [4]

The advantages using this web based, student can be registered through this online system. So, the lost of data information about student can be avoided. Besides, user also can post their resume through this system for job request. They can upload their resume when to request a job.

The disadvantages of this system are no advertisement in each page. So, the website is plain and not interesting to user access. This website also no picture to show that is kids system and can cause users not interest to register their children this childcare.

## ii. BONDAmama childcare

The screenshot displays the BONDAmama website interface. At the top, there is a navigation menu with links for 'LAMAR UTAMA', 'KIDS CENTER', 'ASUHAN', 'CAWANGAN', 'PROGRAM', 'INTERAKTIF', 'BONDA MALL', and 'HUBUNGI KAMI'. The 'INTERAKTIF' link is highlighted in purple. Below the navigation menu is a banner with several images showing children and staff in a childcare setting. The main content area features a registration form titled 'PENDAFTARAN ONLINE KEMASUKAN KE BONDAMAMA'. The form includes fields for 'Nama Ibu/Bapa/Penjaja', 'Nombor telefon', 'Nama Anak', 'Jantina' (with a dropdown menu set to 'Lelaki'), 'Umur anak', 'Jarak lahir anak', 'Alamat Tempat Tinggal', and 'Email'. To the right of the form is a shopping cart section titled 'TROLI ANDA' showing a cart icon and the text 'Beli dan: 0 Barangan Jun, Order RM0.00'. Below the cart is a promotional banner for 'SERTA PROGRAM LATIHAN & DISKON' with a red background and white text.

This childcare is providing Child Care Centre for working parents. Package includes preparing students to religious schools, national schools and kindergartens. We also provide "transit" to the students. Safety and comfort of your children is our priority. Besides, this childcare also Provide pre-school education includes religious education with the academic. The emphasis is on the Malay language, English, Arabic, Science, Mathematics, Basic Fardhu Ain and Jawi. BondaMama Curriculum and Co-curriculum has been designed to provide a full preparation for the children to face the full school years. The program provides a fully interactive learning new scope that has been proven very effective in educating students toward proficiency in English. [5]