

MUSLIM CEMETERY MANAGEMENT SYSTEM (MCMS)

Farah Dalilah Binti Abdul Rashid

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Saya FARAH DALILAH BINTI ABDUL RASHID

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(TANDATANGAN PENULIS)

Alamat tetap: C-01-03, Blok C,
Taman Seri Kenari, 43000 Kajang

(TANDATANGAN PENYELIA)

Safiza Suhana Binti Kamal Baharin

Tarikh: 24 Ogos 2015

Tarikh: 24 Ogos 2015

CATATAN: * Tesis dimaksudkan sebagai Laporan Akhir Projek Sarjana Muda (PSM)

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MUSLIM CEMETERY MANAGEMENT SYSTEM

Farah Dalilah Binti Abdul Rashid

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

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2015

DECLARATION

I hereby declare that this project report entitled
CEMETERY DATABASE MANAGEMENT SYSTEM

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

STUDENT : _____ Date : 18 August 2015
(FARAH DALILAH BINTI ABDUL RASHID)

SUPERVISOR : _____ Date : 18 August 2015
(PN. SAFIZA SUHANA BINTI KAMAL BAHARIN)

DEDICATION

To my parents, Mr. Abdul Rashid Bin Dimin and Mrs, Hadijah Binti Said.

To my supervisor Madam Safiza Suhana Binti Kamal Baharin.

To my lecturers, friends and my family.

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Furthermore, I would like to express my sincere love to my supervisor Pn. Safiza Suhana Binti Kamal Baharin for fully support towards my final year project which Muslim Cemetery Management System. Her patience, motivation and wide knowledge have put me in this situation right now. Her guidance from early phase until the end of this final year project and writing this thesis. I could not have imagined how my project would be without a better supervisor like her.

Lastly, of course I will thank to my family, my parents and my sibling for support me mentally and physically throughout my final year project. Without them, I will not standing right where I am now.

ABSTRACT

The title of my project system is Muslim Cemetery Management System. The purpose of this system is to make the cemetery in manageable state so that it ease the manager and the community to visit. Instantly, the problem statement of the cemetery become worst when people or community hard to find some grave when they want to visit. Besides, the manager hard to manage cemetery due to lack of information about updated or left available space. To solve this problem, I proposed cemetery management system. The objective of this system is to provide web based cemetery database management system to enhance manual searching of grave information. Moreover, it enhances the current cemetery management by providing total number of grave based on cemetery area. Hence, it also to provide a platform for report generation. Furthermore, this system is developed using PHP, MySQL and Apache Server.

ABSTRAK

Projek sistem yang akan saya bangunkan adalah Muslim Cemetery Management System. Sistem ini bertujuan untuk memastikan tanah perkuburan dalam keadaan yang terurus. Keadaan ini akan menyenangkan pihak pengurus dan komuniti di sekitar. masalah ini menjadi semakin besar apabila komuniti sekitar sukar untuk mencari kubur si mati yang ingin dilawati. Selain itu, pihak pengurus susah untuk menguruskan tanah perkuburan kerana kekurangan informasi yang terkini atau ruang kubur yang didapati. Untuk menyelesaikan masalah ini, saya akan membangunkan sebuah sistem iaitu sistem pengurusan tanah perkuburan. Objektif bagi sistem ini adalah untuk menyediakan sistem yang berdasarkan web pengurusan tanah perkuburan untuk mempertingkatkan carian maklumat oleh komuniti yang menggunakan carian secara manual. Selain itu, mempertingkat kualiti sistem yang sedia ada dengan menyediakan keseluruhan berapa tanah kubur yang muat di suatu tanah perkuburan berdasarkan luas tanah perkuburan. Ia juga menyediakan platform untuk mengeluarkan laporan. Sistem ini dibangunkan menggunakan PHP, MySQL dan Apache Server

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LIST OF ABBREVIATIONS

MCMS	-	Muslim Cemetery Management System
DDL	-	Data Dictionary Language
ERD	-	Entity Relationship Diagram
DFD	-	Data Flow Diagram
PHP	-	Hypertext Preprocessor
DBMS	-	Database Management System
DML	-	Data Manipulation Language
DDL	-	Data Definition Language
SDLC	-	Software Development Life Cycle
SQL	-	Structured Query Language

CHAPTER I

INTRODUCTION

1.1 PROJECT BACKGROUND

Every inch of living thing in this world will face to the death include human, trees, and animals. The main point that I want to highlight is the death of human being. Malaysia has three different race that being a symbol to Malaysian which are Malay, Chinese, and India. Each of different race have their own space of cemetery, own design of grave and own ritual of the death. There are many cemetery in Malaysia but a lot of cemetery doesn't being cared well enough for being a beautiful cemetery and manageable.

There are a lot of system that can help people to organize cemetery well out there but only a little have been exposed in Malaysia such as one and only online system, E-Pusara that I have found in website of epusara.com. Even that, it only provided few features and functions and some system is payable.

This system is design to provide a user friendly function to search the corpse easily. Besides that, this system will able to calculate how many corpse that can fit in a cemetery area or region so that the manager of cemetery know how much corpse left. This functionality help the manager get ready to find a new land for new corpse.

1.2 PROBLEM STATEMENT

The problem of cemetery management become worst when the cemetery are not in manageable state. If manager of the cemetery wants to find out how much left for empty space, they must search through records in log book or calculate themselves by patrolling at the cemetery. This problem may difficult the manager and waste their time in managing the cemetery. Moreover, local people also hard to find the grave due to only once a year they visiting.

Besides that, the problem of managing data in efficient way become the main challenge because all information about cemetery include the corpse needs to store into manual based.

