

CERTIFICATION OF APPROVAL

Online Sport Booking System

by

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Approved by,



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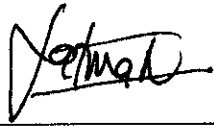
UNIVERSITI TEKNOLOGI PETRONAS

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CERTIFICATION OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project, that the original work is my own except as specified in the references and acknowledgements, and that the original work contained herein have not been undertaken or done by unspecified sources or persons.



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ABSTRACT

This paper reports that the functionality and usability of the online system on internet. In using web technology, it will delivers the promise of access to information from anywhere in the world. Booking sport facilities is difficult nowadays because people are quite busy and do not have enough time to go to sport council just for making a reservation. To overcome this problem, this project will helps their residents to organize the data and the information into better style and format and also to their customers so they can make a reservation easily through internet connection because in Perak, the government has taken a good advantage of Information and Communication Technology (ICT) by built K-Perak. Every council or department also must take this opportunity in improving and update their e-services regularly because in this new era, people are start using e-service in order to save their time and money. If other country can make used of this new technology of ICT too, life will become easier and we can save a lot of time. Besides that, we also can improve our culture and our generation to a next step which is more intellectual and independent same as other countries in this world.

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TABLE OF CONTENTS

	Pages
CERTIFICATION OF APPROVAL i
CERTIFICATION OF ORIGINALITY ii
ABSTRACT . . . . .	. iii
ACKNOWLEDGEMENT . . . . .	. iv
TABLE OF CONTENTS . . . . .	. v
LIST OF FIGURES . . . . .	. vii
LIST OF TABLES . . . . .	. vii
CHAPTER 1: INTRODUCTION . . . . .	. 1
1.1. Background of Study. . . . .	. 1
1.2. Problem statement . . . . .	. 3
1.2.1. Significant of the Project . . . . .	. 4
1.3. Objectives and Scope of Study . . . . .	. 5
1.3.1. Objectives . . . . .	. 5
1.3.2. Scope of Study . . . . .	. 5
1.3.3. Feasibility of the Project within Scope and Time Frame . . . . .	. 6
CHAPTER 2: LITERATURE REVIEW AND THEORY . . . . .	. 7
2.1. Online Booking System . . . . .	. 7
2.1.1. Online Booking (AirAsia) . . . . .	. 8
2.1.2. Hotel Booking Online System. . . . .	. 8
2.2. General Public License (GPL). . . . .	. 9
2.3. Microsoft Visual Studio 2005. . . . .	. 10
2.4. Web Server and Internet Information Services . . . . .	. 11
2.5. Adobe Photoshop . . . . .	. 12

TABLE OF CONTENTS

	Pages
CHAPTER 3: METHODOLOGY/PROJECT WORK	. 13
3.1. Procedure Identification	. 13
3.1.1. Definition stage	. 14
3.1.2. Design stage	. 17
3.1.3. Coding stage	. 17
3.1.4. Testing stage	. 18
3.1.5. Implementation stage	. 18
3.2. Development tools	. 19
3.2.1. Software	. 19
3.2.2. Hardware	. 20
3.3. Advantages of Visual C#.Net	. 20
CHAPTER 4: RESULT AND DISCUSSION	. 22
4.1. Data Gathering and Analysis	. 22
4.2. Findings	. 23
4.3. Result and discussion.	. 25
4.3.1. Interview: IPoh Sport Council staff	. 25
4.3.2. Survey: Ipoh Sport Council staff	. 26
4.3.3. Survey: UTP's student	. 26
4.3.4. User-UTP's Student Interfaces.	. 27
4.3.5. Administrator Interfaces	. 29
CHAPTER 5: CONCLUSION AND RECOMMENDATION.	. 30
REFERENCES	. 32
Internet	. 32
Book	. 32
APPENDICES.	. 33

LIST OF FIGURES

	Pages
Figure 2.0: System Architecture. . . . .	. 11
Figure 3.0: The Waterfall Model Design. . . . .	. 14
Figure 3.1: User Models for OSBS . . . . .	. 17
Figure 4.0: Result for survey . . . . .	. 27

LIST OF TABLES

	Pages
Table 3.0: Milestone for First Semester of Final Year Project . . . . .	. 15
Table 3.1: Milestone for Second Semester of Final Year Project . . . . .	. 16
Table 3.3: Software tools. . . . .	. 19
Table 3.3: Hardware tools. . . . .	. 20
Table 4.1: Functionality and description in OSBS . . . . .	. 23
Table 4.2: Comparisons between .NET, PHP, Java and Cold Fusion MX . . . . .	. 24

ABBREVIATIONS

OSBS	Online Sport Booking System
ISC	Ipoh Sport Council
UTP	University Technology of Petronas
API	Application Program Interface
IIS	Internet Information Services

CHAPTER 1

INTRODUCTION

Before starting the development of the project, there are few things that need to be considered first. This is to ensure that the project is feasible to be continued and also at the same time to provide a guideline or standard on how shall the project works. For that purpose, this section will be giving brief explanation about the project, the identification of problem statement, objectives that need to be achieved and scope of study that need to be follow.

1.1 Background of Study

Nowadays, besides concentrating in providing the best services to the customers, quite a numbers of business organizations had move a step ahead by equipping the new technology in their businesses such as an online sport booking systems. A few of companies already used an online system in order to give better services to their customers. However, it is hard to enhance the peoples to learn and used this kind of technology because it is still new in this country. Besides, many peoples like to use the old system in doing reservation rather than using this technology because they do not have enough knowledge. Online booking system provides service where users/peoples can make an online booking through accessing the network from anywhere and any time to do it.

Moreover, they can save their time from going to any particular place in order to do a reservation. By doing an improvement the finished system will allow all sports members, to book sessions, view their current booked sessions, and cancel them, if necessary. Sports Centre staff should be allowed to do all of these operations, on behalf of any member, as well as additional features such as reviewing the most popular activities and/or venues, and tracking members who book and do not arrive for their session. The motivation for this project is partly a personal one. It can be inconvenient having to physically go to the Sports Centre to book sessions. Having talked to other sports members, this seems to be a view shared by others. The Sports Centre manager also believes it would be a useful system, if it were implemented in a way that was as convenient for the reception staff as the current paper-based system. To overcome the problem of less knowledgeable users, this system will develop in user-friendly and users can understand easily how to make an online reservation. By making this system user-friendly, it can attract many users to use this system regularly.

Besides that, this system can help administrator to keep track the booking records, locate in the database and can manage the booking also the schedules from redundancy. This system basically will realize the existing of Information and Communication Technology (ICT) Strategic Blueprint known as K-Perak. By referring to the process model in process identification, it can be concluded that this study is now coming into the design stage. Data gathering and result have been done before, through many ways such as interviewing, surveying and searching about online system in the Internet. After getting and gathering all sorts of data, it can minimize the problem, which exist before, and the development in online system or system that is being using now can be improved.

1.2 Problem Statement

Currently, in Malaysia only several company that provide an online booking system in their businesses. Normally, only companies which offer services will be provide this system to their customers. They are still anxious to use this kind of technology to improved their businesses, because they though the system will not given them a good feedback and profits to their businesses in future.

Now in Perak, government already launched Information and Communication Technology (ICT) Strategic Blueprint known as K-Perak 2010 in order to born more intellectual Perak citizens but several of Perak citizens still not aware with government targeted before coming 2010 and if they are still not distorted, how this state will be a developed country and will reaches government's target in 2010.

Basically, almost companies still using the traditional method in making a reservation, for example such as Ipoh Sport Council. Before the user can make a sport reservation, user need to download the forms from Perak's government website or they have to call in or and show up personally to book sport facilities at Ipoh Sport Centre. Then, the users need to fill up the form and pass it to the Officer and waiting for several few days to get the result. This happened because the Officer will verify the form and also for check the availability and after that it will be passed to the manager for get approval. Besides, the Officers also need to keep track all the records by manually in the reservation books to make sure the schedules will not redundant with others reservation. When using old system, the tendencies for redundant names to occur are higher as compared to the new proposed system.

1.2.1 Significant of the Project

Right now, Perak Government already prepared an infrastructure (ICT Readiness) such as fiber optic backbone, teamwork from Time Engineering and Telecom Berhad, preparation Last Mile Wireless Broadband until six megabyte by Nasioncom Sdn Bhd with Telecom Berhad. From this, we can have advantages to use this Online Sport Booking System anywhere.

