

**UTeM SPORT CENTER: ON-LINE BOOKING OF FACILITIES
AND EQUIPMENTS**

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**UTeM SPORT CENTER: ON-LINE BOOKING OF FACILITIES
AND EQUIPMENTS**

NOORAIWATI AZHARI

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

**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA
2008**

DECLARATION

I hereby declare that this project report entitled
**UTeM SPORT CENTER: ON-LINE BOOKING OF FACILITIES
AND EQUIPMENTS**

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 Haji Azhari bin Muhamad and Hajah Unaizah bt Mahmood because giving support in completing my final year project which is entitled UTeM Sport Center: On-Line Booking of Facilities and Equipments (OBoSSFE).

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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Last but no least, to all might have involved directly or indirectly in developing this system is much appreciated and a note of thanks from me.

ABSTRACT

The UTeM Sport Center: On-Line Booking of Facilities and Equipments (OBoSSFE) is developed mainly for UTeM students and staffs. An analysis study has been done based on the current manual system and all the problem statements and requirements have been identified. OBoSSFE is two tier architecture systems which involve client tier and database management tier. The interfaces for OBoSSFE have been designed according to the user requirement and needs. The students and staffs can, not only retrieve info about the sport center, but also book the facilities and equipments using the proposed on-line system. The application will be processed by the administrator who is a sport center staff, and users also can view the status about their booking status. Furthermore, the management of facilities and equipments will be maintained by the administrator. The facilities and equipments, including user records will be managed by the MySQL DBMS. Only the administrator has the authority and privileges to make changes about the facilities and equipments. The methodology adopted for this system is Object-Oriented Analysis and Design (OOAD). This UTeM Sport Center: Booking of Facilities and Equipments System hopefully will help to improve the performance of current situation and overcome the problems that arise nowadays.

ABSTRAK

UTeM Sport Center: On-Line Booking of Facilities and Equipments (OBoSSFE) adalah dibangunkan khusus untuk pelajar - pelajar dan kakitangan - kakitangan UTeM. Satu kajian analisis telah dibuat berdasarkan sistem manual semasa dan semua kenyataan masalah dan syarat-syarat telah dikenalpasti. OBoSSFE merupakan seni bina dua peringkat sistem yang melibatkan peringkat pelanggan dan peringkat pengurusan pangkalan data. Perkaitan untuk OBoSSFE telah direka mengikut keperluan pengguna. Para pelajar dan kakitangan bukan sahaja boleh mendapatkan semua maklumat mengenai pusat sukan, tetapi juga boleh menempah kemudahan-kemudahan dan peralatan yang disediakan menggunakan sistem dalam talian yang telah dicadangkan ini. Permohonan akan diproses oleh pentadbir yang juga merupakan petugas pusat sukan. Pengguna juga dapat melihat status mengenai tempahan yang telah dibuat. Pengurusan kemudahan-kemudahan dan peralatan-peralatan akan dikendalikan oleh pentadbir. Kemudahan-kemudahan dan peralatan, termasuk rekod-rekod pengguna akan dikendalikan oleh sistem pengurusan pangkalan data MySQL. Hanya pentadbir yang mempunyai kuasa dan keistimewaan untuk melakukan perubahan - perubahan mengenai kemudahan-kemudahan dan peralatan. Kaedah yang digunakan dalam sistem ini adalah *Object-Oriented Analysis and Design (OOAD)*. *UTeM Sport Center: On-Line Booking of Facilities and Equipments (OBoSSFE)* ini diharapkan akan membantu dalam mempertingkatkan prestasi keadaan semasa dan mengatasi masalah-masalah yang timbul sekarang.

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LIST OF ABBREVIATIONS

OBoSSFE	On-line Booking of Facilities and Equipments
USC	UTeM Sport Center
OOAD	Object Oriented Analysis and Design
UML	Unified Modeling Language
ERD	Entity Relationship Diagram
DD	Data Dictionary
Data	Dictionary (DD)
DDL	Data Definition Language
DML	Data Manipulation Language
SCM	Software Configuration Management
PHP	Personal HyperText Processor
FK	Foreign Key
PK	Primary Key
DBMS	Database Management Selection

CHAPTER I

INTRODUCTION

This chapter presents the background information of the proposed system. It will discuss the overall aims of the project; problem statements, objectives, scope and project significant.

1.1 Project Background

This sports complex has begun to be built on 1st of April 2006 and its construction completed on 30th of June 2007 with the cost as many as RM25,494,807. This Sports complex consists of sports stadium, sports hall, field and court. It was be builds by Konsortium Kumpulan Melaka Berhad-Putra Perdana Berhad-Cobrain Sdn. Bhd.

UTeM Sport Centre (USC) which located at the Durian Tunggal Campus is a modern sport centre provided very complete facilities that possibly not existing to any university. The facilities which sports stadium provide is track (400 meter) and football field with the place sat covered having capacity up to 500 people at one time. Sports hall provide badminton court, basketball court, and gymnasium while field and court provide hockey field, rugby, football, tennis, softball, handball, volleyball and netball.

