BORANG PENGESAHAN STATUS TESIS

JUDUL: INSTITUT KEMAJUAN IKHTISAS PAHANG BOOKING AND MANAGEMENT SYSTEM

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INSTITUT KEMAJUAN IKHTISAS PAHANG BOOKING AND MANAGEMENT SYSTEM

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

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

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DECLARATION

I hereby this project report entitle

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Is written by me and is my own effort and that no part has been plagiarized without citations.

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DEDICATION

To My Family and Friends

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First of all I would like to thank Allah because with His help only then I can complete this Projek Sarjana Muda (PSM) session. I would also like to give out my greatest thank you to all the people who had helped me greatly in assisting me in finishing the course successfully.

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ABSTRACT

Most company had started to rely on the Internet as away to promote their products and services as well as using it as a platform to widen their customers base. Due to that facts, this online system is developed using the basic of e-business. IKIPGym(Institut Kemajuan Ikhtisas Pahang Gym) Booking and Management System are developed for the use of customers and also the management team of IKIPGym. The researches done pointed that a web based system would be the perfect solution to the problem IKIPGym were having. Thus, IKIPGym Booking and Management System(IBMS) are built. The IBMS serve two main purposes, to handle the booking problem of IKIPGym and also to help the management team to handle IKIPGym more effectively. By using the Booking module, the system will let users to book time slots on the gym on the website and the system will help users who are having problem in deciding the right sessions to choose. The only restriction to users who wanted to book through the system is that he or she had to be a registered member of the gym. As for the management team, IBMS will be equipped with additional modules such as Equipment Alert, Staff Scheduling and also Billing modules. Each of these modules serves its on purposes for the management team and will be handles by different users. The Equipment Alert module and Staff Scheduling module will be useful for the instructors in managing the gym meanwhile the Billing module will help the accountant in sorting out the accounts of IKIPGym. And by using the concept of Evolution Prototyping, the development of IBMS is monitored by using both incremental and evolutionary approach. For its architecture, IKIPGym is built using the technology of a three-tiered architecture. Since it is applying the client-server architecture, it will then be implemented by using PHP and MySQL will act as its database. A standard Unified Modeling Language notation will be used for diagrams designing purposes.

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ABSTRAK

Kebanyakan syarikat sudahpun mula bergantung kepada Internet untuk mempromosikan produk dan juga servis mereka. Sekaligus, menggunakan sebagai platform untuk meluaskan perniagaan mereka. Maka dengan ini, IKIPGym Online Sistem dibangunkan menggunakan prinsip *e-business*. IKIPGym(Institut Kemajuan Ikhtisas Pahang Gym) Booking and Management System dibangunkan untuk kegunaan pengguna dan juga pihak pengurusan. Kajian yang dijalankan menunjukkan bahawa sistem berasaskan web adalah jawapan terbaik ekpada permasalah yang dialami oleh IKIPgym. Maka, dengan itu, IKIPGym Booking and Management System dibina. Sistem yang bakal dibangunkan ini akan mempunyai dua tujuan utama, iaitu membantu pelanggan membuat tempahan secara *online* dan juga bagi pengurusan untuk menguruskan gim ini dengan lebih efektif. Dengan menggunakan sistem ini, pelanggan boleh menempah gim. Kekangan bagi mereka yang ingin menempah slot masa adalah mereka perlu mendaftar terlebih dahulu sebagai ahli IKIPgim. Bagi pihak pengurusan pula, sistem ini telah dilengkapkan dengan pelbagai modul bagi membantu pengurusan gim. Modul Equipement Alert dan juga Staff Scheduling berguna buat para petugas dalam menguruskan slot masa gim manakala modul Billing pula akan digunakan oleh akauntan bagi menguruskan kewangan IKIPGym. Konsep yang digunakan adalah prototaip evolusi dan pembinaannya adalah secara berperingkat dan juga berevolusi. IKIPGym juga dibina berkonsepkan *client-server architecture*. Sistem ini juga dibangunkan dengan menjana aplikasi web iaitu bahasa pengaturcaraan Hypertext PreProcessor (PHP) yang dihubungkan dengan SPPD (MySQL server). *UML notation* digunakan bagi proses penghasilan diagram yang bersesuaian.

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LIST OF ACRONYMS

ACRONYMS	MEANINGS
IBMS	IKIPGym Booking and Management System
IKIPGym	Institut Kemajuan Ikhtisas Pahang
PHP	Hypertext Preprocessor
My SQL	My Structured Query Language

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CHAPTER I

INTRODUCTION

1.1 Project Background

Over the past few years, the internet growth are growing steadily and its effect on everyday life is seemingly increasing each days. Most company had started to rely on the Internet as away to promote their products and services as well as using it as a platform to widen their customers base. Due to that facts, IKIPGym online system is developed using the basic of e-business.