- Allow authorize user to access the system:
 - The system will only allow the authorized user to access to the system. All the users can have their own account and the system administrator and moderators will have an inspection time by time to prevent unauthorized personnel.
- Easy access to the Internet:
 - The system is run in a wide area network (WAN). So that users can easily access to the system everywhere through internet connection using broadband.
- Easily to host and manageable:
 - This system is run using a free scripting file and server. So, it can run in any platform of operating system like Windows, Linux and et cetera depends on the system administrator.

1.3 Objectives and Scope of Study

1.3.1 Objectives

The development of this system is based on the following objectives:

- To develop and design an online sport booking system that can help users booked the equipments or facilities where in this system, for example the users can make a reservation for the courts/fields and also several facilities. The online service allows users to achieve the same thing at their own time and convenience.
- To enable wide access and provide users with the ability to change the schedules, cancel the reservation and so on. During time reservation, the users can check the availability before making a reservation or change the date, venue, day and etc before submitted the application.
- Low cost high performance solution so this system can decrease the cost of traditional method during make a reservation.
- To help administrator keep track records from the traditional systems. This system can help administrator to keep track the booking records, locate in the database and can manage the booking also the schedules from redundancy.

1.3.2 Scope of Study

Online Sport Booking Systems will be developed under Ipoh Sport Council and UTP's student as a potential user scope only. It will cover the users which are the Perak citizen that want to book the sport complex for several events. This system will be designed in such a way that users can access it only from their computer with an internet connection. As this online system will focusing on publics and from other state's citizens, the interface and the functions will also need to be essential to their environment. It is also a relevant with the expertise and knowledge of the sport complex. Besides, it also based on the objective of the research itself.

1.3.3 Feasibility of the Project within Scope and Time Frame

In the project, Work Break Structure (WBS) is developed in providing the basis for deciding how to do work as well as creating the project schedule. There are several phases that can be implemented to the Work Break Structure (WBS) process such as planning, executing, analysis and design, implementation and presentation phases. For the planning phase, the project activity is to prepare project timeline which consists of three parts of planning such as identify tasks, determine the tasks dependencies and finalize timeline. For analysis and design part, the activities are such as prepare conceptual data modeling and database design.

Next, for executing phase part, the projects activities involve are such as information gathering and facts finding, search for relevant journal and article and search for suitable tools and development method. Other than that, it also involve about preparation of preliminary report which consists of background of study, identify problem, significant of the project, objective and scope of study, methodology/project work, conclusion, prepare abstract, finalize preliminary report and submit preliminary report. Besides the other one is implementation part which is involve about installation of development tools and develop prototype. Finally, the last phase is presentation phase. In this phase, the project's activities are such as prepare presentation material, revise and practice for presentation and submission interim report.

CHAPTER 2

LITERATURE REVIEW AND THEORY

2.1 Online Booking System

Basically, this online Sport Booking System will optimize the potential of the website. Generally, this system is similarly same as the other online system, such as Online Booking that Air Asia.com [2] provides for gives best services to their customers, which is already, exist nowadays. In this system will be included are when the users start surfing the Internet for booking, potential users are looking for sport council which offer the places such as badminton's court, tennis's court and etc. Users actually can book the places without waiting for reservation's staff to confirm it by sending an email or through the calls. This Online Sport Booking System also is a user friendly booking system, whereby the page of the website is straightforward information and not messy with other advertisement which is not related to sport council.

Any new system, must be a user friendly, and it is very important in order to make sure people or user do not get confused on what they want to find in the website. For a less knowledgeable user, users will think that the system is quite complicated and for sure they do not want to use this system. Besides that, this system provides a detailed booking where it will give confirmation result to sport's users and the system also will notify to sport council. Before this user needs to download the form from formal website of Perak's Government, <http://psuk-msn.perak.gov.my/home.htm> first in order to make reservation, but in this new system, the users also can save their time because there is no special software or downloads are needed for a users in order to make a booking.

Some systems demand that users need to have specialized software installed on their computer in order to make a booking and besides, many computers do not provide the software and users are forced to download it. For example, Online Sport Booking System keeps it fast and simple. Besides that, this system provides an easy to use administration panel to sport administrators. This criterion is provided by many systems, including Hotel Booking System. The different here is they provide complicated administrative panels compared to this new system. With its friendly administrative panels, Online Sport Booking System keeps the things fast and simple.

2.1.1 Online System (AirAsia)

Compared with Online Booking that Air Asia.com offer to their customers same like Online Sport Booking System too which are the guests or users must check availability and book instantly and after that the users only wait for the confirmation from reservations staff using an email. *See Appendix 3.*

2.1.2 Hotel Online Booking System

Now in Malaysia have a lots of hotel services growth faster. To increase and attract customers to come to their hotel and one of the key is provides an online booking system but only several hotels will precisely implement this system for their businesses. The rest, this system only just as a style or trend to be looks like as other hotels and of course this is very useful because they can't implement this system into their companies. The system is exactly provided and users/customers can make a reservation through it. However, when the users want to check in on that booking's date, the hotel's management has no record for that booking's data. Besides, the system requires a JavaScript enable browser for using this system. *See Appendix 3.*

2.2 General Public License (GPL)

Nowadays, MySQL application is available at no cost to academic institutions. Thus everybody can use MySQL for individual purposes. For General Public License (GPL) was created to encourage the free use, distribution, and modification of software. The GPL also ensures that users are free to use MySQL as well as access to the MySQL source code. Today, General Public License (GPL) for MySQL is been used at a lot of institution in this world. The MySQL® database has become the world's most popular open source database because of its consistent fast performance, high reliability and ease of use for support this project.

Besides, it is used on every continent by individual Web developers as well as many of the world's largest and fastest-growing organizations to save time and money powering their high-volume Web sites, business-critical systems and packaged software including industry leaders such as Yahoo!, Alcatel-Lucent, Google, Nokia, YouTube, and Zappos.com. It is also become the database of choice for a new generation of applications built on the LAMP stack (Linux, Apache, MySQL, PHP / Perl / Python.) for this project, MySQL will run on Windows using Internet Information Services (IIS). Besides, MySQL will give the kind of flexibility that puts you in control. MySQL continues to have a very high adoption rate across several industries and is known for its reliability, ease of use, and performance. MySQL 5.0 features are likely to boost MySQL to even higher adoption rates and may open doors for support for more packaged applications and tools [6].

2.3 Microsoft Visual Studio 2005

Microsoft Visual Studio is the main Integrated Development Environment (IDE) from Microsoft. It can be used to develop console and GUI applications along with Windows Forms applications, web sites, web applications, and web services in both native codes as well as managed code for all platforms supported by Microsoft Windows, Windows Mobile, .NET Framework, .NET Compact Framework and Microsoft Silverlight.

Visual Studio includes a code editor supporting IntelliSense as well as code refactoring. The integrated debugger works both as a source-level debugger and a machine-level debugger. Other built-in tools include a forms designer for building GUI applications, web designer, class designer, and database schema designer. It allows plug-ins to be added that enhance the functionality at almost every level including adding support for source control systems (like Subversion and Visual SourceSafe) to adding new toolsets like editors and visual designers for domain-specific languages or toolsets for other aspects of the software development lifecycle (like the Team Foundation Server client: Team Explorer).

Visual Studio supports languages by means of language services, which allow any programming language to be supported (to varying degrees) by the code editor and debugger, provided a language-specific service has been authored. In-built languages include C/C++ (via Visual C++), VB.NET (via Visual Basic .NET), and C# (via Visual C#). Support for other languages such as F#, Python, and Ruby among others has been made available via language services which are to be installed separately. It also supports XML/XSLT, HTML/XHTML, JavaScript and Cascading Style Sheets (CSS) [8].

2.4 Web Server and Internet Information Services (IIS)

Web Server is a computer that delivers (*serves up*) Web pages. Every Web Server has an IP address and possibly a domain name. For example, if you enter the URL `http://www.pcwebopedia.com/index.html` in your browser, this sends a request to the server whose domain name is `pcwebopedia.com`. The server then fetches the page named `index.html` and sends it to your browser. Any computer can be turned into a Web server by installing server software and connecting the machine to the Internet [7].

