

Conference Management System to Manage Conference Information On-Line

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Abstract

This paper discusses a model for Conference Management System (CMS) and presents current progress in system development. Initially, our CMS will be developed to facilitate Knowledge Management International Conference & Exhibition (KMICE) 2004 to be held in February 2004. The main function of the system is to assist the conference secretariat in managing conference information, registration, paper submission and abstract pre-reviewing. The system also enables paper contributors to edit their registration, resubmit paper and camera ready paper and get an update on their paper status. In the future, the system will be used as a template for other conferences, seminar or workshops organized by the school or the university.

Introduction

Conferences, seminars and workshops are among the most frequent activities organized by academic institutions. Generally, the targeted participants are from the local and international communities. Since the distance is the most concern conference promotion activities tend to be very limited. Hence, organizers of conferences, seminars or workshop have to utilize web-based technology in order to promote their activities. They develop an official website and post all relevant information regarding their activities.

However, updating information on a conference website is an arduous task. It requires basic programming skill, and familiarity with web programming language and tools, server and web hosting technologies. It is also time consuming. As a result, most conference websites are developed as static pages and dynamic functionalities such as online registration and online submission are often not available. Thus, the participants have to submit their registration via other communication methods and the conference committees have to manually process the registration and submission information. Another issue is handling and reviewing conference papers (1). Selecting the best from hundreds of submitted papers is really time consuming and difficult.

This paper discusse a model for Conference Management System (CMS) and presents current progress of system development. The CMS is developed to facilitate Knowledge Management International Conference & Exhibition (KMICE) 2004 to be held in February 2004. The system is equipped with several facilities to help and support conference secretariats and participants in managing the related conference activities.

Conference Management System (CMS)

The popularity of web-based application research and development has increase since the Internet became the most popular medium for communication. In addition, all universities, research centers and government offices have been provided with Internet services. The information stored on the Internet can be accessed from anywhere and at anytime around the world. Through this medium the information can be disseminated faster compared to the traditional method. The uniqueness of web-based technology encourages the development of web-based applications. Gal *et al.* (2) and Gal & Mylopoulos (3) for example discuss the potential of web-based technology and its importance toward application development and services via the web.

Much research and development related to CMS has been performed. Snodgrass (4) performed a survey and listed around 20 CMS software. Each of them was developed for a specific conference and later expanded and reused for other conferences. CyberChair for example is a free web-based paper

submission and reviewing system with PC meeting and proceedings preparation support (5). It was originally developed in 1996 for the European Conference on Object-Oriented Programming (ECOOP). The system was then renewed and improved with more features such as electronic review forms and uploading papers. The approach not only saves time but also cuts the operation cost. According to Schneider *et al* (6) each feature in CyberChair is handled by a specialized agent.

WintanWeb also provides almost the same facilities as CyberChair (7). WintanWeb was developed to meet a recurring need, which is to facilitate the communication associated with the paper submission and review process for the conference. It supports interaction between conference secretariats, contributors and reviewers. It was originally set up in 1997 and evolved a great deal in supporting the requirements of several conferences such as CASCON'97, WWW8 and ICSE 2001. MCP or *Managing Conference Proceedings* is a tool to help conference secretariats prepare and manage their conference proceedings (8). The implementation of MCP can minimize the secretariat time and reduce the process of preparing electronic conference materials.

GoldenGate is another prototype of the web-based management system (9). It supports the delivery and handling of proposals. GoldenGate is not a CMS as it deals with research proposals. The proposals are stored in the database until the evaluators approve them. According to (9) the main GoldenGate components are retrieval, verification and workflow. These three components are implemented by combining Hyperware and other components such as office tools, WWW browser and the Internet (10).

CMS for KMICE 2004

The Knowledge Management International Conference & Exhibition (KMICE 2004) continues from the previous KMICE conference that was held in 2001. The website for KMICE 2001 was developed as static informative pages (<http://web.uum.edu.my/kmice2001>). Online registration is the only dynamic facility provided in the website. Other advanced facilities such as online paper submission, online support for conference managers and participants and paper or abstract reviewing are not available. Due to the constraints, the KMICE 2004 website (<http://www.kmice.uum.edu.my/kmice04/>) has been designed as dynamic pages (Figure 1). The pages were developed using web-based programming languages and tools such as ASP and JavaScript.

