

**SPORT RESERVATION SYSTEM WITH DECISION SUPPORT SYSTEM  
FEATURES FOR SPORT COMPLEX OF UNIVERSITI UTARA  
MALAYSIA**

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## **ABSTRACT**

This project presents a web based study highlighting the best practices in designing and building a prototype. It used web-based application in a system which includes both an online reservation system for the sport activities, and DSS to help the manager of the sport complex. This project used object-oriented analysis and design (OOAD) methodology, and UML in designing and developing a prototype. JSP and MYSQL etc. provided adequate support for building a prototype. After developing the prototype, evaluation of it has been done by using usability testing through the distribution of questionnaires on a sample of users including the students and staff. An interview has been held also with the manager of the sport complex in UUM. The responds from the users show that our objectives have been met in this study. We concluded that online sport reservation system provides an opportunity to the users to be familiar with the web applications, and provides enhancement to the management of the sport complex through the use of a data-driven decision support system.

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# CHAPTER ONE

## INTRODUCTION

### 1.1 BACKGROUND

With the increasing popularity of the Internet many organizations are now looking to create Web-based applications capable of collating, processing and distributing information central to the organizations needs. Applications that not only provide services to the organizations staff, but also to their customers via the Web [26].

Web-based applications are becoming so traditional in our every day life in the sense that it would not go a single day without using them. These applications range from simple to complex ones, where thousands of dollars in revenue are generated. Developing, testing and quality assuring these applications become a challenging job [1].

The University Utara Malaysia was officially integrated on February 16, 1984 with the exclusive mission to give academic quality in the areas of business management education, information technology and quality management. The UUM is an open campus, where both the public and even tourists are welcomed to use the activities available, such as sports and recreation complex.

The Sport and Recreation Complex in UUM is an active student group, where individuals motivated by a common interest and wish to share in a favorite game activity. The sports and recreation complex is has an Olympic-sized swimming pool, a small stadium, an archery range, a badminton hall, a gymnasium, tennis, squash, basketball and volleyball courts, rugby, hockey, softball, handball and football fields and a nine-hole

The contents of  
the thesis is for  
internal user  
only



- iv. Add also functionality for the manager that allows him/her to block certain facilities wherever there are any sport tournaments held in the sport complex.
- v. Also propose other new DSS feature that will help the manager managing the resources better.
- vi. To provide descriptive statistics for different report such as relationship between different games related to time, sport equipment maintenance related to type of games, etc.

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