Administrators and Web application developers demand a reliable, easily managed, high performance, and secure Web server. IIS 6.0 and Microsoft Windows Server 2003 introduce many new features for Web application server reliability and availability, management, scalability, and security. The benefits of deploying IIS 6.0 include less planned and unplanned system downtime, increased Web site and application availability, lower system administration costs, server consolidation such as reduced staffing, hardware, and site management costs, and a significant increase in Web infrastructure security [7].

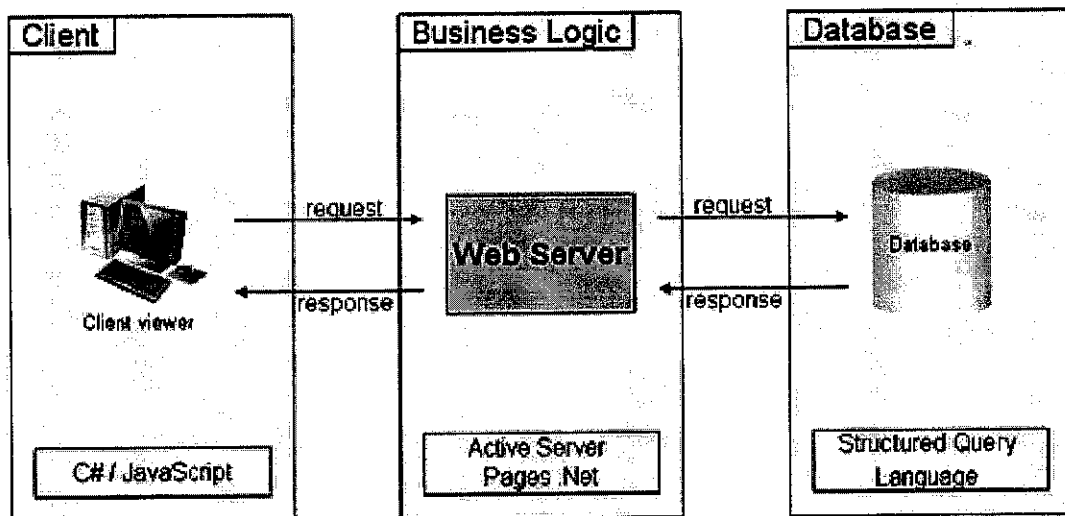


Figure 2.0: System Architecture

2.5 Adobe Photoshop

The interfaces (GUI) for this system will be designed using Adobe Photoshop. This Photoshop has strong ties with other Adobe software for media editing, animation, and authoring. Files in Photoshop's native format, .PSD, can be exported to and from Adobe ImageReady, Adobe Illustrator, Adobe Premiere Pro, After Effects, and Adobe Encore DVD to make professional standard DVDs and provide non-linear editing and special effects services, such as backgrounds, textures, and so on, for television, film, and the Web. For example, Photoshop CS broadly supports making menus and buttons for DVDs. For .PSD files exported as a menu or button, it only needs to have layers, nested in layer sets with a cuing format, and Adobe Encore DVD reads them as buttons or menus [9].

Photoshop can utilize the color models RGB, lab, CMYK, grayscale, binary bitmap, and duotone. Photoshop has the ability to read and write raster and vector image formats such as: .EPS, .PNG, .GIF, .JPEG, Fireworks, etc. It also has several native file formats:

- The .PSD (Photoshop Document) format stores an image with support for most imaging options available in Photoshop. These include layers with masks, color spaces, ICC profiles, transparency, text, alpha channels and spot colors, Clipping paths, and duotone settings. This is in contrast to many other file formats (e.g. .EPS or .GIF) that restrict content to provide streamlined, predictable functionality. Photoshop's popularity means that the .PSD format is widely used, and it is supported to some extent by most competing software.

CHAPTER 3

METHODOLOGY/ PROJECT WORK

Methodology is about study of methods that had been used in order to complete task or project. Thus, in this section, the project methodology will be discussed in two aspect of methodology, which is the system overview or the flow of the sub tasks and the development tools that has been used for developing the online sport booking system. In system overview, it would be more into lifecycle model that had been identified as appropriate for the project while in development tools section; it will be brief explanation on what development and DBMS software that will be used throughout the project.

3.1 Procedure Identification

As for this project, waterfall methodology has been considered to be applied as the methodology. A waterfall methodology structures a project into distinct phases with defined deliverables from each phase. The phases are definition, design, coding, testing and implementation stages. Below is the figure of waterfall model.

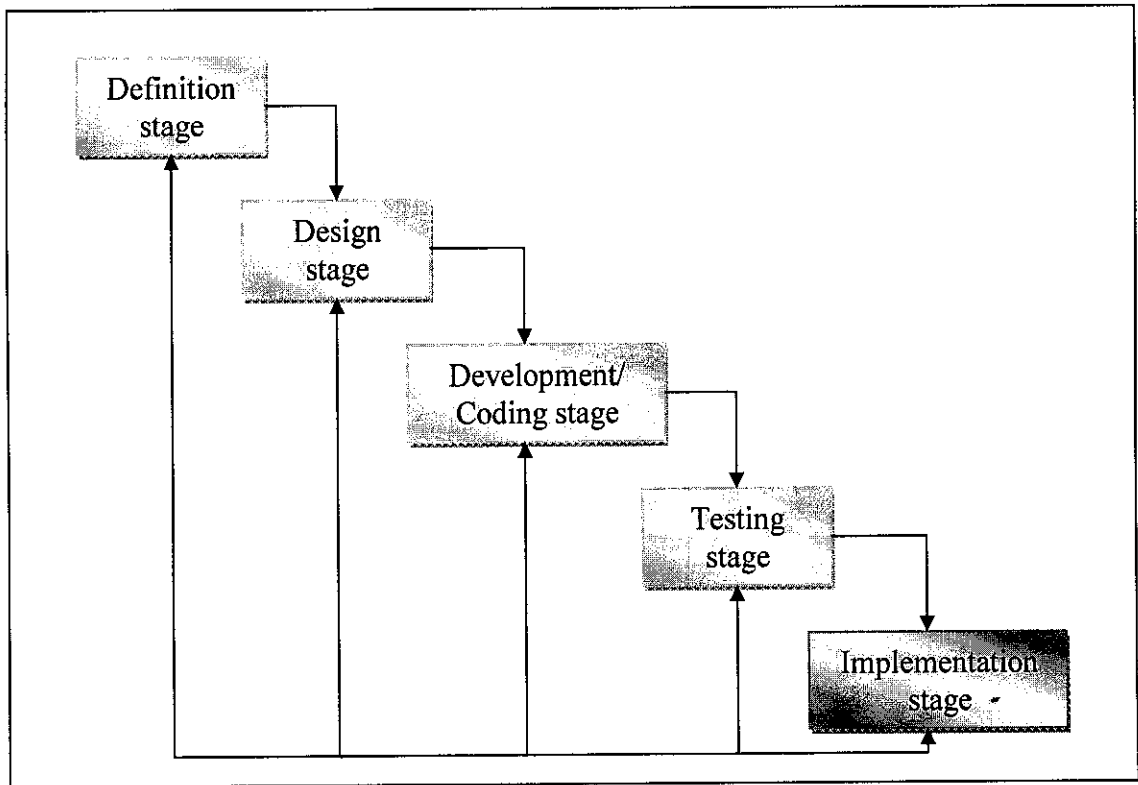


Figure 3.0: The Waterfall Model Design

3.1.1 Definition stage

The first phase of this project is to try to capture what the system will do (its requirements) based on milestones. This is to ensure the system will be on track. Here, comprehensive research has been done to study the basic concept of the system itself. During this stage, the problem definition and problem statement of the system have been started.

No.	Detail/Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Selection of Project Topic	■													
2	Preliminary Research Work	■													
3	Submission of Preliminary Report				●										
4	Seminar 1 (optional)				■										
5	Project Work				■										
6	Submission of Progress Report								●						
7	Seminar 2 (compulsory)									■					
8	Project work continues									■					
9	Submission of Interim Report Final Draft													●	
10	Oral Presentation														●
M I D - S E M E S T E R B R E A K															

● Milestone
 ■ Process

Table 3.0: Milestone for First Semester of Final Year Project

No.	Detail/Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Project Work Continue																
2	Submission of Progress Report 1																
3	Project Work Continue																
4	Submission of Progress Report 2																
5	Seminar (compulsory)																
5	Project work continue																
6	Poster Exhibition																
7	Submission of Dissertation (soft bound)																
8	Oral Presentation																
9	Submission of Project Dissertation (Hard Bound)																

M I D - S E M E S T E R B R E A K

 milestone
 Process

Table 3.1: Milestone for Second Semester of Final Year Project

3.1.2 Design stage

The second stage determines how it will be designed. Here, some relevant diagrams such as the use case diagram, flow diagram, Entity Relationship Diagram (*See Appendix 6*) and so on have been taken into consideration in order to structure the development of the project.