1.3 OBJECTIVE

The objectives for this system are:

- To provide web based cemetery database management system to enhance manual searching of grave information.
- To enhance the current cemetery management by providing auto calculation of approximate number of grave based on cemetery area.
- To provide a platform for report generation (e.g. number of corpse according to age or gender) easily.

1.4 SCOPE

There are 4 types of scope provided for this system to run smoothly and divided according to its functionality which are find module, staff module, login module, and report module.

For login module, the purpose of this scope is to have an authorised user so that only permitted user is allowed to access the system using username and password. After user success to login, user can handle their own field of work.

Besides that, find module provide the result of where the grave of the dead is and it will identified by systematic map of the cemetery. This will ease the person or community who have forget the grave of the dead. This will reduce the time for searching the grave.

Moreover, staff module will make the staff know how much grave left for a cemetery and this will make the manager's work more easier to know how big the cemetery are. Manager also can insert data about the corpse and update the data in this system.

For report module, the manager can view all the information of the tables in database by generate the report in tabular or matrix form. All data will be arrange according month or year to let the manager do the analysis in efficient way.

1.5 PROJECT SIGNIFICANCE

This system will provide solution to cemetery manager that faced problem in managing cemetery in proper way. For example cemetery manager can check the empty space through this system to make an early step for finding a new cemetery area when it is full. This system upgraded by current system which are E-Pusara that only has search option only. Besides that, this system also may automates the manual processes that are currently leading to various problem.

1.6 EXPECTED OUTPUT

This system is expected to deliver the necessary output to solve the problems of cemetery manager that have face many problem in managing cemetery. The report that can be the output of this system will categorized into weekly report, monthly or yearly report.

1.7 CONCLUSION

The cemetery management system is developed to ease the manager of cemetery in cemetery management in term of location of the grave, the number of empty grave, and total number of grave in one cemetery. This will ease the manager when the cemetery is full and manager can make an early step to avoid the problem such as family of the dead must wait in long time to find the new grave. This system will used by manager of the cemetery and community.

CHAPTER II

PROJECT METHODOLOGY AND PLANNING

2.1 INTRODUCTION

This chapter will introduce about the method that will be used to implement this system. For Cemetery Management System, Waterfall Model is chosen as a method in development of this system. Waterfall model is easy to detect or refer a problem that occurred in any stages in Development Life Cycle (DBLC).

Thus it is easy rather than a correction with same error on the further next stages. In advance, waterfall model is simply approach and argue, easily understandable and more explainable phases. There are five stages that we are using from waterfall model, which are Planning, Analysis, Design, Implementation, Testing and Maintenance. Every stage will only start if the stage before have been finished or nearly finished.

2.2 PROJECT METHODOLOGY

The method that is used in development of this system is waterfall model. Waterfall model is suitable for implement this system due concept of waterfall model which are start the next stage when the stage before are finish or nearly finish. There are five main step approach to Database Life Cycle which are Planning, Analysis, Design, Implementation and Maintenance. This step moves logically from one phase to the next.

2.2.1 Planning

The project planning starts in this phase. First, I propose the title that I want to my supervisor. Then, my final decision on choosing suitable title for PSM is on supervisor title which is Muslim Cemetery Management System (MCMS). Next, I make the proposal of our project then submit to my supervisor until it is approved by my supervisor so that I can continue the project smoothly. Meanwhile, I have gathered more information about cemetery system from website or current system observation. Then, the introduction, problem statement, scope, and objectives are set up.

2.2.2 Analysis

In this phase, an analysis has been made within the current system that exist in Malaysia. There are a lot of cemetery system but there are a little exposed for community to use in Malaysia and most of the system are from international.

This analysis phase need to identify what is the weakness of current system and my proposed system should be able to overcome the weakness by adding new function that can improve the current system. By this, the problem statement of the system can be defined throughout the observation. The objective and scope also can be extracted from this analysis to develop the system.

2.2.3 Design

Database design is define as the third phase, where a design for the database is form. It can support Cemetery Management System operational and objective, such as I have choose to use MySQL as database management. The minimum requirement for the installation need to be confirmed first in order for the Database Management System (DBMS) in the server to run smoothly.

Besides, the Entity Relationship Diagram (ERD), and data dictionary is create where it will explain the main basic workflow of the system. All relationship between the tables, define the storage structures and the access paths will be known. In the conceptual design stage, data modeling is used to create an abstract database structure which represents the real-world objects. There are two types of database design such as top-down design and bottom-up design. At the top-down level, the data set is identified and data element is defined. This process involves the identification of different entity types and the definition of each entity's attributes. Besides that, in bottom-up design data element will be identified which also called items and the group them together in datasets.

Business rules that extract from a detailed description will help to create actions within the organizations environment. The business rules defined will properly describe the entities, attributes, relationship and connectivity and constraints of the Cemetery Management System.

2.2.4 Implementation and Testing

All database management system that had been design will be loaded and implemented in our system during this phase. The installation and configuration between database and server was been done and data will be load to create tables and define the relationship. Then, database is tested for performance, integrity and concurrent access and also security constraints. Moreover, testing and evaluate the system parallel with application programming is done.

After the evaluation stage had been carried out, it can pass through the operational system. This phase involve all the users in MCMS that will use this system. The testing and evaluation phase occurs in parallel with applications programming. If the database implementation fails to meet the user's requirement, several option will be in order enhancing the system.

2.2.5 Evaluation and Maintenance

This phase is known as life time stage when system developer take place to perform routine maintenance to the MCMS which periodic maintenance that included of system backup, recovery, enhancing or normal maintenance. Hence, in this phase also, all the problems will be recorded for the last time for maintenance purposes of the parts identified as having problems or weaknesses.