

BORANG PENGESAHAN STATUS TESIS *

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ORPHAN HOME MANAGEMENT SYSTEM

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UNIVERSITI TEKNIKAL MALAYSIA MELAKA

ORPHAN HOME MANAGEMENT SYSTEM

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

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UNIVERSITI TEKNIKAL MALAYSIA MELAKA
2008**

DECLARATION

I hereby declare that this project report entitled

ORPHAN HOME MANAGEMENT SYSTEM

is written by me and is my own effort and that no part has been plagiarized

without citations.

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DEDICATION

A special dedication goes to my beloved parents En. Nasir Bin Abd. Hamid and Pn. Rohana Binti Hamzah because giving support in completing my final year project which is entitled Orphan Home Management System (OHMS).

I also would like to dedicate to the people who help and support direct or indirect in finishing my project successfully.

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ABSTRACT

The Orphan Home Management System (OHMS) is developed mainly for orphan home center which is '*Pertubuhan Kebajikan Anak-anak Yatim Islam Daerah Jasin*' in Jasin, Malacca to manage the orphan registration and user maintenance. It is a standalone system which only can be access on a single computer which the system resides. The system is developed based on the center's size and requirements. The main users of the system are the staffs and administrator or manager. The registration process of the orphans is managed by the staffs while the system administrator is only involved in managing the staffs record and maintenance. Only administrator has the authority and privileges to do the system maintenance such as backup and recovery if there is system failure. The methodology of this system is Structured System Analysis and Design (SSADM). An analysis study has been done based on the current manual system and all the problems statements and requirements have been identified. Moreover, OHMS is developed to solve the weakness of the current orphan registration at the orphan home at Jasin, Malacca. The interfaces for OHMS have been designed according to the requirement and needs of the orphan home. Rather than that, this system also has been tested and evaluated in real life. This Orphan Home Management System will help to improve the performance of current situation and overcome the problems that arise nowadays.

ABSTRAK

Orphan Home Management System (OHMS) telah dibangunkan khas untuk rumah anak-anak yatim iaitu Pertubuhan Kebajikan Anak-anak Yatim Islam Daerah Jasin yang terletak di Jasin, Melaka dan bertujuan untuk memudahkan proses pendaftaran anak-anak yatim dan penyelenggaraan pengguna. Sistem ini merupakan sistem *standalone* iaitu hanya boleh diakses pada satu komputer sahaja. Selain itu, sistem ini dibangunkan berdasarkan saiz organisasi pusat anak-anak yatim tersebut dan keperluannya. Pengguna utama bagi sistem ini adalah staf manakala pengurus sistem hanya terlibat dalam menguruskan rekod staf dan penyelenggaraan. Hanya pengurus sistem sahaja yang mempunyai hak dan kuasa untuk melakukan penyelenggaraan sistem seperti *backup* dan *recovery* jika berlaku kerosakan dalam sistem. *Structured System Analysis and Design (SSADM)* telah dipilih sebagai metodologi untuk OHMS. Satu analisa telah dijalankan terhadap sistem semasa untuk mengenalpasti keperluan dan pernyataan masalahnya. Antaramuka bagi OHMS telah direka berdasarkan keperluan dan permintaan pusat kebajikan anak yatim tersebut. Seajar dengan itu, sistem ini telah diuji di persekitaran yang sebenar. Sistem ini diharap dapat membantu dan menyokong dalam meningkatkan prestasi sistem semasa dan mengatasi masalah yang wujud pada masa kini.

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CHAPTER I

INTRODUCTION

1.1 Project Background

The Orphan Home Management System is developing for a specific Orphan Home Care which is located in Jasin, Malacca. The system is not exists before because the center's management is still using the file system instead of computerizing system. The Orphan Home Management System is going to be developed to overcome the problems that occur in the center's management. It is purposely to handle the registration, orphan's records as well as staff's records and the others important details that are necessary to be keep.

The propose Orphan Home Management System is expected to overcome the general problems in handling data such as data redundancy, security of data, time consuming and recovery manners. To implement the objectives of the system, a few aspects will be included as well as the database because database is the most important part of system. A database is a vital thing since it holds all the data kept.

