

**A GENERIC REQUIREMENTS MODEL: SCHOOL-BASED ASSESSMENT
AND E-PORTFOLIO MANAGEMENT SYSTEM**

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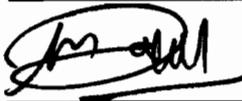
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By

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ABSTRAK

Model Keperluan Umum merupakan salah satu elemen penting dalam proses pembangunan perisian. Fokus kajian ini adalah membina Model Keperluan Umum untuk satu sistem baru iaitu Sistem Pengurusan Penilaian Berasaskan Sekolah dan Portfolio Elektronik. Kajian kes telah dilakukan berdasarkan modul pentaksiran berasaskan sekolah bagi Mata Pelajaran Vokasional (MPV) di sekolah-sekolah menengah harian di Perlis. Model keperluan yang dicadangkan dalam kajian ini terdiri daripada empat elemen utama iaitu model berasaskan senario, model berasaskan kelas, model perilaku dan model aliran. Unified Modelling Language (UML) digunakan sebagai teknik pemodelan untuk menggambarkan keperluan. Model Keperluan Umum ini telah disahkan oleh pakar dalam bidang ini dan juga berdasarkan kajian ke atas prototaip antara muka pengguna. Keputusan daripada kedua-dua teknik validasi memberikan motivasi yang tinggi kepada penyelidik-penyelidik lain dalam bidang yang berkaitan untuk memperluaskan kajian mengenai sistem ini. Kajian ini juga telah memberikan sumbangan kepada penyelidik-penyelidik lain untuk membuat kajian dengan lebih lanjut berkaitan sistem ini di masa hadapan. Bahkan, penemuan dalam kajian ini juga dapat membantu Kementerian Pendidikan Malaysia untuk mengenal pasti masalah dalam pengurusan PBS di sekolah dan faktor-faktor utama yang mempengaruhi pembinaan sistem ini. Malah, isu-isu yang bakal timbul daripada penggunaan sistem ini dan bakal pengguna utama bagi sistem ini juga telah pun dikenalpasti. Oleh itu, dengan adanya Model Keperluan Umum ini, adalah menjadi harapan bahawa pembangunan Sistem Pengurusan Penilaian Berasaskan Sekolah dan Portfolio Elektronik ini dapat di realisasikan di masa hadapan dengan peruntukan masa dan kewangan yang ditetapkan.

ABSTRACT

Requirements model is one of the important elements in software development process. This research focuses on constructing a requirement model for a new system namely School-Based Assessment and e-Portfolio Management System (SMS). The case study is based on vocational subjects within Perlis secondary schools. The requirements model proposed in this research consists of four main elements in the software requirements model approaches which are scenario-based models, class-based models, behavioural models and flow models. Unified Modelling Language (UML) is used as a modelling technique to illustrate the requirements. The requirements model is validated by using an expert review approach and user interface prototyping. The result from both validation techniques gives a high motivation to researchers in particular domain to expand research in developing SMS. This research contributes a guideline to other researchers to further the actual development of SMS in the future. In fact, findings in this study could help the Ministry of Education (MOE) to recognize the current problems of SBA, the key factors influence the development of SMS, the possible issues form system usage and the potential stakeholder for SMS. Thus, it is hope that the actual development of SMS could be successfully complete within allocated time and budget.

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CHAPTER 1

INTRODUCTION

1.1 Background of the study

Malaysian government has introduced the Government Transformation Programme (GTP) in the 10th Malaysian Plan. It is an effort to transform Malaysia towards greater economic, political, social, spiritual, psychological and cultural growth to realise Vision 2020. This programme focuses on the 6 National Key Results Areas (NKRA). Education is one of the NKRA for the government (Economic Planning Unit, 2010). The Education NKRA is a first step for government to improve student outcomes across Malaysia's school system. Thus, government will replace an exam-oriented education system to a School-Based Assessment (SBA).

School-Based Assessment (SBA) programme for certain subjects in secondary school had been introduced by the Ministry of Education since 1992. SBA is a formative, continuous, diagnostic and developmental process which aims to improve the process of teaching and learning (Abdul Zubir, 1995). This programme use both

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