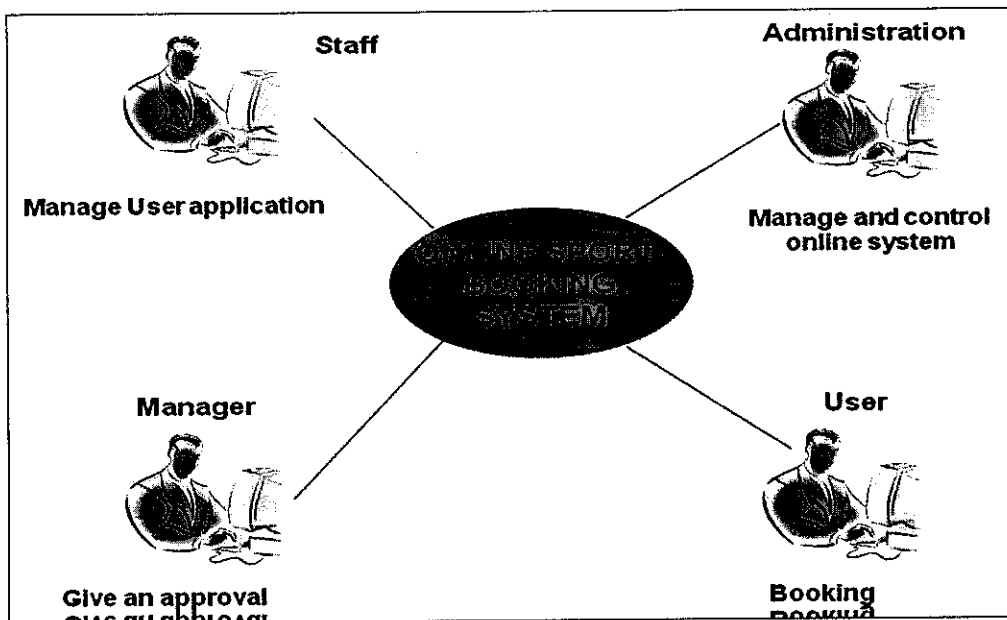


Figure 3.1: User Models for OSBS

3.1.3 Coding stage

In the middle of the stage is the actual programming started. Here, the appropriate software and hardware tools as mentioned below are being applied in order to facilitate the project development process. For this part, it can be analyzed by looking at the C-Sharp (C#) language coding.

3.1.4 Testing stage

The fourth phase is the full system testing where the stages of testing like unit testing, integration testing, system testing and user acceptance testing involved in order to ensure quality of the system.

3.1.5 Implementation stage

The final phase is focused on implementation tasks such as go-live, training, and documentation. Here, the documentation is being prepared to conclude on the overall research and experiment, which is basically to know which method can be applied.

3.2 Development tools

The recommended tools are as mention below:

3.2.1 Software

The software tools that can be used to implement the database security system and web application are such as below:

Software	Minimum Requirement
Operating System	Window XP Service Pack 2
Supporting Software	Microsoft Visual Studio 2005 Adobe Photoshop MySQL Administrator MySQL Query Browser Internet Explorer 5.5 Internet Information Services (IIS)
Scripting Language	C# JavaScript CSS

Table 3.1: Software tools

3.2.2 Hardware

The hardware used for the development of the system is a personal computer with MySQL server and Microsoft Visual Studio 2005 installed in it as well as the following specifications:

Hardware	Model	Reason of usage
Central Processor Unit (CPU)	Intel ® Core™ DUO inside™	Compatible and stable
Main Memory	1024 Megabytes(MB) or above	To support the Operating System and to improve server's performance
Hard Disk	80 Gigabytes(GB) or above	To support the Operating System and to improve server's performance

Table 3.2: Hardware tools

3.3 Advantages of C#.Net

As mention before, this system was built using C-Sharp (c#) language as client side, Internet Information Services as it Web Server and MySQL as it database. Visual C# .NET is the comprehensive toolset for creating .NET based Windows and Web applications, and XML Web services using the component-oriented C# development language [10]. This language is easy to use and give more benefits to beginner for starts using this language. Here several benefits that from C# language [10].

- **Accelerate development of next-generation, broad-reach applications**
Visual C# .NET allows developers to build the next-generation of Windows applications using XML Web services, ADO.NET, ASP.NET, GDI+, and more.

- **Join the .NET revolution**

Using Visual C# .NET, developers can take advantage of the .NET Framework class library, providing a rich set of collection classes, built-in networking, multi-threading support, and broad support for XML technologies.

- **Promote code reuse and publish and consume components**

Quickly design flexible software components usable from any .NET language and import any .NET or COM component written in any language or tool and build on years of application development.

- **Save time with the ultimate developer cockpit**

Visual C# .NET provides developers with the Windows Form Designer, Web Form Designer, XML designer, IntelliSense, and other features for constructing compelling .NET solutions.

- **Get up to speed quickly using existing C++ and Java experience**

Using Visual C# .NET, developers can take advantage of a robust and modern language and development environment while using their experience with object-oriented programming languages such as C++ and Java.

- **Feel comfortable in a thriving community of developers**

Be confident using a powerful new ECMA standards-based language that ensures community input and consistent innovation and exchange code and resources with the rapidly growing community of C# developers.

CHAPTER 4

RESULT AND DISCUSSION

4.1 Data Gathering and Analysis

For the data gathering and analysis part, an interviews and surveys are conducted with Department of Landscape and Recreation, Mr. Zawari about the current system that is used by them. The purpose of an interview is to know the procedures and the process for rents or reserve the Ipoh Sport's equipments and also to know the level of administers' access in order to access for the Online Sport Booking System for Ipoh Sport Council Website. Other than that, it also involve about administers who can responsible for the new reservation, who can approved the application, who can edit or update users' personal data and so on. Feedback from the respondent will help in determine level of satisfaction for administrators and users regarding the online booking system.

The purpose of surveys is to get the information or comments from the publics regarding the old system for making the sport reservation at Ipoh Sport Council. The target user group of the analysis is any kind of user level such as public user, Ipoh Sport Council management, and Ipoh Council's staffs and so on that always rent the sport center. From the surveys, useful information can usually help to implement the Online Sport Booking System website become more effective and useful.

4.2 Findings

After performing the interviews and surveys, the developer had indentified main function that very useful to implement in this system. Below show the main functions embedded in this system and their description according to different users.

Function	Description	User: Student	User: Staff
Login	Login into OSBS	Yes	Yes
Home page	Main page for students process and activities	Yes	
Create an account	Student who does not have a Username and Password	Yes	
Make a reservation	Student can make a reservation	Yes	Yes
Check sport status	Check facilities' status	Yes	
Admin page	Main page for staff manage a reservation		Yes
Add new employee	Administrator can add new staff details		Yes
Manage user application	- Staff check form application - post status for each reservation		Yes
About Us page	Information about Ipoh Sport Council	Yes	Yes
Contact Us page	Students can give comments	Yes	Yes
Logout	Logout from OSBS	Yes	Yes

Table 4.1: Functionality and description in OSBS

Features	.NET	Java	Cold Fusion MX	PHP
Compiled Code – Increases website speed (precompiled is the fastest)	Yes – both precompiled and dynamically compiled when a page is requested	Yes – both precompiled and dynamically compiled when a page is requested	Yes – dynamically compiled when a page is requested	No – a 3 rd party accelerator can be used to increase performance but it is not installed on most shared hosting servers.
Scripted Language – results in poor website performance	No	No	Somewhat	Yes – a 3 rd party accelerator can be used to increase performance but it is not installed on most shared hosting servers.
Object Oriented – Increases the ability for code reuse and provides enhanced features as well as reduced development time; since code is more reusable, results in fewer bugs that can be discovered by any client and fixed for everyone; encourages developers to write more maintainable code.	Yes	Yes	Somewhat	No
Supported Development Languages – easier to find developers	C++, C#, Perl, Python, Visual Basic.NET, Delphi, COBOL, Jscript.NET, Java (J#), Eiffel, – 25 languages supported currently	Java	CFML and CFScript	PHP
Browser Specific HTML Rendering – different HTML is automatically sent to IE than to Netscape, reducing incompatibility issues	Yes	No	No	No
Open Source	No	Yes	Somewhat	Yes

Table 4.2: Comparison .Net, PHP, Java and Cold Fusion MX

4.3 Result and Discussion

The project will be done using web site application. First of all, need to determine who will use this form and the next determined the main features needed in this system. The results of the system should be able to perform the function and task that being design to provides information for both parties.

