EMBEDDED SCHEME OF WORK STRUCTURE INTO LEARNING MANAGEMENT SYSTEM

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Abstrak

Kajian ini berkaitan dengan integrasi automatik Rancangan Pengajaran (TP) atau Skima Rancangan Mengajar (SRM) ke dalam Moodle; perisian pengurusan kursus popular (CMS). SRM adalah dokumen yang disediakan oleh guru-guru akademik untuk memperincikan pelan kursus sepanjang tempoh pengajaran. Ia membantu untuk menguruskan aktiviti-aktiviti pelajar seperti kuiz, peperiksaan, topik, dan lain-lain untuk menjadikan ia lebih tersusun. Walaubagaimanapun, kebanyakan jabatan-jabatan seperti Pusat Pengajian Pengkomputeran (SOC) biasanya menyediakan dokumen secara manual. Moodle membolehkan kursus akan diuruskan dengan berkesan walaupun penggunaan perkhidmatan web. Terdapat beratus-ratus ciri yang disediakan oleh Moodle untuk membantu dalam pengajaran. Moodle membahagikan tempoh mengajar mengikut tarikh pra-set. Buat masa sekarang, SOW perlu ditambah secara manual ke dalam seksyen SOW di Moodle. Kajian ini mendapati bahawa kebanyakan dokumen-dokumen dalam SOW pensyarah tidak sama dengan kandungan Moodle mereka dan dengan itu mereka perlu mengubah suai dengan sewajarnya. Ini adalah disebabkan oleh kemasukan manual untuk SOW dalam sistem Moodle yang mengambil masa dan agak rumit. Kajian ini membentangkan penyelesaian yang berpotensi dalam struktur SOW yang boleh disepadukan secara automatik mengikut aktiviti mingguan, seperti tugasan dan kuiz melalui penggunaan plugin yang dibangunkan dalam kajian ini. Kaedah yang digunakan dalam kajian ini terdiri daripada lima langkah, iaitu kesedaran tentang masalah, cadangan, pembangunan, penilaian dan kesimpulan. Berdasarkan penilaian yang dijalankan melalui persampelan, plugin yang dibangunkan melalui kajian ini mempunyai nilai yang signifikan dengan menjimatkan masa berharga dalam membantu tugas ahli akademik mengemaskini dan menggunakan Moodle, khususnya yang berkaitan dengan SOW.

Kata kunci: Sistem Pengurusan Pembelajaran (LMS), tertanam, Skim Work (SOW), Moodle, Perisian Pengurusan Kursus (CMS)

Abstract

This research is related to the automatic integration of the Teaching Plan (TP) or Scheme of Work (SOW) into Moodle; a popular course management software (CMS). SOW is a document prepared by academic teachers to detail out a plan of the course throughout the teaching duration. It helps to better manage student activities such as quizzes, exam, topics, and etc. However, most departments like the School of Computing (SOC) normally prepare the document manually. Moodle allows for course to be managed effectively though the use of a web service. There are hundreds of features provided by Moodle to assist in teaching. Moodle divides the teaching duration according to pre-set dates. Current Moodle practice is that the SOW needs to be added manually into the SOW section of Moodle. This study found that most of the time, the lecturers' SOW documents are not the same with their Moodle content and thus would have to modify accordingly. This is due to the manual entry for the SOW in the Moodle system that takes time and becomes cumbersome. This study presents a potential solution and describe show the SOW structure can be integrated automatically according to the weekly activities, like assignments and quizzes, by using a plugin developed in this study. The methodology used in this study is made up of five steps, namely, the awareness of the problem, suggestion, development, evaluation, and conclusion. Based on the evaluation performed through sampling, the plugin developed through this study has significant value by saving precious time in assisting the academician's task of updating and using Moodle, specifically related to the SOW.

Keywords: Learning Management System (LMS), embedded, Scheme of Work (SOW), Moodle, Course Management Software (CMS)

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List of Abbreviations

UUM : Universiti Utara Malaysia

ICT : Information Communication Technologies

LMS : Learning Management System

VLM : Virtual Learning Management

OUM : UUM Online Learning

SOW : Scheme of work

MQA : Malaysian Quality Agency

LCMS : Learning Content Management System

WWW : World Wide Web

CMS : Course Management System

OSS : Open Source Software

VLE : Virtual Learning Environment

MMLS : Multimedia Learning System

OUM : Open University Malaysia

CHAPTER ONE
INTRODUCTION

1.1 Background

The Malaysian Quality Agency (MQA) has its own standardised of Scheme of Work (SOW), so academic staff like lecturers in any university in Malaysia, like Universiti Utara Malaysia (UUM), must follow the rules from the MQA because SOW is one of the MQA mandatory requirements. Currently, UUM Online Learning (UOL) has been developed as a medium or interface for linking the lecturer and their students via the Internet. In UOL, course notes and related media are uploaded into the system by the lecturer for the students to use. Assessments, such as quizzes and assignments can also be uploaded and run at predetermined times. SOW is a very important document used by lecturers in UUM because it assists in informing the lecturers as well as students alike about the upcoming events of the course, since it is the blueprint for the course. In the area of academic field, SOW is more important for the lecturers because SOW serves as a guideline or reference for the lecturers to be prepared with the materials and assessments in advance, well before the course commences. However, the UUM implementation of SOW is still in the manual form, where the lecturer manually types the information into a document or a form and printed on the paper before the start of every semester. In order to move towards a paperless environment, this manual operation of SOW implementation can potentially be computerised to save time and money.

According to Blanco and Ginovart (2010), there are so many alternative ways to reduce using paper in the academic field, like using Moodle. According to Jonathan

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