BORANG PENGESAHAN STATUS TESIS

JUDUL: PURCHASE REQUEST SYSTEM

SESI PENGAJIAN: TAHUN 4 2005/2006

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<div align="center">(HURUF BESAR)</div>

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PURCHASE REQUEST SYSTEM

NOOR FAZILAH ALI

This report is submitted in partial fulfillment of the requirements for the
Bachelor of Computer Science (Software Development)

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2006

DECLARATION

I hereby declare that this project report entitled

PURCHASE REQUEST SYSTEM

is written by me and is my own effort and that no part has been plagiarized without citations.

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DEDICATION

I would like to dedicate this appreciation to my beloved family and friends who have support me during completing this project. Thank you very much.

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ABSTRACT

Purchase request system (PRS) will be defined as one of a system in a finance department that caters a purchase request from staff in the organization. The other users that will involve in this system are finance staff, Head of Department and committee members. This system should be developed to overcome the problems that happen in the current system for examples security problem and difficulties to track purchase request status. Besides, user will feel difficult to update or revoke a purchase request as this system is using a manual system. Otherwise, there will be a problem when committee members deciding whether to approve a purchase request according to the latest budget reports. By developing Purchase Request System, a few problems that had been stated in the problem statement section can be solved by producing a computerized purchasing requisition form. It also has a few features for examples; security characteristic, tracking the specific purchasing information where user can find any pertinent data, processing and maintaining a history of the purchasing request status, generating report and Decision Support System (DSS) for approving a purchase request. In order to solve the problems a research should be conducted by making a literature review where developer will focus on a finding according to researches and studies to choose the best solution to improve the current system. The expected outcome for this system is not only a system that can manage a purchase request but also a Decision Support System (DSS) to give a suggestion whether to approve the purchase request.

ABSTRAK

Sistem Permohonan Pembelian dapat dilihat sebagai salah satu sistem di dalam jabatan kewangan yang menguruskan permohonan pembelian daripada staf di dalam organisasi tersebut. Pengguna lain yang terlibat adalah kakitangan kewangan, pegawai kewangan, dan ahli lembaga pengarah. Sistem ini perlu dibangunkan untuk mengatasi masalah yang berlaku dalam sistem lama, contohnya masalah keselamatan, kesukaran untuk menjejaki status permohonan pembelian yang sedang diproses dan sebagainya. Selain itu pengguna akan merasa sukar untuk mengemaskini, mengubah dan membatalkan permohonan pembelian jika menggunakan sistem manual. Di samping itu terdapat juga masalah apabila ahli lembaga pengarah mahu membuat penilaian untuk meluluskan pembelian. Dengan membangunkan sistem ini, masalah yang sedia ada akan dapat diatasi dengan membangunkan sistem berkomputer. Ia juga mempunyai beberapa ciri-ciri seperti ciri keselamatan, mampu menjejak maklumat pembelian, memproses permohonan pembelian, menjana laporan dan Sistem Bantuan Keputusan (SBK) atau lebih dikenali sebagai *Decision Support System* (DSS) untuk analisis permohonan pembelian. Untuk mengatasi masalah ini, kajian harus dijalankan dengan membuat kajian literatur dimana ia akan berfokus kepada memilih penyelesaian terbaik untuk memperbaiki sistem semasa. Hasil yang diperolehi adalah pemilihan metodologi berorientasikan objek yang berpotensi meningkatkan produktiviti pembangunan perisian dan sistem yang bukan saja dapat menguruskan permohonan pembelian tetapi juga menyediakan DSS untuk analisis sama ada permohonan pembelian itu wajar diluluskan atau tidak berdasarkan beberapa kriteria dan peraturan.

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LIST OF SYMBOLS

TERM	DESCRIPTION
PRS	Purchase Request System
OOAD	Object-oriented Analysis and Design
OOD	Object-oriented design
UML	Unified Modeling Language
ERD	Entity Relationship Diagram
UI	User Interface

LIST OF APPENDIXES

CHAPTER I

INTRODUCTION

1.1   Project Background

This chapter will highlight the briefing and sufficient background of the Purchase Request System for Finance Department. The other sections that will be discussed in this chapter are the problem statement, the objectives of the system, the scopes, the project contribution, the expected output and the conclusion for this chapter.