Currently, there were 15 staffs run the sports centre including Director of Sports Centre, Sports Officer, Assistant Registrar, Assistant Sports Officer,

Technician and many more. The booking process for facility and equipment can be made directly to USC. User should come by them to sports centre to make the reservation manually. This process is thought not efficient and need best medium to make booking process easier. The automation system is foreseen look more efficiently while it can make the booking process quicker, effective and benefit too many. It would allow staff resources to perform their tasks more professionally. The system that will be built will provide access to university staff and students. Current policy does not allow external parties to use any of the sport centre facilities and equipments.

1.2 Problem Statement

Despite of the modern and up-to-date facilities, it still not has any medium that could make the booking process more professionally and corresponding with its standard. The current manual system faces a number of problems namely;

i. Unsecured data

Data was not well recorded because booking's information including user's data is stored in paper format in the drawer. The probability the data to gone astray or damage is high. Users and their reservation's information also may be change by irresponsibility person.

ii. Unsystematic report generated

All the data did not manage systematically caused the reporting or future reference cannot be done. If the administrator wants to see the activities for the last month, he must search the record written inside paper one by one. Such way looks wasteful and not well-organized.

iii. Increase staff work force

The time management will not be organized due to many work requests. Booking process will do with staff intervention. This might the staffs work force will be increase.

iv. Difficult to access information

No way how user be able to get know about facilities and equipments that still available for them. Users are requiring the physical presence of them to go to the sports centre to ask for availability. There exist times where this may be not be feasible due the sport centre which locate at main campus is quite far from user at industrial campus.

1.3 Objective

The main aim of this project was to design, develop and create web-based application which would assist student, staff and also the public to book facilities and equipments provided by UTeM Sport Centre. In order to fully satisfy the project aim, the following objectives must be met:

i. Data will be more secure

The data will not put aside in paper format anymore. The booking process will be done via computerized system and user's information will kept in database. All the data will be considered as a secure and only the users with the right username and password can access the secure information. The data will not go astray or damage or changed by illegal person.

ii. Standardization of report and documentation

By using the computerized system, the report can be generating less then one minute. Staff work force could be decrease and he can spend time to another tasks.

iii. Decrease staff work force

To provide faster and efficient service which user can make booking process without need go to sport centre and without staff intervention. All the booking process will be online and user can access to see the availability at anywhere through internet connection.

iv. Easy to access information

To provide complete information about the facilities and equipments which able to give information for example, what types of facility and equipment are able to borrow, and which facility are not book yet at a particular time.

1.4 Scope of Project

This system is being build to easily for user to see facilities availability through searching by facility name, and allowing them to book facilities and equipments available for them. Process of booking can be made by user's themselves but process of issuing and returning the equipments will be handle by staff to make sure the equipments is return and in a good condition.

1.4.1 Modules

i. Registration

User needs to register first before make booking to the facility and equipments.

ii. Login and Logout

Staff who also act as an administrator, need to login to the system to gain access to the administrator privileges. User also must login if they want to enter to their page and make any changes to of their booking. Only the right username and password can access to the system. This method will give the security to the information save. Staff and user need to logout whenever to leave the system.

iii. Booking

Before giving a permission to use the facility or equipment, user needs to

make a booking. It will give some knowledge to everyone who uses the facility or equipment at that time. Users need to book at least one week before can use the facilities or equipments. Booking is made depends on availability of facility and equipments provided.

iv. Searching

Search module is where user can view the facilities availability through search the facility by facility name.

v. Booking Status

After made a booking, the booking status given for user is 'pending' status. Next, the administrator will responsible to decide whether to approve or reject of the booking request. User can view their booking status by entering their name. The match trial will give the results.

vi. Issuing and Returning

Issuing and process of returning the equipments will be handling by staff. It is to ensure it is return in good condition especially the equipments borrowed. No paying needed to borrow the facilities or equipments, but if the facilities and equipments are fails or damage during the borrowing process, payment will be deducted.

1.4.2 Target User

i. Staff (sport centre)

- Manage about the users, facilities and equipments and ability of adding, modifying, or deleting of facilities and equipments including information and made any changes at term and policy of booking.

- Responsible to make the acceptance or rejection to the booking that has made by user.
- Manage the issuing and returning of facilities and equipments.

ii. User (staff/student)

- View facilities availability through searching by facility name.
- View the status of booking that they had made.
- Only the user who has registered can make the booking and use the facilities and equipments provided by USC and need to login first to make the booking.
- User need to register first as a member before make the booking.

1.5 Project Significance

This online system will help the users to make the booking of facilities and equipments faster and easier. User can book facilities and equipments at any time and anywhere from their place using internet browser. User may view the facilities and equipments that are available to book before continue to a booking process. Online Booking Facilities and Equipments also will assist the staff to handle facilities and equipments management in term of adding, modifying, deleting or even make any changes to the system. The staff of sport centre is also responsible to verify the correct user when they ask for facilities or equipment they booked, and handle the issuing and process of returning of facilities and equipments.

1.6 Expected Output

The objectives of this system are to develop a web based booking system and to automate the process of booking system for sport facilities and equipments. This system expected to change from manual system to a computerize system that can be use by sport centre and its users. The proposed