As stated earlier, the purpose of this project is to build an Online Sport Booking System for Ipoh Sport Council to improve their services for public users. From the interviews and surveys, the results are shown as below:

4.3.1 Interview : Ipoh Sport Council staff

To gain some insight into what the current system is, how it worked, and what would be required from an online system, a number of meetings with Encik Zawari from Department of Landscape and Recreation, the person who's responsible for the sport's booking of the Ipoh Sports Centre, were arranged. Much useful information was got in these meetings.

- Speed.
 - The current system is very slow for the staffs because they application must need follow the procedure before the booking is done so when we transferred the old system to online system, the process for confirmation of booking will done quickly.
- Database
 - They still keep track the data from users manually. It's very difficult if the current users want to make another sport's booking for the next times so when they used database system, the data will stored into the system and they will not lost the users data too.

4.3.2 Survey : Ipoh Sport Council Staff

During the survey, Ipoh Sport Council's staff was giving some comments regarding this system which are they're disagreed to use this system because they have difficulties to understand and follow the steps because they're not computer literate but, in some times they're also agreed with this system because it can make them easier to manage the booking and data, time constraints and etc.

4.3.3 Survey: Students

The following requirements were gained from UTP's student as a user and when asked what they would like to see from an online booking system. The survey was conducted for 10 students only. *See Appendix 1* for questionnaire forms.

- Online help system
 - To guide users if they have problem during used the online system
- Easy to use
 - Make the interface more effective and user-friendly with simple buttons and icons so easier for users to use.
- Booking consecutive/concurrent slots
 - This would allow users to easily book concurrent or consecutive sessions of a particular activity, without having to book all sessions individually.
- Regular sessions
 - Allow users to book the same slot every week or every day.

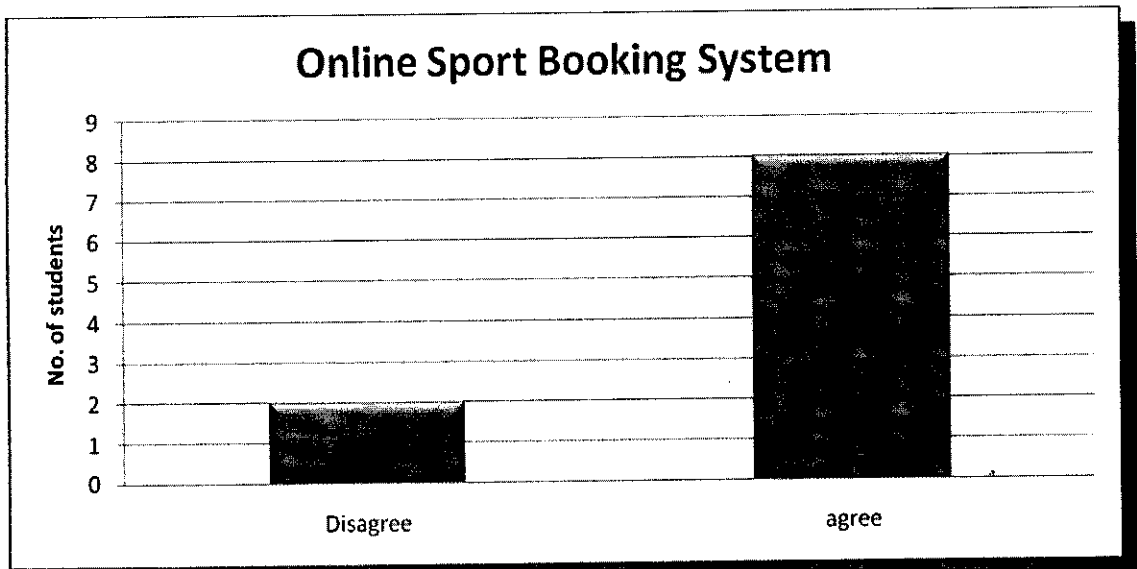


Figure 4.0: Result survey from students

4.3.4 User-UTP's Student Interfaces

In this stage, I already design first draft for an Online Sport Booking System. *See Appendix 4.*

4.3.4.1 Login page

At this page, the user or staff/admin are needed to login if they're already have the account. For the rest, they're must register for the first time with administrator to give permission for them to login into this online website.

4.3.4.2 Register

Users who already have their account can login by putting their username and password. For the first time users, who do not have an account, they must register first before using this system. They must fill their details in the blank box provided. The blank box with has (*) must be full filled by the users before they can go to admin homepage and start using this online sport booking system.

4.3.4.3 Homepage for Student

When user can access the login, they will go to this page automatically. This page is only for the users who want to get information about Ipoh Sport Council. In this page, they will know any updates about Ipoh Sport Council and what are the incoming events that will be doing by Ipoh Sport Council. Users also can get the information about the past events in this page. From this page, user can be linked to book's application and can give comments directly to Ipoh Sport Council.

4.3.4.4 About Us

This page is telling the information about the Ipoh Sport council management. Besides, users can view what is the IPC is all about. Users also will know how the process flows for this booking system in order for them to get clear view on what they must do before making the reservation.

4.3.4.5 Facilities

Facilities page will show information about the facilities which are provided by the Ipoh Sport Council itself.

4.3.4.6 Booking

All reservation will do at this page. The user must fill up the booking information and submit the booking confirmation to admin. They will book the sport center through online. They do not use the manual step to booking anymore. Here also have a link whether the users can check the availability for the sport center itself before make a reservation. They can set time, date, change the time/date/facilities and also can cancel the booking.

4.3.4.7 Contact Us

If users have problem in make a reservation or have any problem regarding this system, they can contact or email to ISP directly.

4.3.5 Administrator Interfaces

In the administrator interface, same like User interfaces but have additional features such as tatus reservation and Schedule page where included all information about user's reservation and also sport facility's availability. *See Appendix 4.*

4.2.4.1 Login page

Admin must fill in their username and password in order to access the website.

4.2.4.2 Homepage

Future and past information about the Ipoh sport council can be updated by admin in this homepage. The advertisements which are related to Ipoh Sport Council also can be put here. Besides, administrator has additional function which is for adding new staff information.

4.2.4.3 Status reservation

In this page, admin can view all the reservation forms which are submitted by users. Details about date, time, and users profile also can be viewed from this page. Besides, in this page also admin will know whose application will approve or rejected.

4.2.4.4 Schedule page

Admin must alert with the availability for the reservation. Here, admin can update, cancel, and view the schedule before they can proceed or reject the reservation.

4.2.4.5 Comment page

Get comment/questionnaires from users.

CHAPTER 5

CONCLUSION AND RECOMMENDATION

Nowadays many companies in Malaysia have start providing Information and Communication Technology (ICT) in their company. These technologies provide a new system in order to get services or products just by online system. In Perak also, government already launched Information and Communication Technology (ICT) Strategic Blueprint known as K-Perak 2010 in May 2005. To make K-Perak more reliable, this system or any part of this system can be applied and also being used by Perak citizens. It will cover the users which are the Perak citizen that want to book the sport complex for several events. This system will be designed in such a way that users can access it only from their computer with an internet connection. By providing this system, it can optimize the potential of K-Perak website by making this website user friendly booking systems. The methodology that will be used is waterfall model because the structured design waterfall approach are that it identifies system requirements long before programming begins and it minimizes changes to the requirements as the project proceeds. According to System Development Life Cycle (SDLC), each of the works can be separated into four fundamental phases: planning, analysis, design and implementation. In developing this system, the author need to know what the functions are is useful to parties, users and management and this system is not built for staff merely, but also for student to have privileges of online sport booking system.

