STUDENT MANAGEMENT SYSTEM

IN SCHOOLS

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by

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ABSTRAK

Kajian ini dibuat untuk menghasilkan satu prototaip Sistem Pengurusan Pelajar Sekolah (Student Management System) berasaskan Web. Kajian ini dibuat memandangkan kurangnya penggunaan serta pendedahan mengenai sistem yang berasaskan Web yang dapat menguruskan hal-ehwal pelajar di sekolah-sekolah. Metodologi sistem yang digunakan dalam kajian ini ialah metodologi *System Development Research.* Prototaip sistem ini dibina menggunakan beberapa perisian seperti pangkalan data MySQL, PHP serta pelayan Web Apache. Faedah-faedah dan kelebihan dalam menggunakan perisian-perisian tersebut juga dibincangkan di dalam kertas kajian ini. Gabungan teknologi-teknologi tersebut telah berjaya membina sebuah sistem prototaip yang dapat meningkatkan taraf pengurusan pendidikan di sekolah-sekolah.

ABSTRACT

The study was carried out in order to produce a Web-based application of Student Management System in schools. This is done due to lack of online systems that can cater for students' affairs in schools. The System Development Research Methodology is the methodology used in the study. The prototype of Student Management System is built using the MySQL relational database, together with PHP and Apache Web server. The benefits of these technologies are discussed in this paper. The combination of these technologies makes the Student Management System featured with many benefits that are believed can enhance today's educational system.

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LIST OF ABBREVIATIONS

ACID	*Atomic, Consistent, Independent, Durable*
ASP	*Active Server Page*
CASE	*Computer-aided Systems Engineering*
CGI	*Common Gateway Interface*
COBOL	*Common Business Oriented Language*
COPPA	*Children's Online Privacy Protection*
CPU	*Central Processing Unit*
DBMS	*Database Management System*
DFD	*Data Flow Diagram*
DOS	*Disk Operating System*
ERD	*Entity Relationship Diagram*
FAST	*Facilitated Application Specification Technique*
GIF	*Graphics Interchange Format*
GPL	*GNU General Public License*
HTML	*Hypertext Markup Language*
HTTP	*Hypertext Transfer Protocol*
IIS	*Internet Information Server*

JSP	*Java Server Page*
LAMP	*Linux, Apache, MySQL, P* (PHP, Perl, Phython)*
LAN	*Local Area Network*
MMS	*Modular Management System*
MySQL	*My Structured Query Language*
ODBMS	*Object-oriented Database Management System*
OOP	*Object-Oriented Programming*
PHP	*Hypertext Preprocessor*
PIECES	*Performance, Information, Economics, Control, Efficiency, Service*
PL/I	*Programming Language 1*
PowerSchool SIS	*PowerSchool Student Information System*
RDBMS	*Relational Database Management System*
SASIxp	*Schools Administrative Student Information Software*
SSL	*Secure Sockets Layer*
SQL	*Structured Query Language*
UNIX	*Uniplexed Information and Computing System*
VB	*Visual Basic*
WWW	*World Wide Web*
XML	*Extensible Markup Language*

CHAPTER 1

INTRODUCTION

1.0 Introduction

Currently, developing a Web-based application has become a priority to most organizations, be it corporate sectors, government or education institutions. Most of the corporate sectors have been using the Web-based applications to support their everyday business activities, such as the online service site of San Francisco-based mPower (www.mpower.com) and freeware and open source programmer content site Andover.net (Babcock, 2000). Moreover, pioneers such as Amazon.com, Dell and Federal Express have demonstrated success with Web-based businesses (Oppel, 1999). However, there are not many schools that have been developing Web-based applications to handle students' activities in various areas such as registrations, attendances, co-curriculum enrollments, subject selections, examinations and many other activities that concern students (Media & Methods, 2000).

Many benefits could be gained in having a Web-based Student Management System in schools. For example, The Sergeant Bluff-Luton School District has been implementing the Web-based Student Management System for the past three years (Media & Methods,

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