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JUDUL: ONLINE NURSERY INFORMATION SYSTEM

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ONLINE NURSERY INFORMATION SYSTEM

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**This report is submitted in partial fulfillment of the requirements for the Bachelor
of Computer Science (Software Development)**

**FACULTY OF INFORMATION AND COMMUNICATIONS TECHNOLOGY
KOLEJ UNIVERSITI TEKNIKAL KEBANGSAAN MALAYSIA**

2006

DECLARATION

I hereby declare that this project report entitled
ONLINE NURSERY INFORMATION SYSTEM

is written by me and is my own effort and that no part has been plagiarized
without citations.

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DEDICATION

**To my beloved family and friends for their constant love
and support**

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Generally, Projek Sarjana Muda (PSM) is one of the partial fulfillments for bachelor program. For that reason, I've choose to continue my study on Online Nursery Information System to increase knowledge and skills in information technology field. It is my pleasure to thank you all for the supports from who have been contributing in my first report whether directly or indirectly.

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ABSTRACT

With advances in World-Wide Web applications and technologies, research on measurement and modeling of Internet and Web-based information systems has become increasingly important. A nursery is one of the interesting organizations to develop information system because all nursery data are controlled on paper and unsystematically filed. Currently, there are a lot of nurseries that still using old day system and mostly do not have online information system and this web-based system become more popular and relevant for users especially busy parents to register their children. This paper contains some of the research and information in developing Online Nursery Information System (ONIS). The online information system on this research will control the management of nursery information especially on registration path and announcement to all parents and staff. ONIS is easy-to-use management software for child care centers, daycare centers, preschools and family daycare agencies. Structured System Analysis and Design Methodology (SSDAM) is chose as a methodology to describe items required in the system and establish a basis for the creation of a software design. The system can alert the parents online on any matters related to the children including payments' status view and ONIS provide staff with announcement system. Developing system with email services will be an alternative for the normal system. In online nursery, email services cater parents of announcements of their children's important programs and dates or any news related to their children. Staff and parents share a secure Internet system so everyone can access the important information they need, when they need it. With everything from online enrollment, payment status and menus and emergency contact updates, parents will love the convenience of this online system. Staff also can manage announcements to parents using the system or send an email. Both can check the status of monthly payments made by parents. Finally, it is hoped that this system meets all the requirements and will be enhanced for future expansion.

ABSTRAK

Seiring dengan pembangunan teknologi dan industri masa kini, pembangunan sistem maklumat atau informasi berasaskan web semakin mendapat perhatian. Secara umumnya, kebanyakan taska masih lagi menggunakan cara lama dalam pengurusan maklumat – maklumat yang mana dikawal secara manual dengan cara penyimpanan melalui fail-fail kertas yang tidak begitu sistematik. Dokumen ini akan menerangkan secara keseluruhan kajian dan maklumat- maklumat sepanjang pembangunan *Online Nursery Information System (ONIS)*. Selain itu pengguna sistem dapat mengetahui pengumuman melalui paparan suatu sudut pengumuman mengenai sebarang berita perubahan dan penjaga boleh meyemak status pembayaran yuran terkini. Pengguna sistem ini adalah tertumpu kepada staf yang bekerja di Taska Sri Awan Suria serta penjaga kepada pelajar yang ingin mendaftar ke taska terbabit. Dalam proses pembangunan sistem ini, metodologi yang menjadi panduan ialah *Structured System Analysis and Design Methodology (SSDAM)*. Sebagai tambahan, *Online Nursery Information System (ONIS)* dilengkapi sistem *email* yang bakal digunakan oleh staf di taska tersebut bagi memudahkan mereka menyampaikan maklumat kepada penjaga secara personal. Pengguna sistem boleh menggunakan sistem pada bila-bila masa melalui sistem maklumat secara *online* ini dan sangat sesuai bagi ibu bapa yang sibuk bekerja di pejabat. Penjaga boleh menyemak kekosongan kelas yang ada sebelum membuat pendaftaran anak mereka. Sebagai kawalan sekuriti, penjaga dan staf dikehendaki mendaftar akaun sendiri sebelum dapat menggunakan sistem maklumat ini sepenuhnya. Secara keseluruhannya, *ONIS* menyediakan perkhidmatan pendaftaran secara *online*, semakan status pembayaran yuran, paparan maklumat-maklumat staf dan penjaga mengikut tahap pengguna, menu-menu umum serta sebarang pengumuman melalui *email*. Akhirnya, sistem ini diharapkan dapat memenuhi kehendak pengguna dan menyumbang idea kepada kemajuan sistem informasi di sesebuah taska untuk masa hadapan.

