

**DEVELOPMENT  
OF A DATABASE-DRIVEN WEB-BASED  
LIBRARY APPLICATION**

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## ABSTRACT

The internet has been the most popular ways for sharing information in recent years. As the number of publicly available site increase, the users demand for more dynamic content has also increased. This has lead to a proliferation of technologies available to serve up dynamic content. Currently the school library database system has been created as a MS Access 97 application, a stand-alone database which consists of a static site. MS Access provides an easy user interface, but it can only be used as a personal or single-user application and managing limited amount of data. The objective of this project is to develop and implement a database-driven web-based library system using MySQL (data management platform), PHP (server-side scripting language) and Apache (web server). The advantage of implementing a database-driven web-based is that the unlimited access for looking up and searching for information in the database which also known as on-line search mechanism. An authenticated and a strict access control by password will apply to the administrative user in editing and maintenance operations. This system also implements a read-only, non-authentisized interface to serve other web user which should be available on a 24x7 basis.

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# CHAPTER 1

## INTRODUCTION

### 1.1 General Overview

The concept of online database is far from a new concept, but undoubtedly with the proliferation of technologies available the users demand for more dynamic content are vastly increasing. Though the choice of technology depends on the target environment, a wide range of implementations can be on any given platform, including various *cgi* implementations, server side JavaScript (livewire), ColdFusion, PHP, Active Server Pages(ASP), .Net, Java Server Pages, servlets and web services. The server side technologies facilitate creation of dynamic web pages, but often do not operate on their own.

Databases often play an integral part in storing the information, and the scripting languages query the database to create the dynamic web page. A variety of vendors cater to this, and the popular ones are Oracle, DB2, Microsoft SQL server, Sybase, MySQL, Postgre, and MS Access.

Because of these considerations, a Web-based solution was sought. For various reasons (in particular, because of licensing concerns and experience), a Linux/Apache based solution using PHP for dynamic Web page generation and a MySQL database backend was chosen.