TEACHER TRAVEL CLAIM SYSTEM

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This project is submitted in partial fulfilment of the requirements for the degree of Bachelor of Education with Honours (Information Technology)

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DECLARATION

I certify that no portion of the work referred to in this report has been submitted in support of an application for another degree or qualification of this or any other university or institution of higher learning.

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Jong Mei Sze 19 Mei 2006
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ABSTRACT

The usage of the computer is in sync with our daily life. Most of the application we met today is not longer manually. Most the routines can be done using technology such computer. Therefore, the Teacher Travel Claim System (TTCS) is developed to help the teachers in SK Niup on claim making. The implementation of TTCS is based on user’s requirements. The system’s goal is enable user to fill their claim easily. By the features provided in the system, the users can gain benefit by making the claim much easier.
ABSTRAK

CHAPTER 1: AN OVERVIEW

1.1 Introduction
In the era of information technology, school has realized the wide use of computer. There are various types of computer system that assist the teacher in doing the daily job. For example, an EMIS program helps to keep the staff and students information for all school in Kuching. The information from each school can be integrated become one data and retrieve the data based on the criteria required. Besides, some of the school had using library system to keep the book in library. Teachers will no more using book to record the item in library. They will just need to key in the new items into the database. The information key in can be modified and retrieved anytime. All of the manual system has been changed to automatic system day by day.

However, the claim system is still in manual. Teachers have to make claim manually. All teachers have to fill the form provided by Education Ministry whenever they need to make a claim. This manual process is being carried out of almost all the schools in Kuching. Therefore, an automatic claim system is very important now as the system can help the automation of the data filled and process precisely. By using the automatic system, teacher can make the claim more quickly with less human error. The teacher travel claim system (TTCS) is creating to fulfill these entire requirements to make the teacher life easier when making the claim.
1.2 Problem statement

Teacher in SK Niup have to make the claim manually which they need to fill form which are specially designed and provided by Education Ministry. The process of claim is all in paper form. It requires number copies of paper to be stapled together and manually carry through the processing system. Furthermore, it is tedious. It requires user to fill such a lot of form and make all the calculation manually. Besides, user has to prepare a backup copy in case of any incident happen. It also takes time for user to calculate the amount that to be claimed. It is waste time and causes workload. The automated system can assist in calculate the amount involved. Therefore, it is necessary to create a system that is able to solve all these problems.

1.3 Objectives

The main objective of this project is to develop an automated travel claim system for SK Niup that calls Teacher Travel Claim System (TTCS).

Other objectives of the project are as follows:

1. To create database that can store data or information on claims that have been made.

2. To create a system with function claim, automatically calculate and send directly to administration clerk in school.

3. To reduce unnecessary workload of teachers and clerk, where users can make claim themselves by login the system and then send to clerk automatically.
1.4 Scope

This project will cover primary school Teacher Travel Claim System. In this project, SK Niup has been selected as case study. The main focus is to let the teacher in SK Niup make the claim using automated system and send to the clerk electronically for process. The system allowed clerk to generate report such as monthly report and yearly report. Furthermore, this entire system also supports the security function: users have to login by their ID and password. Essentially, the proposed system is not a web-based system that enables the user to send the claim directly to the education department. It is a client server system that allows the clerk and teacher to use in school environment. The proposed system is intended for the ease of teachers and administrative clerk in making the claim.

1.5 Expected outcome

The developed system is a fully functional system that focusing on making the claim, computerized the calculation, report generating and security in accessing the system and preview the claim made. The system is intranet client server network that can be operated in school environment.

1.6 Significance of project

The proposed system makes ease of the system users such as clerk and teachers in the claim process. By changing the current system from manual to electronically, teacher can make the claim automatically, do the calculation accurately and alert the clerk about the claim made. This proposed system would make the claim job easier because user only need to
click into the form and 50% of the form is prefilled for the user based on the claim data already in the system. By a few “click” in minutes might solve the plenty of paper work involved.

1.7 Project Schedule

The project plan is scheduled as in Appendix A (Gantt chart).

1.8 Chapter outline

A general description of each chapter is given as below:

Chapter 1: Chapter Overview

This chapter consists of overview of the project. This includes introduction of the proposed system, problem statement of the existing paper-based system, objectives of the project, scope, expected outcome, research significance, project schedule and the outline of the project.

Chapter 2: Literature Review

In this chapter, certain existing related system will be reviewed to identify the strengths and weakness of the system. Some comparison on programming language used, system interfaces and system features of existing systems was done. Review done contribute in the decision making regarding the most suitable tools for the implementation of the Teacher Travel Claim System.
Chapter 3: Methodology
Chapter 3 illustrates the methodology used to develop the Teacher Travel Claim System. The methodology used is Waterfall Development Methodology. All the phase involved will be discussed in detail in this chapter.

