ESTABLISHING CONDUCIVE ENVIRONMENT FOR BETTER SOFTWARE DEVELOPMENT PROCESS. A STUDY ON THE INTEGRATED CARGO COMMUNITY CLEARANCE APPLICATION (ICCCA) PROJECT

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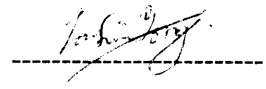
CERTIFICATION

I, TAN SIM YONG, candidate for the degree of Master in Science (Information Technology) certify that the content for the project paper is original

25 November 2002



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PENGHARGAAN.

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ABSTRAK

Tujuan project ini adalah untuk mengkaji proses-proses yang terlibat dalam pembangunan perisian aplikasi, halangan atau konstraint yang dihadapi oleh pembangun aplikasi dan akhir sekali memberi cadangan untuk memperbaiki proses pembangunan aplikasi. ICCCA atau 'Integrated Cargo Clearance System" merupakan satu aplikasi yang mempunyai ciri-ciri kepintaran buatan, pengikraran boleh dilakukan secara online, flexible dan senang digunakan. Halangan yang dihadapi oleh pembangun aplikasi ialah kekurangan tenaga pekerja, modal dan jangkamasa yang pendek,untuk menyiapkan projek. Tenaga pekerja merupakan satu faktor yang penting dalam pembangunan aplikasi. Kekurangan tenaga pekerja mahir boleh menyebabkan kegagalan dalam pembangunan sistem. Pengurusan projek juga merupakan satu faktor yang penting dalam pembangunan sistem aplikasi. Satu pengurusan projek yang baik ialah mempunyai koordinasi yang baik antara pembangun aplikasi. Kejayaan melaksanakan projek ini telah membuka lembaran baru dalam dunia web.

ABSTRACT

The purpose of this paper is to understand how the process development of "massive" and "important" system, to reveal the constraint/problems faced by the development team and to suggest for better development process environment during the system development process. ICCCA stands for Integrated Cargo Clearance Community Application. It serves as a mean of form filler, that means the customs declaration form can be filled electronically (web enabled). The customs form involved are form 1, 2 and 8. This system is also classified as an intelligent system. The system is intelligent in the sense that it can transfer data from invoice and worksheet easily, manipulate the data, store it or send to the appropriate personals. This software is also very flexible. The constraints faced by the development team includes lack of manpower, insufficient cost, tight schedule and produce high quality products at a given time. Manpower is the critical component in systems development. Insufficient manpower, technical specialists and incompetent workers is the cause of systems failure. What the software development team is facing, is the insufficient of manpower because they are also bound to budget constraints. Project management is also another key factor in system development. The project management within the system development team is good as there is coordination between the project and the developers. The success of developing this project is a breakthrough to the development of web application.

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CHAPTER 1

1.0 INTRODUCTION

According to Zachzuch (2002), the *World Wide Web* allows computers users locate and view multimedia based documents (i.e., documents with text, graphics, animations, audio and/or videos). The Internet or the *World Wide Web* is listed among the most important and profound creations of humankind. Study on computer and its related technology has been undertaken actively to determine and understand their effects. One of the main component in computer development is with regard to software development which is the focus within this write-up.

For the development of computer, in the past, most computer applications ran on "stand-alone" computers, i.e., computers were not connected to one another. Today's applications are written to communicate among world's hundreds of millions of computers. It makes work easier, information instantly and conveniently accessible worldwide. It makes it possible for individuals and small businesses to get worldwide

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