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CHAPTER I

INTRODUCTION

1.1 Overview

Basically, Online Nursery Information System is developed after I did some research and studies based on existing problems at nursery/kindergarten and exclusively prepared for Tadika Sri Awan Suria where the case study is made. This chapter will introduce the outline of this online information system.

Nowadays there are a lot of nurseries that are still using the manually controlled system of old. This system is built to help in managing the nursery. Online Nursery Management can be used from any computer with a dial-up or high-speed Internet connection. The target users for this information system are head administrator who can control most of the system, staff of Tadika Sri Awan Suria, and also for parents. As a result, the program directors, administrative staff, and teachers can easily share information. Enrollment has always been a time-consuming process, both for schools and parents. Therefore, this system allows parents to go online, review the programs and activities at the kindergarten and the program offered, as well as complete the entire enrollment process in minutes without any paperwork or hassles.

In this online nursery, guardians and staff can make online registration after checking for the vacancy of nursery or kindergarten according to their children's ages. This online nursery management will provide menus like other websites including feedback packages and email system for all staff. A user can find out the

status of payments made by guardians. Not only that, this online nursery system allows staff records to be kept with basic information. A biography of the staff with experience and education, and a photo can also be included for marketing purposes.

Moreover, it also gives a secure and convenient way to communicate online with parents. The nursery may send menu, newsletter or monthly bulletins or send information about field trips, classroom news, curriculum or schedule updates. It can remind parents when a child's physical, vision test, or next immunization is due. Because all of these communications are sent electronically over the Internet, we can increase the interaction with parents while saving thousands of dollars in printing and postage costs.

1.2 Problem Statements

Some of the problems of the current system are:

i. Unsystematic record keeping

Many nurseries are still being managed manually which means that there may be records lost, damaged, or not updated especially at Tadika Sri Awan Suria. Besides, working parents must personally go to the nursery or kindergarten to register their children.

ii. Too much paper being used

The current practice of announcing information to parents is through the use of paper or phone calls which are actually involves a lot of money.

iii. Inefficient services

The manual process delays tracking of information on children, guardians and staff.

iv. No report provided

Besides, there was no report in listing of current children records and other information related to the nursery/kindergarten in actual system.

1.3 Objectives

The objectives of the Online Nursery Information System (ONIS) are:

- i. ONIS will replace the current system and stores all the nursery information to make it easier to manage and manipulate.
- ii. The computerized system will save guardians' time spent on registration as it will be done online. They will not have to personally go to the nursery.
- iii. Easy checking of status of payments made by guardians and send announcement to them.

1.4 Scope

The system will allow for a better management of nursery information such as in registration, making announcements to all parents, and managing staff records, children, and their parents. Target users of this system are the nursery staff, and the parents. The system will be web-based so that it can be accessed via the internet.

Listed below are descriptions on the functions of this system:

i. Guardian New Account and Children Registration

Apart from the online registration service, the staff and guardians may also send in their registration forms personally to the nursery.

ii. Child Approval by Staff

Staff will manage all the process of accepting child to the nursery. Each child will be given a class based on their age. Staff also has a priority to delete the useless record of applicants.

iii. Recording Children's and Parents' Information

All necessary information about the parents and children will be recorded into the system's database including birth date, age, allergy, important contact numbers, and address. Children will be assigned facilities, programs, classroom, and activities. Registered parents can check their

payment history, status, and announcement. Parents may also update their records.