Chapter 4: System Analysis and Design
Chapter 4 illustrates the analyses of current system and proposed system. The user, software and hardware requirements will also be specify in this chapter. Besides, this chapter consists of system design, which included data flow diagram, ERD diagram, business rules, data dictionary, input and output design of the proposed system.

Chapter 5: System Implementation and Testing
This chapter describes the system implementation, system testing and evaluation. System implementation includes the introduction to system implementation, system configuration, implementation of system modules and additional functions. System testing and evaluation will include system testing, system evaluation, user acceptance test, result analysis, user feedback and system limitations.

Chapter 6: Conclusion and Future Enhancement
Chapter 6 reviews the achievement of Teacher Travel Claim system. Besides, this chapter also discuss about the future enhancement of the proposed system.
CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Literature review will be done to justify and make inference on other literature. The review was conducted on existing systems. It also will be done through paper, books, newspaper, conversations and the internet. These reviews will become the scaffold for providing the better understanding about the technology and methods used to implement the proposed system.

2.2 Reviewing of the Existing Systems

Three systems will be reviewed to gain more knowledge about the similar system to enhance the proposed systems effectiveness. They are TERS (Travel Expense Reimbursement System), eSPKB ("Sistem Perancangan & Kawalan Belanjawan") and Model J305 Professional Entry System. These systems will be evaluated based on User Interface, Functionality, Security and Technology. Interactivity of the system is an important feature in order to create a user friendly and effective system. The technology used is important to make sure the flexibility of the system built. Furthermore, the ability to auto refilled the claim form and generate claim form based on information in database will be a more essential features to be reviewed. Lastly, the system must have security function to enhance the effectiveness in term of security part. These three systems have been selected because each of them has strength function based on the criteria evaluated that will enhance the effectiveness of the proposed system. For example, each system has security function to
authorize the user log in. The further detail about the strengths and weakness of each system will be discussed below.

2.2.1 TERS

![Figure 2.1: Main page of TERS system](http://tersweb/login/login.asp)

Figure 2.1: Main page of TERS system

(Feature: http://tersweb/login/login.asp)

2.2.1.1 Introduction

TERS (Travel Expense Reimbursement System) is an online travel claim system developed by Oregon Department of Human Services. The system requires Internet Explorer 5.5 with SP2 or above to run the program. The TERS main menu contains items such as help, profile, TERS News, general policies, travel templates, travel claims and logoff.
The TERS Main Menu will appear on the left of the TERS screen. Each screen has a detailed help page that relates to the information on that screen. The help file will show the step-by-step process for creating the travel claim. Included in this help screen is a very brief outline for completing a trip within a claim. The profile screen is the default page that appears when you sign into TERS. There are three subject tabs on this page: Identity, Work and Login. The information which user enters in these screens becomes user’s Employee Profile. User may change the information entered here as needed. For the TERS News, user can find information such as: rate changes, policy updates, or other messages from the Systems Administrator. General Policies relate to the TERS application rather than DAS travel policy. Travel Templates provided user with a list of any Travel Claim Templates user have created. Through travel claims, user can find a list of paid, rejected, submitted (finalized), or incomplete claims, as well as the number of templates user have. Each claim may include more than one TRIP. Lastly, user can click the item Logoff to logoff the system.
2.2.1.2 **Strengths**

TERS system has security log in function. User need to key in valid user name and password in order to view and key in the information. For the first time TERS user, they will need to enter the username and password for registration. Once a valid Username has been entered, TERS will take user to the new user registration pages where user will need to enter additional registration information, which will be validated by the system administrator. After user registration has been accepted, user will be notified by email that user may begin using TERS for the travel expense reimbursement claims. The system also has various functions. User can add, change, or delete trips until the claim is finalized. Once finalized, the Travel Claims Tree View will show the claim in BLUE, and user can view it, but they will not have access to make changes unless accounting rejects the claim. If rejected, the claim will be listed in RED. The technology requires is available which is Internet Explorer 5.5 with SP2 or above. In addition, the system also has a lot of navigation for linking to other function.

2.2.1.3 **Weakness**

Before getting started with TERS, user will need to establish the setting and verify the internet explorer 5.5 with SP2 or above. Therefore, the user will need to familiar with the window setting and change the setting if necessary. Besides, user will need to familiar with the internet environment and the entire navigation link provided because it is an online system.
2.2.2  eSPKB ("Sistem Perancangan & Kawalan Belanjawan")

2.2.2.1  Introduction

"Sistem Perancangan & Kawalan Belanjawan" is used at State Accountant Department for the finance matters. This system is written in Java and used Oracle as database server. The system requirements for this system are window, Internet Explorer 5.0 or 6.0, Acrobat Reader, and Smart Card Reader Technology. The system has widely use since 2004 and will be used in all secondary school by 2020.

2.2.2.2  Strengths

The system used Smart Card Reader to authorize the user log in. Only users that own a smart card are able to access and edit the information. Every user has different authority to