There are several advantages gain from the studies and the research analysis which are to ensure that the system developed will be sufficient enough and contains necessary functions. In basic, a study on how to develop this system also is another issue. It does offer an author on how to play with C-Sharp (C#) and their function itself. Besides that, it also provides a guide during the technical part work such as integrating Application Programming Interface (API) with web server and databases. Testing stage is very important in doing a new system because to figure out the errors that was not noticed by the developer. For example, after completing the system, it should be tested on the real network server.

As a conclusion, the reliability, authentication and authorization and security are very important issues even if this system was fully implemented. The whole purpose of this project is to explicitly show how the World Wide Web (WWW) can be utilized to improve the work activities today.

RECOMMENDATION

It I hoped that this system could be implemented at Ipoh Sport Council. In future hopefully this system can be implemented via phone and SMS reservation. By having this system, it can reduce time constraint of browsing on the internet.

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APPENDICES

APPENDIX 1

ONLINE SPORT BOOKING SYSTEM (OSBS)

Instruction: Please tick in the box.

Arahan: Sila tanda (X) dalam kotak yang disediakan.

Occupation: Government Non-government Private
Pekerjaan: Kerajaan Swasta Persendirian

Gender: Male Female
Jantina: Lelaki Perempuan

Closed Ended Questions:

Instruction: Please tick in the box.

1. Do you like used manually system for book sport centre?

Yes No

2. Do you think this current system is effective and efficient?

Yes No

3. Do you agree if there has an Online Sport Booking System?

Yes No

4. Do you wish to have a new technology system for sport booking system?

Yes No Idea


5. How you want the interfaces in the system look like?

APPENDIX 2

Hallisoft - RezEasy hotel reservation system and online booking software - Windows Internet Explorer

File Edit View Favorites Tools Help

Product Information | online reservation system | Hallisoft - RezEasy hotel...



RezEasy Online Reservation Software

The Facts:
Travel remains the second largest business and will grow to \$22.5 billion by the end of 2007. All recently published statistics on Internet sales confirm that travel and in particular airline tickets and accommodation, represents almost 50% of all Internet transactions worldwide.

Take Control:
Purchase RezEasy today and take control of your business. For just the cost of a few room nights you can have your own online reservations system working for you 24hrs a day, 7 days a week, 365 days a year!
RezEasy Standard \$225
RezEasy Agency \$599

Affordable:
You can easily recoup the cost of RezEasy within the first month of operation - less in many cases. Selling just a few room nights is enough to recover your investment. When partnered with RezEasy Front Desk property management system it provides the most cost effective package available today.

Efficient:
RezEasy's powerful control panel enables you to add and amend rates and sales criteria at any time, instantly and thus maximise Internet sales effectiveness. You can offer discounts to travel agents and corporate clients plus special discounts when occupancy is low. RezEasy offers real time checking and updating of room availability, cancelled bookings can easily be reversed and the rooms made available.

Powerful:
RezEasy is probably the most powerful online booking system available. It can handle any number of properties with any number of rooms. Packed with features RezEasy will transform your website into a fully functional and secure Online Booking Engine with reporting and sales analysis functions. There is no programming or complex HTML coding - RezEasy inserts all the code for you.

More Info | Benefits | Demo | Buy Online | Download | FAQ's | Who Uses RezEasy?


Internet | Protected Mode On | 100%

http://www.hallisoft.com/RezEasy/RezEasy.html

Free online reservation system - Easy Booking Service - Windows Internet Explorer

File Edit View Favorites Tools Help

Product Information | online reservation s... | Online Reservation... | free online reser... | Hallisoft - RezEasy...



The free online reservation system

for hotels - for travelers - for all kind of travel sites

Hoteller, try to book in HOTEL TEST. Use a [book test link](#) or a custom form. This tool is FREE for your site!

Arrival date: 6 - March - 2008
Departure date: 7 - March - 2008
Persons per room: 2

Just like our reservation system is free for every hotel, it's also free for chains and travel sites marketing several hotels (a local directory for example). Check it all, there is no obligation, no hidden fee, no threat of losing customers, no necessary add-on.

Try here above our single hotel reservation form as we're still finishing the group version for new users (october 2004).

The group version comes with:

- additional location wide availability question and answer to check rates among several hotels
- enhanced customization possibilities (direct online payment implementation may not be free)
- possibility to let hotels use EBS from their own site (FREE OR NOT: up to you!)
- alternative white labeled domain name for your reservation pages
- affiliate tracking to let you build your own affiliate network

And like hotels, you can opt for our commission based distribution service.

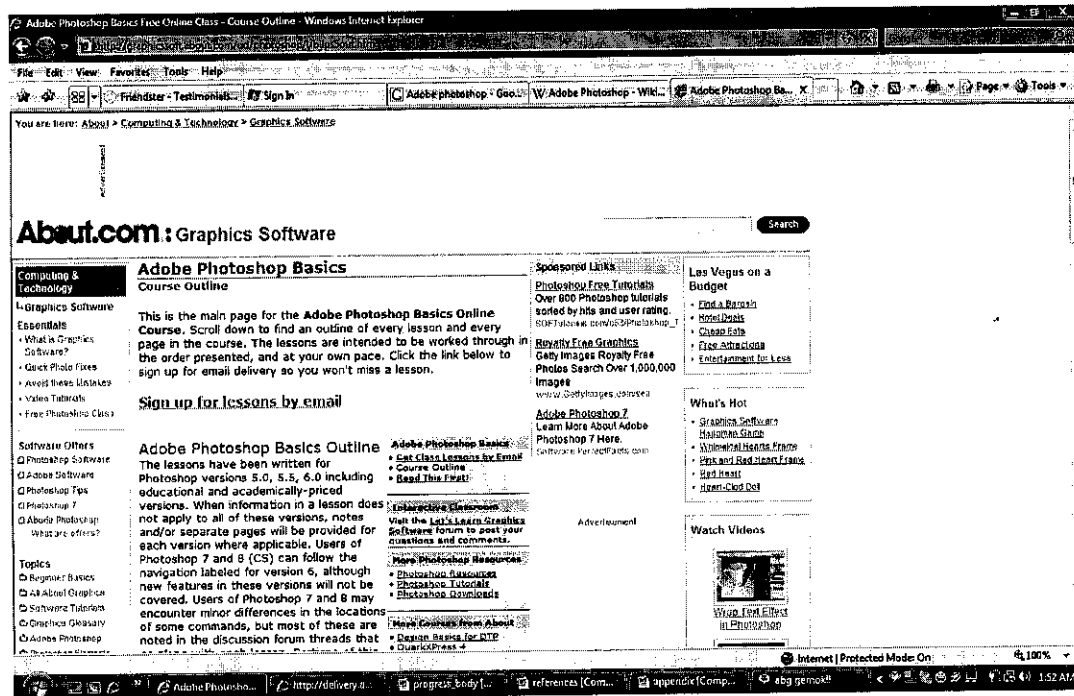
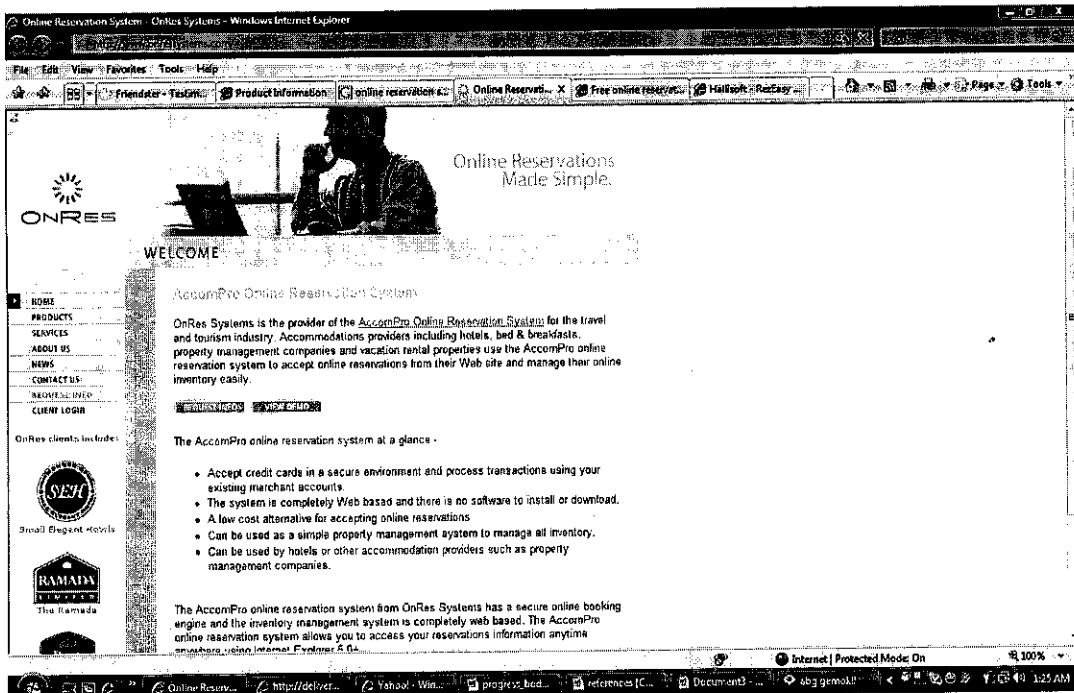
REGISTER NOW

