

Automated Sports Club

Abstract

The Ellesmere Sports and Leisure Club (“the automated sports club”) provides cricket, tennis, squash, bowls, and croquet facilities to its members. There is room for improvement in the current procedures for booking sports facilities. Presently, sports users make bookings in person and sports centre staff record them by hand. Staff currently spends a considerable amount of time administrating the booking of sports centre facilities. There is currently no way for users to check what bookings they have outstanding without contacting sports centre staff. This can lead to more unnecessary use of staff time or users missing bookings. By automating above system, administrator organizes, schedules tasks and maintains the system, users (members) can access and can book sports club tasks through internet, different club promoters can see various tasks and organize them efficiently by using this developing online application. It is felt that there would be benefits to both sports users and staff from automating this process. For this reason, the focus of this project will be on the development a generic solution that is suitable for a variety of sports centers.

Existing System

In the current procedures for booking sports facilities, presently, sports users make bookings in person and sports centre staff record them by hand. It is felt that there would be benefits to both sports users and staff from automating this process.

- *This is manual maintenance system.*
- *Here some spread sheet is maintained for listing all the members and facilities.*
- *Bookings are also maintained in the spread sheet.*
- *Annual bills are provided by linking word processor using mail merge.*
- *There by causing loss of employee time also.*
- *Thus the present system stated is time taking, insecure and costly.*

Proposed System

The proposed system "AUTOMATED SPORTS CLUB" serves organization's needs and Club Members in a consistent and transparent manner. It should cater the needs of information sharing. It allows the Staff members to allow activities through net. The members need not to go to Club to book activity and payments. It saves a lot of time of Staff and members of that Club.

Scope of the System

The scope of this system is automating the sports booking facility and etc. and different club promoters see and organize the tasks efficiently. But the user (club member) needs to appear before staff if he needs to pay money and take receipt for choosing some sport. It is possible to enhance this application by adding a functionality that the user pay through online banking system attached with our system or using credit card. We can also implement internationalization (i18n) to support user interface in various/local languages.

Module Description

The system “AUTOMATED SPORTS CLUB” consists of 2 modules.

- 1. Admin Module*
- 2. Member Module*

Admin Module:

This module is for Administrator who organizes, schedules tasks and maintains the system.

Member Module:

This module is for booking activities, paying money, updating his details and can view the booking details.

Features to be implemented

- *Session management*
- *Connection pooling*
- *Normalized database*
- *Prevention of duplication login*
- *Design patterns*
- *Three-tier architecture*
- *Maintainability*
- *Easy deployment with Ant script.*
- *Exception handling*
- *Client-side validations*

Technologies to be used

- *Web Presentation: HTML, CSS*
- *Client – side Scripting: Javascript*
- *Programming Language: Java*
- *Web based Technologies: JNDI, Servlets, JSP*

- **Database Connectivity API: JDBC**
- **Build Tool: ANT**
- **Debug Tool: Log 4J**
- **CASE tool: Rational Rose, Visual Paradigm, Enterprise Architect**
- **Backend Database: Oracle/SQL Server/MY SQL/MS Access**
- **Operating System: Windows XP/2000/2003, LINUX, Solaris**
- **J2EE Web/Application Server: Tomcat/Weblogic/WebSphere/JBoss/Glass Fish**
- **IDEs: Eclipse with My Eclipse plug-ins/Net Beans/RAD**
- **Browser: IE/Mozilla**

Hardware requirements

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|---------------------|-------|------------------|
| • Pentium processor | ----- | 233 MHZ or above |
| • RAM Capacity | ----- | 128MB |
| • Hard Disk | ----- | 20GB |
| • Floppy disk | ----- | 1.44 MB |
| • CD-ROM Drive | ----- | 32 HZ |
| • KEYBOARD | ----- | 108 Standard |

