**ABSTRACT**

Queen Elizabeth Hospital (QEH) is a government hospital in Kota Kinabalu, Sabah. Therefore, the staff in QEH have to do overtime work, on-call and duties outside the hospital. To claim for the additional work, the current practice is through the use of physical claim form for the additional work, the current practice is through the use of physical claim form and it will be processed manually by the Finance Unit. During the claiming process, errors often occur especially on the calculation of payment as the claimants have to calculate the total claim themselves. Since there are many different rates depending on the position, grade, and day of week, the claim process itself can be time-consuming and often added burden to the claimant especially for the clinical staff as they are already busy taking care of patients. Therefore, to streamline the claim process, the ICT Unit of QEH requested an e-Claim system to be developed. The e-Claim system is for the processing of on-call, overtime, and travel claims. The modules of the system are specified by the QEH ICT unit. System prototyping model is used as the development methodology. Three types of testing have been conducted: unit testing, system testing, and user acceptance testing.
CHAPTER 1

INTRODUCTION

1.1 Introduction
This chapter will explain why the QEH e-claim system need to be developed. The problem, objectives and project scope are defined. The organization of the book is explained at the end of this chapter.

1.2 Problem background
Queen Elizabeth Hospital (QEH) is a government hospital in Kota Kinabalu, Sabah. In QEH, the employees is divided in three categories: management, clinical and supporting-clinical staff. In order to provide a better service to community, employees often have to do overtime work, on-call and duties outside the organization.

Overtime work is the official/real work of an officer or Department that is carried out on the instructions of the head of Department outside normal hours of work stipulated, or on a weekly rest day or on a public holiday.

On-call work is where a medical officer or medical consultant officer work outside the normal hours of work. On-call allowance is also known as EKLWBB (Elaun Kerja Luar Waktu Bekerja Biasa).

Figure 1.1: Claiming Process Flowchart (Claimant Part)
Figure 1.2: Claiming Process Flowchart (Finance Unit Part)

Figure 1.2 is the manual claiming process for Finance Unit part. The process start when Pembantu Tadbir Kewangan W17 receive the claim application from the staffs.
The application is reviewed and checked if it is complete or not. If no, then proceed to write query letter process. Query letter is a notification sent to claimant to notify them that their claim have to be updated or changed due to some mistakes or incomplete information. Most of the claims application will undergo this process and the reason for this mostly the same for each application. The claimant have to respond the query letter by completing their application. Then, if the claim application is completed after reviewed, the claim payment will be verified before the application sent to e-SPKB. The Electronic Budget Planning and Control System (eSPKB) is developed to meet the financial control needs and financial information needs for projects under the Electronic Government application. The manual claiming process end after the process of submitting claim application to e-SPKB completed. The current practice of applying claim in QEH is through manual process as explained above where the staff need to get the claim form from the front office of Finance Unit. The staff is complaining because they are lazy to come to the office to take the form. They have to fill in their personal information and claim information in the form. The personal information entry process is repeated every time the user apply claim. During the claiming process, errors often occur especially on the calculation of payment. This is due to the existence of different rates to calculate the claim payment. The calculation involved in the claim form take time and burden the staff in the hospital especially for the clinical staff as they are busy taking care of patient. After they have completed the claim form, they have submit it to the Finance Unit to be processed and checked. If the claim have problem or incomplete, Finance Unit have to write query letter to the claimant. Paper and pen are still used in writing query letter. Usually, they have to write the same query repeatedly to the claimant whenever the same mistakes were found. The mistakes will delay the approval and payment process. So, to solve the problem, they request ICT Unit of Queen Elizabeth Hospital to develop a system.

1.3 Problem Statement
The problem identified can be simplified as follow;

a) Repetition of the same work process of writing personal information in the form.
b) Error in calculation involved in the form often occur.

c) Time consuming in writing claim information in the claim form.

d) Query letter from Finance Unit is sent manually to the claimant.

e) Time consuming in checking and processing the claim.

1.4 Objectives
The objectives of this project is as follows;
i). To design an e-claim system for on call, overtime and travel claim;

ii). To develop the e-claim system for QEH;

iii). To test and verify the system for user acceptance.

1.5 Project Scope
The QEH e-Claim System have five main modules:
i. Login Security Module

ii. Update Profile Module

iii. Claim Module

iv. Query Module

v. User Management Module

The first module is Login module which function as security control to the access of the system. Only registered user can access the system. There are three access level to this system which is system administrator, Finance admin and the user. Before using the system, new user have to register first. Registration sub-module will involve with registration of new user and create of user account. User have to wait for their registration to be approve by the system admin before using the system.

There are several sub-modules in update profile module. First, edit profile sub-module where user can update their personal information. Second is change password sub module which allow the user to change their password according to their preferences.
Claim module is the main module of this system. It consists of overtime claim, on-call claim, and travel claim. Overtime and travel claim can be accessed by all categories of staff, however on-call claim is only for the medical officer. Sub-modules are
claiming (fill in online claim form), edit or delete claim information, calculation and view previous claims.

Next is Query module. This module provide a way for the clerk at Finance Unit to submit query to the claimant. Claimant can view the query through the system.

Lastly, User Management module where administrator is allowed to approve user registration, add new user, disable or enable user account, reset user password and register new admin.

This system will focus the scopes in three main users and they have different access level.

a) User (Clinical and Non-clinical staff)

b) Finance Unit Admin

c) System Administrator

1.6 Organization of the Report

In this report, there are seven chapters.

Chapter 1 is the Introduction. This chapter describes the motivation of developing the system. It includes problem background, problem statement, objectives and project scopes.

Chapter 2 is the Literature Review. It reviews similar systems with e-claim system. This chapter also gives the comparisons between the existing systems and the e-claim system.

Chapter 3 is the Methodology. It explains the chosen methodology to develop the system. Software and hardware requirements are also presented in this chapter.

Chapter 4 is Analysis and Design. Context diagram and Data Flow Diagram are explained in this chapter. Entity relationship diagram, database design and early design for interface are also included.
Chapter 5 describes the system implementation where the writing of source code for the program is started. The development of the system is based on the analysis and design in chapter 4.

Chapter 6 is the testing of the system from unit testing level to acceptance testing level. Last chapter summarizes the contents of the system development project report. Suggestion for future work also described briefly.