According to High Latitude's E-Definition, E-business is doing many business activities electronically using Internet-centric technologies. The focus of e-business is on the application of Internet technologies in the management of day-to-day business processes.

The system will let users to book time slots on the gym on the website and will display all the slots that have been booked by other users. Staff's schedule will also be uploaded so that the staff of IKIPGym will know when they had to work and when is their day off.

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1.2 Problem statements.

Before this, IKIPGym had already had their own system namely IKIPGym Billing System. This system is a stand alone system built using VB6 and Microsoft Access. This system covers two module which is the Registration module and also Billing module. The previous system also only generating report for billing invoices for users only. That is the billing on Registration and Monthly Payment.

i. Problem in promoting the gym

With stand-alone system, it somehow did not help to promote to users the existence of the gym. By using a web-based system, the promotion of the gym will be easily done. Interested users can contact the gym through e-mails or calls. Not only that, any new news on the gym can also be known to the gym loyal customers.

ii. Users are not allowed to book any slot time on the gymnasium

The Booking module is done in this system because it had been an arising matter of complaints by several customers. Before this, the management team had never allowed customers to book session on the gym. So with the online system, the booking module will be added to allow customers to book their favorite session according to its availability. In this module, users can book their preferred date and slot time.

iii. Scheduling of staff are done manually

For the management team, a few additional modules will be built aside than Maintenance and Billing module. The Scheduling module will display the schedule of staff for that day. So that staff will know their schedule and if there should be any changes then it can be easily altered on the website.

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iv. No reminder for equipments check-ups.

The Maintenance module is built to help alert the maintenance staff when the time comes to service the equipments. Every year, there will be a total of three check-up on all the equipments of the gym. These check-ups will be done by Dynamex Health and Gym Sdn. Bhd. So, with the alerts from this module, these check-up-dates will no longer be forgotten.

v. Reports generated not only on billing

Reports that are generated are not only on monthly billings but also on other cases such as for maintenance purposes or analysis purposes.

1.3 Objectives

The objectives of developing this project are;

i. As a way to promote IKIPGym to a wider range of users across Pahang.
ii. To help IKIPGym management officers can analyze the up and down of the use of the gym by using the reports sheet generated from the web portal
iii. Users can easily book the gym due to the convenience of web portal concept.
iv. Maintenance are done accordingly as the alert will remind which equipements needs to be serviced.
v. Staff can also check their working day and day off from the website.

1.4 Scopes

The scopes of this project can be divided into three aspects which are the user, technology and also the system itself.

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i. User

This project is mainly built for two users. One who will benefit this system is the management team and another targeted user is customers who used the system. Since this is a web-based system, anyone who is using the Internet will be the targeted users. But since the gym is located in Pahang, the customers based will be anyone who stayed in Kuantan or districts that is in close proximity to IKIPGym.

For the management staff, the ones that will be using the system are the instructors, administrator of the system, the maintenance officers, the front-office staff, and also the account clerk. Each of these users will be using different modules. The customers will be using the Booking online modules, the instructors will be using the Scheduling modules, maintenance officers will be using the Maintenance modules, the front-office staff will handle Registration and Booking modules and the account clerk will managed the Account modules. The admin will handle the system itself.

ii. Technology

Basically, this system is a web-based system built using the technology of Hypertext PreProcessor and MySQL. At the same, this system is also being implemented as an Intranet system as all the staff of IKIPGym will be using it.

iii. System

This system handles 2 main modules. The modules are the User module and also the Management Module.

a. User Module

The user for this module is the customer of the gym. Other than the customer who will use this module via online connection, the Front-Office staff will also use this system.

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- **Login**

This submodule is actually a security function that is used to identify whether an authorized user is using the system. Since there is both registered and unregistered user, only registered users will be allowed access to the system.

- **Booking**

Users can book his/her favourite slot by entering the date and time and will receive a message whether the slot they choose is available or unavailable. Since all the booking list will be displayed in the Booking Schedule, thus user can easily choose his/her slots based on the display shown.

- **Registration**

Interested user can registered themselves using the Internet. Users can choose which category they wanted since there are four category altogether to choose from. Payment for registrees will be done at IKIPGym. Users are given 10 days to make the payment or their data will be deleted from IKIPgym database.

b. Management Module

There are a few different user for this module. Easily said, each module will be handled by different users but these users will interact with each other.

- **Login**

This submodule is actually a security function that is used to identify whether an authorized user is using the system. Basically, all the users in the management module will use this module.

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