

**THE WEB-BASED SECONDARY SCHOOLS  
EXCESS TEXTBOOK-ON-LOAN DATABASE MANAGEMENT SYSTEM  
(eXcessToLDatabase)**

NG SIAT CHIN

Demo (Visit <http://www.pdfsplitmerger.com>)

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## ABSTRACT

This project develops a web-based system called '*eXcessToLDatabase*' to systematically manage and make public the data on excess textbooks in secondary schools of the Kuching division. The present manual access to this kind of data is difficult and consequently, request for the excess textbooks is time-consuming. *eXcessToLDatabase* - equipped with the speedy information-delivery capability of the internet and coupled with the efficient data-administration feature of the database - offers an in-time sound solution to the said problem. The website provides services for schools to advertise information on excess textbooks, search for availability of excess textbooks, request for advertised excess textbooks and forward queries or suggestions via an instant email facility.

Demo (Visit <http://www.pdfsplitmerger.com>)



## **ABSTRAK**

*Projek ini membangunkan satu sistem berasaskan Web bergelar 'eXcessToLDatabase' untuk menguruskan serta menyampaikan maklumat tentang buku teks yang berlebihan secara sistematik di sekolah-sekolah menengah dalam bahagian Kuching. Pencapaian kepada maklumat sebegini secara manual pada masa kini adalah sukar dan mengakibatkan permohonan untuk buku teks yang berlebihan mengambil masa yang agak panjang. eXcessToLDatabase - dengan kemampuan internet untuk menyampaikan maklumat dengan pantas serta ciri pengurusan data yang efisien yang dibekalkan oleh sesuatu pangkalan data - menawarkan satu cara penyelesaian yang berkesan kepada masalah tersebut. Antara perkhidmatan yang ditawarkan oleh laman Web ini ialah: Pengiklanan senarai buku teks berlebihan, enjin pencarian judul buku teks yang diiklankan, permohonan untuk buku teks berlebihan serta sudut email untuk mengemukakan soalan atau cadangan.*

*Demo (Visit <http://www.pdfspublish.com>)*

## CHAPTER 1: AN OVERVIEW

### 1.1 Introduction

As the world advances into the so called Information Highway era, one will certainly be of enormous advantage over the others if he/she is able to possess the most up-to-date global information to thrive in the ever increasing competitive environments. In this aspect, the degree of efficiency and the swiftness in which the information is acquired counts.

The setting up of the Multimedia Super Corridor (MSC) indicates that Malaysia has also realized the importance of her people in grasping the latest information communication technology in order to perform well in the global environment. The Smart Schools, as one of the seven flagship applications of MSC, serves as the germinating nursery for producing the nation's future knowledge workers. To achieve this end, two of its components/strategies namely Smart School Management System and Smart School Technology Infrastructure are of utmost important. As the country is stirring towards a developed nation by the year 2020, all schools in Malaysia will be gradually upgraded to Smart School status. This implies that the schools' overall management system (inclusive of the database management) have to be moving in par with this development via employing of the most recent technology as possible (Multimedia Development Corporation, 2003).

Thus, in envisaging the global trend, this proposed project which entitled "**The Web-based Secondary Schools Excess Textbook-on-Loan Database Management System**" (*eXcessToLDatabase*) has come into being.



## 1.2 Problem Statement

The Textbook-on-Loan Scheme Program or *Program Skim Pinjaman Buku Teks* (SPBT) was first implemented in the year 1975 in government and government aided schools to all eligible students whose parents are Malaysian citizens only. The SPBT program was implemented with two major aims. First, it aimed to help reduce the financial burden of the low-income parents. Second, it was meant to ensure that no needy students were left unattained of their welfare in their schooling years (*Bahagian Buku Teks*, 2000).

Since the program's first implementation, it was managed manually based on the guidelines and work procedures provided in a handbook. A file system which consists of a minimum of nine different files is employed to ensure the textbooks are managed efficiently and systematically. This file system used to work well in its setting as the total student population was considerably manageable. Moreover, there was no alternative to resort to as Malaysia was still lagging behind in terms of technology literacy.

As the student population swells and the digital divide gap between Malaysia and the West shrinks, the manual file system is becoming obsolete and is impeding the system's efficiency. This prompted a group of UNIMAS students to develop a Computer-based Textbook-on-loan System Model or *Sistem SPBT Berkomputer* in 2002.