This section will focus on the reason why this system should be implemented due to problem that occurs in the current system. This system will be built to replace the paper-based system for purchase request in finance department. As before, the entire request that related to purchase (e.g. buying printer and scanner for staff) should be fill in the specific form before it could be verified or rejected by the finance management.

To complete the process, a meeting should be conducted whether to approve the purchase that had been requested. A few reports, for an instance, a budget statistics or purchase request status will be printed and a series of rules or policies should be considered to help the committee member to make a decision.

Unfortunately, there are a few problems in the current system. By using a manual system, an unauthorized user can view and update the data without permission. Otherwise, user must transfer all raw data into the computer if they want to generate a

simple report. This action may lead to data error or inaccurate data due to human mistakes.

By developing Purchase Request System, a few problems that had been stated in the problem statement section can be solved by producing a computerized purchasing requisition form. It also has a few features for examples; security characteristic, tracking the specific purchasing information where user can find any pertinent data, processing and maintaining a history of the purchasing request status, generating report and using Decision Support System (DSS) for approving a purchase request.

1.2   Problem statements

This system should be developed to overcome the problems that happen in the current system:

i)   Security problem

The current system does not provide a security characteristic. An unauthorized user can view and update the data without permission.

ii)   Management problem

No proper way to separate the purchase request according to it status. A problem might happen whenever a staff wants to generate reports, query and memo.

iii) Confirmation problem

User will also has a difficulties to track their request status and they need to make a few follow up manually (e.g. check to finance department by e-mail, letter or phone).

iv) Update or revoke a purchase request

As before, all the application related to direct purchase should be written in the specific form before it could be verified by the finance management before it can be approved or rejected by the committee member. As this system is using a manual system it is a little bit difficult to update or revoke a purchase request.

v) Purchase approval problem

A few meeting should be conducted to approve a purchase request according to the budget reports.

1.3 Objectives

The expected outcome is reflected to the problem statement that had been discussed in the previous section. The objectives of this system are:

i) Replacing the paper-based system for purchasing records in finance department by using their own access right for finance staff, Head of Department and committee member.

ii) Recording and managing the purchase request and approval process. This system could provide a proper system to group the purchase request according to it status.

iii) Provide a feature for tracking status to help user to check their latest request status. Otherwise, this system will send processed purchase request information (e.g. an e-mail) and it status.

iv) Provide a Decision Support System (DSS) for purchase request to committee member and finance top management. In a month a meeting should be conducted to evaluate the sum of the budget and purchase request. A few decisions should be made to approve the purchase and this system will help them to complete this process.

1.4 Scopes

This intranet system will be implemented in Finance Department and the scopes are:

i) User

    a) Staff – make a purchase request.

    b) Finance Staff-generate report.

    c) Head of Department - verify or reject the request.

    d) Committee members - approve or reject the request.

ii) Module

Each of these users had their own access right to read and write in certain form or interfaces. This module is decomposed into smaller parts called unit that are:

    a) For security, users need to use their own username and passwords to access the system (each user had their limited access right).

    b) Purchase requisition, revoke and update - for staff.

    c) Verify or reject the entry - for Head of Department.

    d) Generate a report - finance staff.

    e) Purchasing approval to approve or reject the request – for committee member.

    f) Check request status by log in the Purchase Request System when the status of their request is updated.

    g) Decision Support System (DSS) to approve a purchase request for committee member.

iii)   System platform

The platform for this system is Microsoft Windows XP Professional or Microsoft Windows 2000 and Visual Basic 6.0.

iv)   Development tools

The main development tools to develop this system are Visual Basic 6.0 and SQL Server as a database. To visualize the system design and analysis in the form of Unified Modeling Language (UML), the tool that will be used is Rational Rose 2000 Enterprise Edition to create the object-oriented models and ER Assistance to develop a database design.

v)   Project methodology

After a deep research and consideration, this system will use object-oriented approach as a project methodology. This approach will be discussed in Chapter 2: Fact and Finding and project methodology section.

1.5   Project Significance

The contribution from this project can be seen in reducing time to search a specific purchase request data and quick view of the purchase request by login into the system. Otherwise the system manager will send a status to the originator for confirmation.

This project may also benefit the other users of this system, which are finance staff who need to checked the request form and make reports, finance management who verified the request and the committee member who needs to approved the purchase request.

While developing this system, an analysts and designers can exercise their knowledge in object-oriented methodology in a real scenario and compare it pros and cons with other methodology. Object-oriented methodology can be seen as the best