REFERENCE MODEL FOR OFFICE OF DEFENSE COOPERATION (ODC) TRAINING SUPPORT SYSTEM (OTSS)

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University Utara Malaysia

by

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ABSTRACT

The purpose of this project is to develop a reference model and a prototype system for training management activities at the Office of Defense Cooperation (ODC) in US Embassy, Kuala Lumpur. A reference model is important as it serves as a good starting point for system developers to understand users' requirements, and it saves time, resources and cost, reduces risk, improves effectiveness and efficiency, and reduces ambiguity. The prototype system, referred as ODC Training Support System (OTSS), will provide functionality that could not be fulfilled by a primary system, and subsequently complement the primary system in order to achieve synergy and greater productivity. The reference model was developed using a simplified version of Rational Unified Process (RUP) methodology, and Unified Modeling Language's (UML) notations. The database application for the prototype system was developed using Microsoft Access 2000, and the Web interface was developed using MySQL database server, HTML, PHP scripting language, and Apache Web server. The system was validated through system requirement testing and IBM's Computer System Usability Questionnaire. It was concluded that, users' requirements were met and the prototype system was operating well, however, the system's interface and functionality were recommended for further improvement. This project concludes by discussing problems and limitations that were encountered in completing this project, and offers a few recommendations for future development in this subject.

ABSTRACT (BAHASA MALAYSIA)

Tujuan projek ini adalah untuk membangunkan satu model rujukan dan sebuah sistem prototaip bagi pengurusan aktiviti-aktiviti berkaitan latihan di Pejabat Kerjasama Pertahanan atau "Office of Defense Cooperation" (ODC) yang bertempat di Kedutaan Amerika Syarikat, Kuala Lumpur. Model rujukan adalah penting kerana ia boleh digunakan oleh pembangun sistem sebagai titik permulaan rujukan yang penting untuk memahami keperluan pengguna sistem, ia menjimatkan masa, sumber manusia dan kos, mengurangkan risiko, meningkatkan tahap keberkesanan dan keefisienan, dan mengurangkan tahap kesamaran (*ambiguity*). Sistem prototaip dalam projek ini yang dirujuk sebagai "ODC Training Support System" (OTSS), akan menjadi pelengkap (*complement*) sistem utama bagi mencapai sinergi dan meningkatkan tahap produktiviti dengan menawarkan ciri-ciri yang sebelum ini tidak dapat dipenuhi oleh sistem utama. Model rujukan dalam kertas projek ini telah dibangunkan dengan mengunakan metodologi Rational Unified Process (RUP) versi mudah dan notasi-notasi Unified Modeling Language (UML). Aplikasi pangkalan data untuk sistem prototaip telah dibangunkan dengan perisian Microsoft Access 2000, dan antara muka Web untuk sistem ini telah dibangunkan menggunakan "server" pangkalan data MySQL, HTML, bahasa skrip PHP, dan "server" Web Apache. Sistem prototaip dalam projek ini telah diuji kesahannya menggunakan ujian keperluan pengguna dan borang soal selidik penggunaan sistem berkomputer IBM. Projek ini merumuskan bahawa keperluan pengguna telah dipenuhi dan sistem prototaip yang dibangunkan beroperasi dengan baik. Namun demikian, antara muka dan ciri-ciri sistem prototaip telah disyorkan untuk pembaikan selanjutnya. Projek ini diakhiri dengan membincangkan masalah dan batasan yang dihadapi ketika melengkapkan projek ini, dan menawarkan beberapa cadangan untuk pembangunan lanjut dalam subjek ini dimasa hadapan.

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BACKGROUND OF AUTHOR

The author is currently working in the Office of Defense Cooperation (ODC), American Embassy, Kuala Lumpur. The author is primarily responsible for the processing of Malaysian Armed Forces' officers for their training in the United States (US) military establishments. To assist the processing of officers, various Information technology tools are used to ensure smooth and efficient processing of officers for their scheduled training.

ODC is an U.S. Department of Defense (DoD) agency that resides in most of the U.S. Embassies around the world. In Malaysia, the ODC works in close cooperation with the Malaysian Armed Forces (MAF) to enhance MAF's capabilities and professionalism through the provisioning of U.S. defense articles, training and services.

Chapter 1

INTRODUCTION

This project paper, which falls under the TZ6996 course code, was completed as part of the requirement to obtain the MSc (IT) from University Utara Malaysia (UUM). The purpose of this project is to develop a reference model and a prototype system for training management activities at the Office of Defense Cooperation (ODC) in US Embassy, Kuala Lumpur. The system, will provide functionality that could not be fulfilled by a primary system, and subsequently complement the primary system in order to achieve synergy and greater productivity. Once the system is implemented, it can be used by ODC's training personnel to assist them with the management and execution of their training program, namely, International Military Education and Training (IMET) program, with Ministry of Defense (MINDEF), Malaysia.

This chapter provides an overview of the IMET program, a brief description of the information systems currently utilized by training managers, the problem statement, proposed system, objectives, scope, and lists system requirements to develop the prototype system.

The contents of the thesis is for internal user only

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