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JUDUL: **RECREATIONAL AND SPORTS CENTRE MANAGEMENT SYSTEM**

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RECREATIONAL AND SPORTS CENTRE MANAGEMENT SYSTEM

NOR ASHIDAH BINTI SELAMAT

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

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
KOLEJ UNIVERSITI TEKNIKAL KEBANGSAAN MALAYSIA
2006

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I hereby declare that this project report entitled

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STUDENT : _____ Date : 20/11/06
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DEDICATION

To my beloved parents, En. Selamat Ahmad and Pn. Poviah Masdad that always cares and concern about me, my whole family that always there for me, my supportive supervisors, Pn. Norashikin Ahmad and Cik Nuridawati Mustafa that that always support and guide me, and all my friends. Thank you.

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The title for my PSM project is the Recreational and Sports Centre Management System (RSCMS). This project is a request from the Recreational and Sports Centre (USR) of KUTKM.

All requirements for the new system and information regarding the current system are given to me by one of the USR staff that is En. Razali Yaakob. Therefore, I would like to thank him and other USR staff that had given me their full support and cooperation.

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Thank you.

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ABSTRACT

The title for the project is the Recreational and Sports Centre Management System (RSCMS). The project is going to be developed for the use of the Recreational and Sports Centre of KUTKM. There are two major modules in the system that is sports events management and inventory management. The system is developed to manage the database of sports events management and the inventory management, and to provide easy searching for the user. This PSM reports includes seven chapters that are the introduction, literature review and project methodology, analysis, design, implementation, testing and conclusion. The system will be a web application system using LAN and is designed using the DBLC methodology. RSCMS is developed using ASP as its programming language and SQL Server 2000 as its database. Currently, USR does not have any computerized system in managing the sports event and its inventory. The main purpose for developing the system is to develop a proper and systematic database in sports events and inventory management.

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ABSTRAK

Tajuk bagi projek ini adalah Sistem Pengurusan Unit Sukan dan Rekreasi (RSCMS). Sistem ini dibangunkan untuk kegunaan Unit Sukan dan Rekreasi (USR), KUTKM. Terdapat dua modul besar di dalam sistem ini iaitu pengurusan kejohanan sukan dan pengurusan inventori. Sistem ini dibangunkan untuk mengendalikan pangkalan data bagi kejohanan-kejohanan sukan dan inventori USR, untuk menyediakan carian yang mudah bagi pengguna. Laporan PSMI ini mengandungi lima bab iaitu pengenalan, hasil rujukan dan metodologi projek, analisa, rekabentuk, dan kesimpulan. Sistem ini merupakan sebuah sistem aplikasi web menggunakan LAN dan direkabentuk menggunakan metodologi DBLC. RSCMS dibangunkan menggunakan ASP sebagaii bahasa pengaturcaraanya and SQL Server sebagai pangkalan data. Pada masa ini, USR tidak mempunyai sebarang sistem perkomputeran dalam pengendalian maklumat kejohanan-kejohanan sukan dan inventorinya. Tujuan utama untuk membangunkan sistem ini adalah untuk menyediakan pangkalan data yang betul dan teratur dalam pengendalian maklumat kejohanan-kejohanan sukan dan inventori.

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LIST OF ABBREVIATION

TERM	EXPLANATION
PSM	Projek Sarjana Muda
KUTKM	Kolej Universiti Teknikal Kebangsaan Malaysia
RSCMS	Recreational and Sports Centre Management System
USR	Recreational and Sports Centre
DBLC	Database Lifecycle
WAN	Wide Area Networking
FTMK	Faculty of Information Technology and Communication
LAN	Local Area Network
MAN	Metropolitan Area Network
DBMS	Database Management System
DFD	Data Flow Diagram
IIS	Internet Information System
ASP	Active Server Pages
HTML	Hypertext Markup Language
ERD	Entity Relationship Diagram
3NF	Three Normal Form

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CHAPTER I

INTRODUCTION

This chapter is the introduction of the system to be developed for the PSM project. The project that is going to be developed is calls the Recreational and Sports Centre Management System (RSCMS). It is developed for the use of the Recreational and Sports Centre (USR) of KUTKM. The system is going to be used in managing all the sports events that involving KUTKM and the inventory of the centre. This chapter will describe the project background, problem statement(s), objectives, scopes and project significance of the system.

1.1 Project Background

The project is going to be developed for the use of the Recreational and Sports Centre of KUTKM. KUTKM is one of the government high education institutions in Malaysia. The Recreational and Sports Centre is one of the departments in KUTKM that manage things associated with sports and recreational. Information associated with the sports events will be stored systematically and associated reports can be produced using the proposed system. Besides that, processes associated with inventory such as borrowing sport equipments will be handled using the system.