iv. Recording Staff Information

Staff can record basic information of the staff which can be viewed by guardians to find the contacts of their children's teacher.

v. Monthly Fee Payment

Cash payments are made by guardians to the nursery and staff can check for payment history and status. Payment status will highlight staff of current month fees.

vi. Generate Report

The system will enable administrator to generate some report including listing of monthly income, list of children group by class and also displaying and print all information for each child.

vii. Announcement to Guardians

The system will enable staff to add some announcement to guardians if there are urgent changes to be made. Staff can manage the announcement so that it will be appeared at the main page of the site.

viii. User Feedback

Guardians can give some feedback about the nursery or any related things to the system and staff.

ix. Email Service

Staff can send email from system to guardians email if there are some personal news will be informed to them.

1.5 Project Significance

The importance of establishing this software project is to overcome existing problems that are inherent with using the manual system. Working parents have little time to involve themselves in their children's progress at the nursery. These two factors lead to the development of the proposed system so that parents are fully aware of how their children are doing at the nursery. The system can alert the parents online on any matters related to the children including payment's status announcements.

Compared to Online Nursery Management, the manual system is unsystematic. All information will have high security. Moreover, this online system will use user friendly interfaces and it will be using a database to prevent data redundancy.

1.6 Expected Output

Upon completion of the system, it should be capable of storing children, guardians, and staff records as well as allowing staff to manage announcements, and check for payment status. The system will also enable guardians to view the announcement and teachers contacts. The system will also provide the facility for report generation which includes list of children's names, number of vacancies, and payment status. Besides that, this online system enables staff and parents to update their profiles. Furthermore, guardians may give some feedback about the website and allow staff to send email to guardians to give some personal news.

1.7 Conclusion

Based on what have been discussed, today's parents are busy people, and they need flexibility on how they communicate and participate. This online system works in cycle with the rest of the system applications, giving family members a way to stay informed 24 hours a day. Staff and parents share a secure Internet system so everyone can access the important information they need, when they need it. With everything from online enrollment, payments status and menus and emergency contact updates, parents will love the convenience of this online nursery management system. Staff can send any announcements to parents by email or using the announcement part of ONIS. Both can check the status of monthly payments made by parents.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

This chapter describes the background information into online nursery management with its issues and uses. It will describe in details of facts and finding regarding to the case study, projects methodology and all projects requirements involved in this project.

2.2 Facts and Finding

2.2.1 Tadika Ummu Ain Website

Refer to Figure 2.1 and Figure 2.2, it shows one of the examples of the current simple website that is used by nursery and kindergarten center in Malaysia. Tadika Ummu Ain is appropriated to have one solution in managing their information system because they have many staffs, workers, programs and also students. Base on this page; it's more to a website because it only displays information of the kindergarten. Even if it seems to be an information website, it offers online registration. The system will be used by parents to register their children into the nursery school. Parents will full fill the online registration form on

behalf of their children and click on the send button to forward their application to the management section. Then nursery administrator will view the application and call parents to confirm their children placement status. Users also can download the registration form from this site. Even though this website provides online registration, it does not allow parents to check their application status in the website. The system does not provide module for waiting list of the applicant. Besides, this website is still under construction by its developer.

Refer to Figure 2.1, there is a space allocated for enquiry however when click on the link nothing happened. In other way, the interface confuses the users. No other alternative of enquiry is offered which may limit the system to its full potential. Not only that, this webpage is only focused on display information of the nursery school where as there is no data tracking such as searching for related record e.g. search for teachers profile. Because it differs so much from a portal and should be one that contain administrator management, staff login, download and upload attachment e.g. birth certificate

From the other side, interface is also important in the system because it gives an impression for the overall system. This webpage is lack of these criteria because the color is very contrast and not appropriate for childcare institution website. It doesn't have a interesting presentation. When looking back in Human Computer Interaction (HCI) view, the arrangement of every item in an interface should be organized and even. The combination of behavior, look and style and consistent metaphor with ensure that the design comes close to meeting the needs of the users and that it will meet its usability criteria (Preece, 1994).