REQUIREMENT MODEL FOR LOCAL GOVERNMENT ENTERPRISE INFORMATION PORTAL (EIP)

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REQUIREMENT MODEL FOR LOCAL GOVERNMENT ENTERPRISE INFORMATION PORTAL (EIP)

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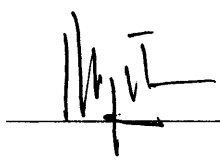
(Signature) : 

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ABSTRAK

Kajian ini dijalankan untuk mengenalpasti ciri-ciri atau elemen-elemen utama yang terkandung di dalam sesebuah portal industri (Enterprise Information Portal) bagi kerajaan tempatan di Malaysia, mengulas kaedah-kaedah yang digunakan untuk mendapatkan maklumat keperluan pengguna terhadap portal tersebut, dan mentakrifkan satu model keperluan atau "requirement model" untuk portal kerajaan tempatan. Model keperluan (requirement model) adalah penting kerana ia memberi kemudahan kepada pembangun sistem untuk memahami keperluan pengguna, menjimatkan masa, dan kos pembangunan sistem, meningkatkan kecekapan dan keberkesanan sistem, dan mengurangkan risiko kegagalan sesuatu sistem.

Kajian ini menumpukan kepada dua portal kerajaan tempatan bagi tujuan mendapatkan maklumat keperluan. Portal-portal tersebut adalah portal bagi Majlis Perbandaran Subang Jaya (MPSJ), dan portal bagi Majlis Perbandaran Ampang Jaya (MPAJ). Selain itu Majlis Perbandaran Kota Star (MPKS) turut menjadi lapangan kajian untuk mendapatkan maklumat keperluan yang lain atau untuk. mengukuhkan lagi maklumat keperluan yang telah didapati sebelumnya. Maklumat-maklumat keperluan tersebut dianalisa dan digabungkan untuk menghasilkan keperluan yang standard untuk portal kerajaan tempatan. Kajian ini walaubagaimanapun hanya menumpukan kepada keperluan pengguna awam kerana kekangan masa.

Keperluan yang dikenalpasti dari kajian dimodelkan dengan menggunakan notasi UML. Model yang dihasilkan adalah merangkumi "use-case package", "use-case diagram", dan "use-case specification". Selain itu senibina sistem atau "system architecture" turut disertakan. Teknik prototaip telah digunakan bagi mengesahkan keperluan. Prototaip yang dibangunkan pula telah disahkan dengan menggunakan teknik "system requirement testing" dan "heuristic evaluation method". Kesimpulan, dari pengujian tersebut adalah, keperluan pengguna telah ditepati dan prototaip dapat beroperasi dengan baik. Walaupun begitu. pada masa hadapan fungsi prototaip dan rekabentuk antaramuka haruslah dilengkapkan bagi meningkatkan keupayaan sistem portal yang dibangunkan. Kajian ini diakhiri dengan kesimpulan, yang menyatakan masalah dan limitasi yang dihadapi dalam melaksanakan kajian disamping mengutarakan beberapa cadangan untuk kajian akan datang.

ABSTRACT

The purposes of this project are to identify the characteristics of local government Enterprise Information Portal (EIP), review the various methods use in capturing the requirement, and define a requirement model for local government Enterprise Information Portal. A requirement model is important as it serves as a good starting point for system developers to understand users' requirement, and it saves time, resources, and cost, reduces risk, improves effectiveness and efficiency, and reduces ambiguity.

The study focuses on two local governments portals for the purpose of requirement capture. The local governments' portals chose are Subang Jaya Municipal Council (MPSJ) portal, and Ampang Jaya Municipal Council (MPAJ) portal. Besides that Kota Star Municipal Council (MPKS) also becomes the fields of study to capture the user' requirements. The requirements captured from the MPSJ and MPAJ portals and requirements from MPKS are analysed and combined together to produce the requirements for local government in general. However due to time constraint this study only focuses on public user requirements.

The requirements captured from the study are modelled out using Unified Modelling Language's (UML) notation. The models are use case packages, use case diagrams, and use case specification. Besides that system's architecture is also included. The prototyping technique is used to validate the requirements. In this technique, a simple prototype is developed by using PHP scripting language, MySQL Database server, Apache Web Server, and Macromedia Dreamweaver MX for interface. The portal system was validated using system requirements testing and Nielsen's Heuristic Evaluation method. It was concluded that, users requirements were met and the prototype system was operating well, however the functionality and interface of the prototypes 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.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

Internet and web technologies have changed the way we view and interact with information. In the past year, portals have received more attention from organization than any other internet technology (Finkelstein, 2000). The Enterprise Information Portal (EIP) is a concept for web-site that serves as a single gateway to a company's information and knowledge base for employees, customers, business partners, decision makers, and the general public as well. According to Shilakes and Tylman (1998), Enterprise Information Portal is application that enables companies to unlock internally and externally stored information, and provide users a single gateway to personalized information needed to make informed business decision. EIP combine software applications that consolidate, manage, analyze, and distribute information across and outside an enterprise.

In Malaysia, the use of EIP in government sector is still in the early stage. This is because based on review on related literatures; there are no specific guidelines such as requirement model for EIP and the lack of expertise. Requirement model is important to make sure that the portal will meet the expectations of customers, users, or stakeholders and are delivered on time and within the budget. Besides that, the requirement model is important to avoid project failure. According to McIntosh (2003), 78% of the IT software projects in United Kingdom failed because the requirements of the project were not defined well.

At this stand, the motivations behind this study are to identify the characteristics of Enterprise Information Portal, review various methods use in capturing the

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