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There are two major modules in the system that is sports events management and inventory management. Each month, there are several sports events that involving KUTKM. In the sports events module, the Recreational and Sports Centre will store all the general information of the event and assign athlete to it according to the sports that was organized for the event. There are several reports that going to be produced according to the user requirements such as KUTKM achievement by year, full report of each sports event and full report of each sport in each sports event. While in the inventory module, the centre will manage process associated with inventory such as the borrowing process. The system is developed to manage the database of sports events management and the inventory management, and to provide easy searching for the user.

The main purpose for developing the system is to develop a proper and systematic database in sports events and inventory management. The requirements to develop the system are gathered from the Recreational and Sports Centre staff that is En. Razali Yaakob.

1.2 Problem Statement(s)

Below are the problem statements of RSCMS:-

a) No computerized system

Currently, USR does not have any computerized system in managing the sports events associated with KUTKM and it inventory. All the information regarding the sports events and inventory are recorded manually using form and was placed in a file. Therefore, loss of data may occurs. It is also hard for the USR staff to update and maintain the data. Using system to be, it will help the USR staff in recording and maintaining the data.

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b) No proper way in recording important information

There is no any specific database in storing all the information associated with the sports events management and USR inventory. All the information is just being saved and viewed in Microsoft Office Word and Microsoft Office Excel. Besides that, the entire important document is not being saved in one place. This will lead to loss of data and data redundancies. The new system to be is important to make sure that all the data are recorded in a proper storage.

c) Hard to keep track inventory

Currently, USR uses manual forms each time borrowing operation occurred. Then, the form is placed in a file. Whenever, USR want to update or make inspection on the inventory, they have to browse all the form. This required more time and sometime carelessness may occur where the data is not being check carefully. Therefore, it is hard to keep track the USR inventory.

1.3 Objectives

Below are the objectives of RSCMS:-

a) To develop proper data storage for the sports events management.
It is to make sure that the data are recorded properly and systematically so that the data can be easy maintain by the user.

b) To develop an online system of managing the sports events to make all the operation associated with it being managed easily.
Currently, there is no any computerized system in handling the spots events management. By making all the operation regarding the sports events

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management computerized and online, the USR staff can easily maintain and update the data regarding the sports events anytime and anywhere.

c) To produce all the reports required by the targeted user.
To enhance the performance of USR and it management, all the reports required by user will be produced using the system such as KUTKM achievement by year, full report of each sports event and full report of each sport in each sports event.

d) To provide easy record searching for the user.
When all the data are recorded systematically, it will provide easy searching for the user.

e) To make borrowing and returning process easier and faster.
Using the current way, each time any person want to borrow any equipments from USR, they have to fill in form and it will be placed in a file. When they return the equipment, the USR staff has to check all the form one by one to approve that the equipment had been return. The new system is aim to let all the process being done just on the fingertips that will be easier and faster.

f) To keep track of the inventory of the Recreational and Sports Centre.
It is important to keep track of the USR inventory. By using the new system to be, it is hoping to help the USR staff in tracking their inventory faster and easier.

1.4 Scopes

The project is going to be developed for the use of the Recreational and Sports Centre of KUTKM. It is a multi-user system that included the USR administrator, his assistant and third level USR staff.

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The department had no computerized system in managing the sports events that involving KUTKM. In fact, all the record is just being recorded manually in Microsoft Office Word or Microsoft Office Excel and being printed and put in a file. While for the inventory management, each time borrowing process occurred, the borrower and the equipment information is fill in a form and then being placed in a file. When the borrower return the equipment, the USR staff have to find the correct form first before approving that the equipment had being return. This is a hassle for the USR staff.

Therefore, the system is being developed to overcome the problem and to make sure that the data are recorded in proper database. There are two major modules included in the system:-

a) Sports Events Management Module

The modules that are included in the sports events management are sports registration module, sports events registration module, athlete registration module and report producing module.

b) Inventory Management Module

In the inventory management module, there are adding and updating inventory modules, borrowing and returning modules and report producing module.

Even though, the system included modules of the sports events management and the inventory management, it doesn't manage the whole process of inventory maintenance.

The methodology that is going to be use in developing the database system is the Database Life Cycle (DBLC). The DBLC is composing of six phases: the database initial study, the database design, implementation and loading, testing and evaluation, operation, and maintenance and evolution.

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The system is going to be developed using Active Server Page (ASP) and the data storage that going to be used is MS SQL Server 2000. The system is going to be online using the Local Area Networking (LAN) and it is only available on the Windows platform.

1.5 Project Significance

RSCMS is developed to help the USR staff to enhance their performance in managing the sports events and the inventory using a computerized system.

Using the system, user can key in all important information regarding sports events and inventory into the system. Then the data will be properly stored in a systematic database. Therefore, each time user wants to view or maintain the data, the data can be easily retrieved. By using a systematic storage, it can also afford the growth of data.

By developing the system, borrowing and returning process can be easily done. User just have to fill in the borrowing form in the system and when borrower return the equipment, the user just have to key in the equipment serial number.

The system is also developed to fulfill the user requirements in producing certain reports regarding the sports events management and the inventory management. Therefore, it can make the operation of USR more efficient.

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