1.2 Problem Statements

As the current system is a manual filing system, there are several problems that are state for the current system:

i. **Lack of security**

Usually for normal filing system there is lack of security as there is no limitation on who can access the files. Anyone can change the records and this may cause serious trouble in the future. For example, intruders can easily steal the important information about the orphan's details or even an unauthorized staff may steal the sensitive information and sell it to the third party.

ii. **Low data retrieval**

Through manual filing system, the data will be kept in file according to the year or company alphabetically. This may take time to search for the information needed in time as the staff may have to look the file one by one and other related file just to search for some information. For example, if the staff wants to search the donator's name or details, the staff has to search on every file, one by one. It may consume longer time than what is expected.

iii. **Data redundancy and consistency**

In a manual file system usually there are data redundancy and inconsistency. This is because the same data may be stored in various files as they are related with each other. This also causes of data anomalies and then inconsistency because the redundancy data are changed in one file but not in the others. For example, repetitive data might happen in a record of the orphanage because of unsystematic data management. Such as if a staff change their telephone number, the staff may change the information in one file but not the other which may also contain information, this may cause data anomalies.

iv. **No backup and recovery**

Manual files system has no backup and if the file of all the information lost or damage, the tuition center will lose all its valuable information. For example, the most important data of the home care center are the orphan's details and history records, if that data lost, the orphan home care center will face a bad impact where they may lose their important information for a future analysis.

1.3 Objectives

There are some objectives that have to be achieved through the system. The objectives are:

i) **Secure system**

Data stored in the home care's center database must be protected from being access by unauthorized users. In this system, users are provided with password that allows the assignment of access rights to specific authorized users. Password usually enforced at logon time.

ii) **Faster data processing and accessing**

To be fast in data processing and accessing by using query and index are required. This is because query and index will help to improve data retrieval and performance speed. For the solution primary and foreign key are created each time to retrieve the data from database.

iii) **Data integrity**

Data integrity enforced through for the proper use of primary and foreign key rule. The primary key will help to avoid data redundancy and inconsistency. So, there would not be redundancy data especially in inserting orphanage's data.

iv) Backup and recovery

Data backup and recovery create a safety values, allowing the database administrator to ensure the availability of consistent data. The system will used the centralized database and will make easy to backup the data. For example, all the information of the home care center, orphan and staffs will be back up in the external hard disc. So, if the database corrupts, we still can use the database in the external hard disc.

1.4 Scope

The system is going to be used by the staffs of the Orphan Home Care which is 'Pertubuhan Kebajikan Anak-anak Yatim' to save all the important data. Based on concepts, the system is designed especially for the chosen Orphan Home Care and it is a stand alone system. The scope includes the targeted user and function that involved in the system. The system does not cover the financial of the orphanage home.

1.4.1 User

The user of the Orphan Home Management System will be divided into high-level staff and low-level staff.

1.4.1.1 High-level staff

- a) The administrator is the high-level staff, They have high level authority of using the system. Beside that, they know all the flow of the system and also can view all the details of the system.
- b) The administrator has to make sure the system do not have problem and the low-level staff do not have problem when using the system.

- c) The administrator will set the data policies for the company, set the standard for control and usage of data.
- d) The administrator also has to make the back-up, maintenance and tuning of the system.

1.4.1.2 Low-level staff

- a) Staff has to place for the registration of new orphan, such as personal details and others.
- b) The staff also can add, update and search for the related data.
- c) By the way, low-level staff also can delete the data that related to the registration.

1.4.2 Function

This system includes several functions which are:

1.4.2.1 Log In

Before using the system, the user needs to log in. After success, they can proceed with the system.

1.4.2.2 Registration

a) Add

The user can add new orphan or staff including the details into the database.

1.4.2.3 View Records

a) Search

The staff can search the data by id number, name of orphan or staffs. For example, the staffs can search the total orphan for each room.

b) Delete

The user can delete the data of the orphans and staffs. It includes the details of them.

c) Edit

They also can edit the changes of the orphan or staffs and save it as update data.

1.4.2.4 Tuition

a) Add

The staffs are able to add the details about the students who want to enroll for the tuition's subjects.

1.4.2.5 View Enrollment of tuition

a) Search

The staff can search the data by id number or name of subjects or orphan

b) Delete

The user can delete the data of the orphan and their enrollment.

c) Edit

They also can edit the changes of the enrollment and save it as update data.

1.4.2.6 Adopter

a) Add

The staffs are able to add the details about new adopter. The new adopter maybe a person or a family.

1.4.2.7 View Adopter

a) Search

The staff can search the data by id number or name of adopter.

b) Delete

The user can delete the data of the adopter. It includes the details of them.

c) Edit

They also can edit the changes of the adopter and save it as update data.

1.4.2.8 Back up and Recovery

a) Back up

The admin can do the database backup at any single time. The backup file will be saved based on version.

b) Recovery

The admin are able to retrieve the back up files to restore the database if the database damaged.

1.4.2.9 Monthly Report

a) Generate the reports of the orphans based on the records or the total orphans per year at the Orphan Home.

1.4.2.10 Log Out

After the user finish using the system, they need to log out from the system.

1.5 Project Significance

The projects significant of this project are:

a) Data storage management