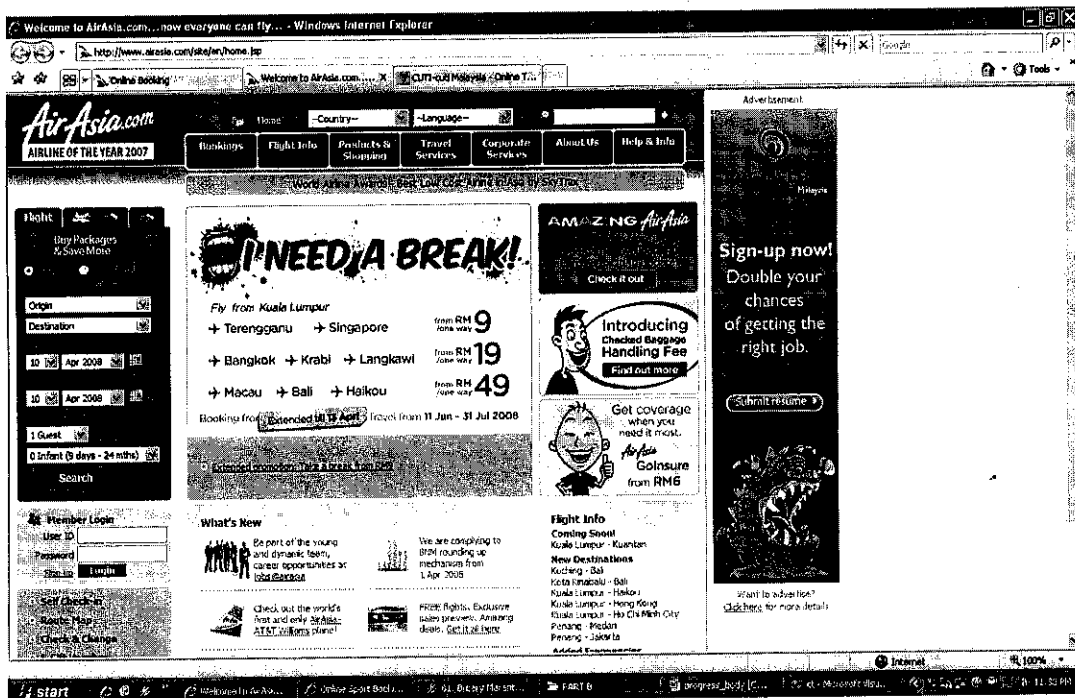
[Help](#) - [Privacy & Security](#) - [For Hotels](#) - [For Travelers](#) - [For Travel sites](#) - [About us](#) - [Contact](#)

