

**A WEB-BASED COMPUTER LAB MANAGEMENT SYSTEM:
CASE STUDY IN SEKOLAH KEBANGSAAN TIKAM BATU,
SUNGAI PETANI.**

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UNIVERSITI UTARA MALAYSIA

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**A WEB-BASED COMPUTER LAB MANAGEMENT SYSTEM: CASE
STUDY IN SEKOLAH KEBANGSAAN TIKAM BATU, SG. PETANI**

**A Project Submitted to Dean of Awang Had Salleh Graduate School in Partial
Fulfillment of the Requirement for the Degree Master of
Information Technology
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ABSTRAK (BAHASA MALAYSIA)

Kajian ini dijalankan untuk pengurusan makmal computer secara sistematik dan berkesan. Pengurusan makmal komputer berasaskan web (laman sesawang) akan dibangunkan untuk menyediakan kemudahan kepada guru-guru bagi tujuan rekod penggunaan menggunakan makmal komputer, log penggunaan makmal komputer oleh pelajar-pelajar dan juga menyediakan laporan berkenaan penggunaan makmal komputer kepada pihak pentadbiran sekolah dan jabatan pelajaran. Guru tidak perlu lagi menunggu waktu persekolahan untuk menggunakan makmal komputer. Sebaliknya, mereka boleh melakukan log penggunaan makmal komputer di mana-mana sahaja dan bila-bila masa sahaja melalui internet. Laporan analisis tentang penggunaan makmal komputer akan dihantar kepada Pejabat Pelajaran Daerah (PPD) dan Jabatan Pelajaran secara berkala. Kajian ini akan disesuaikan dengan analisis automatik untuk sistem pengurusan makmal komputer. Prototaip untuk sistem pengurusan makmal computer ini akan dibangunkan dengan menggunakan prototaip PHP dan MySQL bagi memastikan model, kaedah penggunaan, pendekatan yang digunapakai dan sistem yang terliabt mampu berfungsi dengan baik. Sistem pengurusan ini akan diuji keberkesanan penggunaannya di makmal komputer Sekolah Kebangsaan Tikam Batu. Sistem pengurusan makmal komputer berasaskan web (laman sesawang) ini mempunyai potensi yang seharusnya dapat dilaksanakan di sekolah-sekolah yang lain yang memerlukan sistem pengurusan makmal komputer untuk tujuan kemudahan pengurusan makmal komputer di sekolah.

ABSTRACT (ENGLISH)

This study will be conducted to manage the computer laboratory at school in a systematic and effective manner. A web-based computer lab management will be developed to provide facilities for teachers to make a reservation for using lab computer, to log the use of computer by students, and produce reports about the computer lab utilization to the management of school and education authority. Teachers do not have to wait on school hours for booking the computer lab. They can perform a reservation in anywhere and at any time term through the internet. Reports on the analysis of the use of computer laboratories will be submitted to the State Education Department (PPD) and others education authority periodically. This study will adapt automated analysis usage system for computer lab management system. The prototype of computer lab management system will be developed by using PHP and MySQL for ensuring the proposed model/methodology/approach/framework/system is workable. The system will be tested for usefulness at the computer laboratory in Sekolah Kebangsaan Tikam Batu. The web-based computer lab management system has potential to be implemented in other schools, which required laboratory management system to manage their facilities.

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

Information and Communication Technology (ICT) has brought a new era for all areas in developing countries. ICT infrastructure become a serious matter because of the need to develop greater knowledge compared to the days before, especially in the domain of the education system, which is most important for developing countries like Malaysia. Malaysian Smart School (MSS) program is one of the greatest inventions for teaching and learning process. This idea is the central of enabling the use of ICT in teaching and learning processes that affect students and teachers. Furthermore, the infrastructures are already in place to ensure the correctness and effectiveness of the education system.

Implementation of the MSS program increased the efficiency of creating new ideas of education. This idea makes Malaysia to be a center of educational excellence and world-standard of Malaysian Smart School for the current education system. The MSS program provides students with the individual skills in learning and guiding them in using integrated ICT equipment available in school laboratory. Nowadays, each school had been provided with at least 50-100 computers for educational purposes. However, the ICT equipment is rarely used and the laboratory usage is not properly managed. It caused a great waste of ICT equipment to the government. An effort needs to be implemented to properly manage the usage of ICT equipment in the school laboratory.

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