The computer-based system has inevitably capable of improving the efficiency of the manual system in term of textbook data management in individual school. However, it does possess certain shortcomings that would impede its performance like:



- It does not provide the mechanism as how the excess textbooks in any schools are to be interchanged or reallocated. As according to the guidelines provided by the Textbook Section or *Bahagian Buku Teks* of the Ministry of Education, schools have to transfer any excess textbooks to those that need them.
- The system is designed stand alone and not Web-based. It only provides individual service to any one school that installs it. The technology employed in developing the system, like Microsoft Visual Basic, has in one way or another impeded the effort to upgrade it to a Web-based system.
- As the databases are not interlinked, information on excess and shortages of textbooks have to be enquired manually from every single school and this is of no time and cost benefits.

Consequently, these hindrances demand enhancements/complements to the present system so as to increase its efficiency. The proposed Web-based system with a central database will certainly meet this end.

### **1.3 Project Purpose and Objectives**

The project has the ultimate purpose or goal of identifying the weaknesses of the present manual system of textbook information dissemination alongside with the requirement analysis and develops an enhanced system to rectify the problems and to offer more efficient services.

Based on this purpose, the following objectives are defined:



### **1.3.1 To fully tap the Web-based system's efficiency in information dissemination**

As being mentioned in the introductory section, timely and efficient acquirement of information put one at advantage and this can be easily achieved via a Web-based system that data can be easily uploaded and referred to by anyone with a matter of mouse click. This speeds up information exchange.

### **1.3.2 To produce an organized and efficient textbook data management system**

This objective is utmost important as the present manual system is disorganized and lack of proper guidelines in its implementation. The proposed system will be able to rectify this problem by providing (online) documented rules and procedures in the management of textbook transfer.

### **1.3.3 To allow instant references on available excess textbooks in other schools**

As differs from the present system that requires a school to contact each and every other school to obtain the required information on excess textbooks, *eXcessToLDataabse*, as a centralized data repository, offers immediate reach to this information irrespective of time and location factors.

### **1.3.4 To provide a channel for suggestions in promoting the system's efficiency**

With the suggestions/comments corner provided, the new system offers a proper channel to pull in constructive comments that will be invaluable in the effort to improve the system's efficiency.

## **1.4 Project Scope**

“The term scope is used to define the work boundaries and deliverables of the project so what needs to get done, gets done...” (Marchewka, 2003). Based on this definition, the project scope for *eXcessToLDatabase* is defined as follows:

### **1.4.1 Project Deliverables and Boundaries**

The project will deliver a system called *eXcessToLDatabase* and a documented report, a user manual and helpdesk. The system will serve to take care of the exchange of excess textbooks' information among schools to enable the reallocation of these textbooks to schools that need them. The management of SPBT at individual school level will not be of its concern.

### **1.4.2 System Target Users**

*eXcessToLDatabase* will serve two types of authorized users who are provided with unique login usernames and passwords. The first type of users is the Kuching division's Department of Education (which is the system/database administrator as well). Whereas schools with excess textbooks to advertise and contribute as well as schools that need these textbooks make up the second type of users.

### **1.4.3 System Limitation**

*eXcessToLDatabase* is developed to only complement, but is not meant to replace, the present SPBT system at school level. The system's effectiveness, to a great extent, relies on the degree of cooperativeness and proactive-ness of the schools to advertise the information on the excess textbooks possessed by them as they are not bounded by any rulings to do so.



## **1.5 Research Significance**

This project, upon implementation, will ultimately benefit the school teachers, students, parents and the education department in terms of providing sufficient textbooks to needy students as stated in the SPBT program. The improved efficiency in textbook data management will bring about both tangible and intangible benefits as listed below:

### **1.5.1 Tangible Benefits**

- The web-based centralized database offers easy and instantaneous information on excess textbooks in any schools. This reduces cost and time by in enquiries from school to school by phone/mail.
- Textbook exchange among schools is faster and more systematic.
- The education department can issue immediate directives via email to schools for textbook-exchange arrangement.

### **1.5.2 Intangible Benefits**

- The system allows the education department to indirectly monitor the performance of every school in term of textbook management via how quick the school can provide the statistics of textbooks for reallocation purposes.
- The timely reallocation and distribution of textbooks to eligible students will boost up their morale value as well as their interest in studies as they will not feel that they have been discriminated from the main stream.
- The subsequent effect of the above is that the parents will have a greater confidence in the teachers and this again will promote the school's image as a whole.