© Easy Booking Service Ltd - the free online reservation system - since 2001

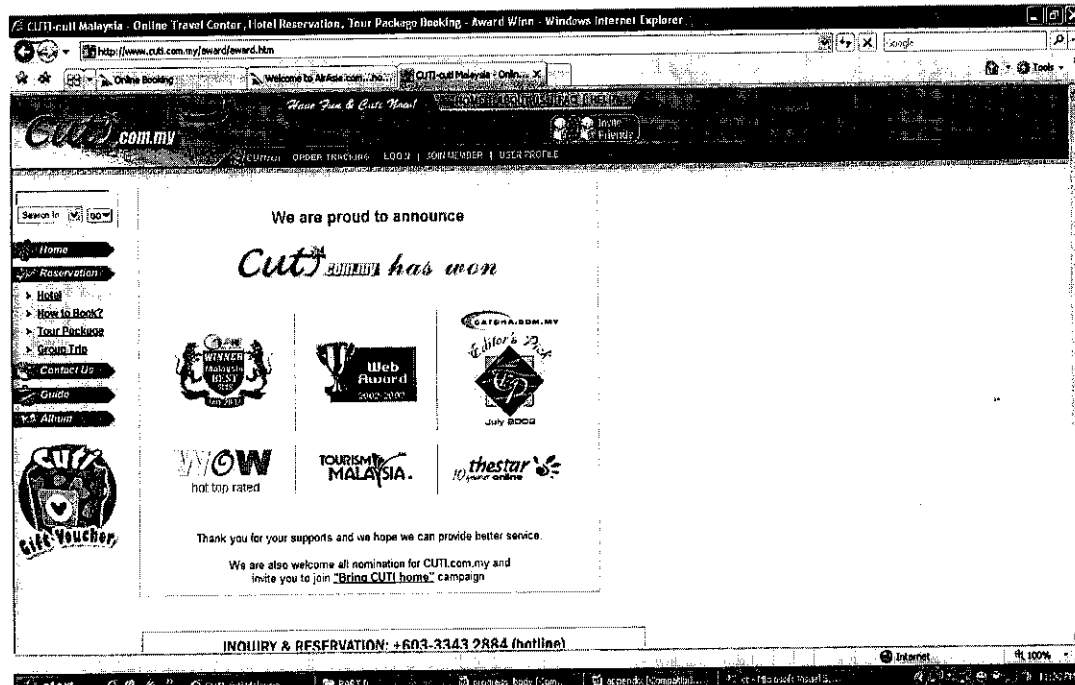
Internet | Protected Mode On | 100%

http://www.easybookingservice.com/chains.php



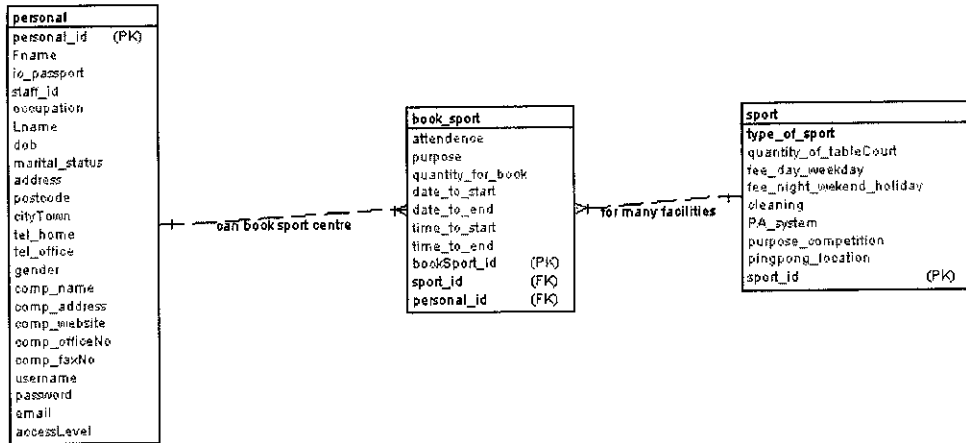


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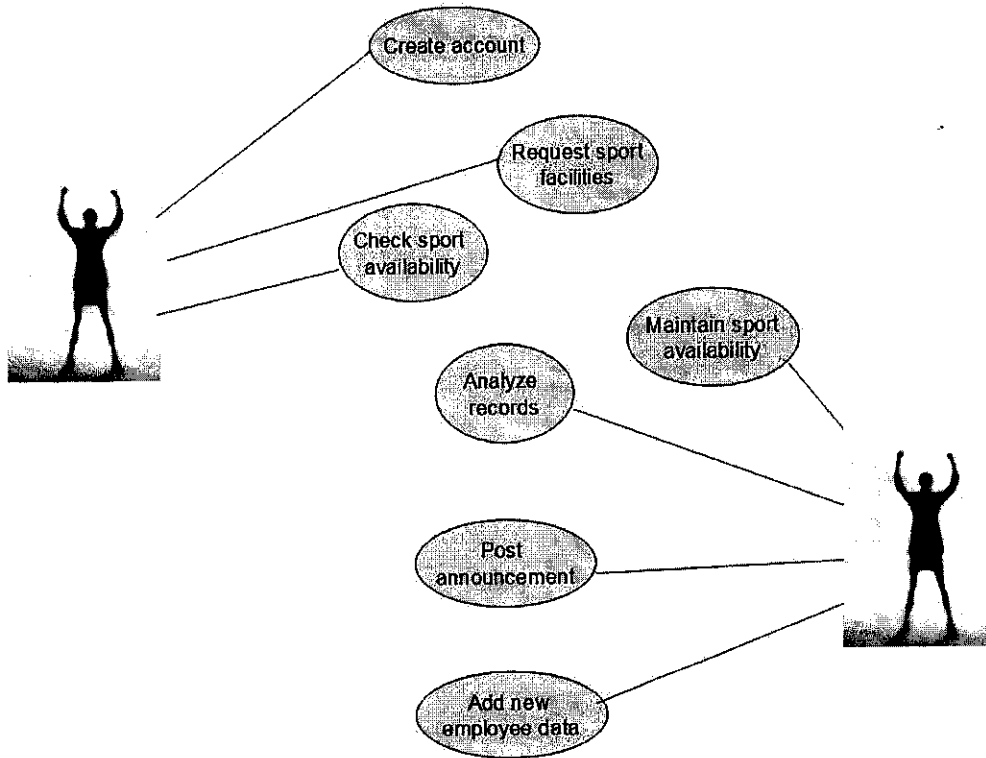


<http://www.mecommerce.com.my/>

APPENDIX 3



Entity Relationship Diagram for Online Sport Booking System



Use case Diagram for OSBS

APPENDIX 4

Email :

Password :

Remember me

Not member yet? Sign up [here](#) .

Login page

ONLINE SPORT BOOKING SYSTEM

ONLINE REGISTRATION FORM

Please fill up the form and click the button Submit when ready.
Fields marked with (*) are mandatory fields.

Login Details

Email :

Re-email :

Password :

Re-password :

Personal Particulars

First name : <input type="text"/>	Last name : <input type="text"/>
IC No / Passport : <input type="text"/>	Date of Birth : <input type="text"/> DDMMYY
Gender : <input type="text" value="Male"/>	Marital Status : <input type="text" value="Single"/>
Occupation : <input type="text"/>	Staff ID : <input type="text"/>

Current Address

Address : <input type="text"/>	Postal Code : <input type="text"/>
Tel [Home] : <input type="text"/>	City / Town : <input type="text"/>
	Tel [Mobile] : <input type="text"/>

Company Details

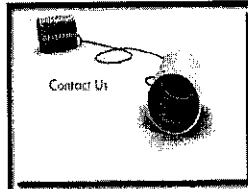
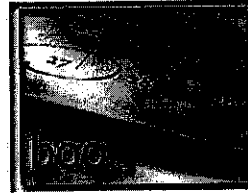
Company name : <input type="text"/>	Company Webiste : <input type="text"/>
Address : <input type="text"/>	Tel [Office] : <input type="text"/>
	Tel [Fax] : <input type="text"/>

Student: Sign UP page

ONLINE SPORT BOOKING SYSTEM

[Logout](#)

Welcome, Siti Fatimah Abd Rahman



Student: Home page

ONLINE SPORT BOOKING SYSTEM

[Logout](#)

[HOME](#) [ABOUT US](#) [CONTACT US](#)

RESERVATION FORM

Name : Siti Fatimah Abd Rahman
IC No / Passport : 840915-05-5348
Address : V4-G3-3, Universiti Teknologi Petronas
31750 Bandar Seri Iskandar, Perak
Tel [Home] : -
Tel [Mobile] : 0122130734

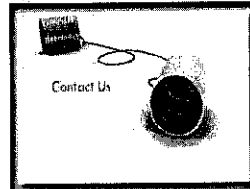
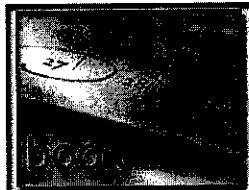
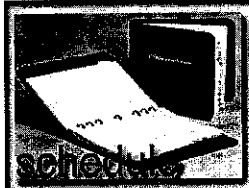
Date Start :
Time Start :
Type of facility :
Date End :
Time End :

Booking page

ONLINE SPORT BOOKING SYSTEM

[Logout](#)

Welcome Mohamad Adzran Hamidun



Staff: Home page

ONLINE SPORT BOOKING SYSTEM

[HOME](#) | [BOOK](#) | [CONTACT US](#)

[Logout](#)

Mar		April 2008					May
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
30	31	1	2	3	4	5	
6	7	8	9	10	11	12	
13	14	15	16	17	18	19	
20	21	22	23	24	25	26	
27	28	29	30	1	2	3	
4	5	6	7	8	9	10	

PENDING STATUS

Date: 04/12/08 Name: Siti Fatimah Abd Rahman

Status: Pending [Edit](#) *

Staff : Schedule page

ONLINE SPORT BOOKING SYSTEM

ADD NEW EMPLOYEE

Please fill up the form and click the button Submit when ready.
Fields marked with (*) are mandatory fields.

Login Details

Email :

Re-email :

Password :

Re-password :

Personal Particulars

First name :

Last name :

IC No / Passport :

Date of Birth : DD/MM/YY

Gender : Male

Marital Status : Single

Occupation :

Staff ID :

Current Address

Address :

Postal Code :

City / Town :

Tel [Home] :

Tel [Mobile] :

Company Details

Company name :

Company Webiste :

Address :

Tel [Office] :

Tel [Fax] :

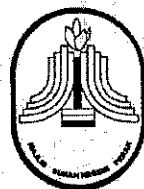
Staff: Add new employee data

ONLINE SPORT BOOKING SYSTEM

[HOME](#) | [BOOK](#) | [CONTACT US](#)

[Logout](#)

ABOUT US



Majlis Sukan Negeri Perak ditubuhkan pada 1 November 1989 di bawah Akta Majlis Sukan Negara Malaysia 1971, Perintah Majlis Sukan Negara Malaysia Pindaan Jadual Kedua) 1988 Akta 29. Majlis Sukan Negeri Perak adalah di bawah pengawasan Timbalan Setiausaha Kerajaan Negeri Perak (Pentadbiran) yang beribu pejabat di Pejabat Setiausaha Kerajaan Negeri Perak.

Pejabat Majlis Sukan Negeri Perak yang pertama telah bertempat di Pejabat Setiausaha Kerajaan Negeri Perak. Pengarah Majlis Sukan Negeri Perak yang pertama ialah Encik Mahiyuddin Bin Arshad yang mula bertugas pada 1 November 1989 hingga 30 April 1993. Tempat beliau kemudiannya digantikan oleh Encik Mazelan Bin Ahmad Baharin yang mula bertugas pada 1 Julai 1993 dan berakhir pada 31 Disember 1996. Tempat beliau digantikan pula oleh Encik Abdul Puha Bin Mat Nayan yang mula bertugas pada 1 Januari 1997 hingga 31 Oktober 2005.

Sebelum pejabat di Bangunan Perak Darul Ridzuan digunakan, Majlis Sukan Negeri Perak telah beroperasi di suatu blok rumah kedai yang disewakan beralamat di No 4, Medan Istana 5, Jalan Panglima Bukit Gantang Wahab, Bandar Ipoh Raya, Perak Darul Ridzuan. Tanggal 1 Disember 2006 kerusi Pengarah Majlis Sukan Negeri Perak telah disandang oleh Haji Meor Ismail bin Meor Akim. Berikutan dari perubahan kuasa pentadbiran tertinggi Majlis Sukan Negeri Perak, pejabat Majlis Sukan Negeri telah berpindah ke Wisma Majlis Sukan Negeri Perak, Kompleks Sukan MBI sehingga kini.

About Us page

CONTACT US

We welcome your feedback on Ipoh Sport Council. We will try to respond to all inquiries within two business days. To send feedback to us please complete the form below:

All details are required:

Your name :

Your email address :

Your feedback related to :

Enter Your Comment Here :

Your position :

Your company name :

Contact Us page

Thank you for using this system and
"MAJULAH SUKAN UNTUK NEGARA".
Click [here](#) to Login.

Sign Out page