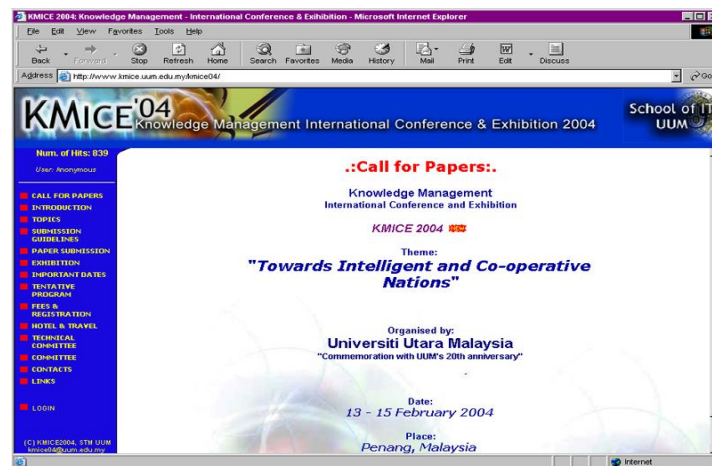


Figure 1 The KMICE 2004 Website

Besides the informative contents, the KMICE 2004 website a number of dynamic features such as:

- 1) Online registration form;
- 2) Online paper submission form including paper uploading facility ;
- 3) Personal page for contributors;
- 4) Personal page for conference managers such as the conference chairman, secretary; and chairman of proceeding and publication committee; and
- 5) Automated abstract reviewing.

The first four features are currently available and ready for use. However, the fifth is still under development. The online registration accepts four types of conference registration, which are participant, paper presenter, poster presenter and exhibitor registration. A feedback email is sent to the contributor after each registration has been received. The details of the registration can only be

accessed and viewed by the conference managers. For the convenience of paper contributors, an online paper submission form with uploading facility is being developed. The facility is a step-by-step process whereby contributors have to fill in and submit a form. They can then upload the full paper in the next step. After displaying the confirmation page, the KMICE CMS engine will send an email message to the contributor. The email contains a summary of submission information such as paper title, paper ID, authors and corresponding email address together with the login information such as login name and password.

The login name and password are used to give contributors permission to access the system in order to update their details of registration and paper submission (Figure 2). In addition, the system also provides a facility for re-uploading or re-sending a paper, uploading a camera-ready paper and checking their paper status (Figure 3).

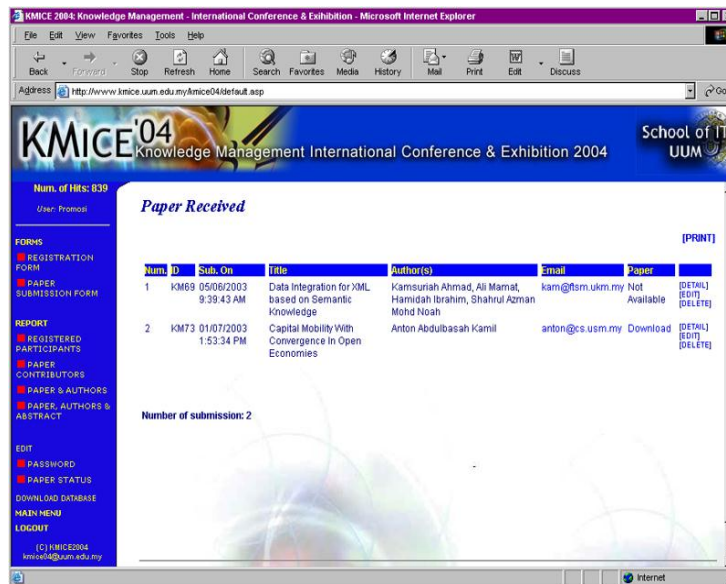


Figure 2 Personal pages for paper contributors

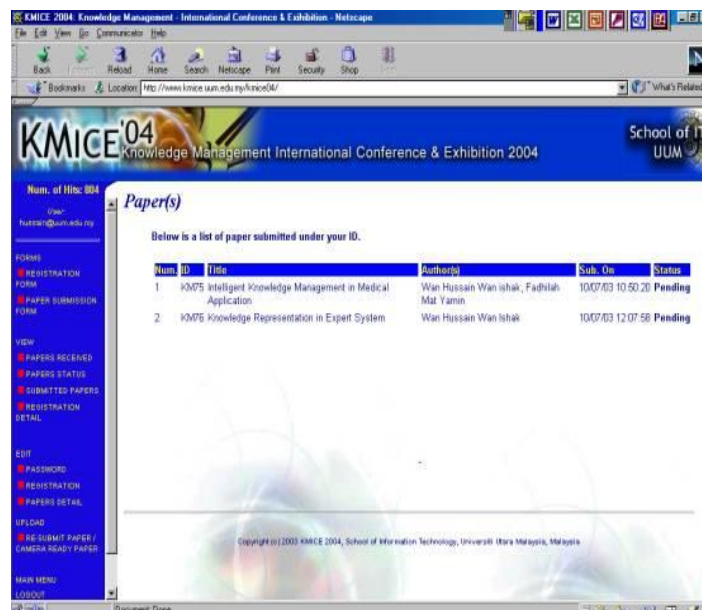


Figure 3 Paper status

To manage the system, the conference managers such as the chairman, secretary and chairman of the proceeding and publication committee can view contributors' details by login to their personal pages (Figure 4). The view and access controls are limited based on their work functions. For example, the

chairman of the proceeding and publication committee can view, edit and delete all items relating to paper submission, but not the registration details. On the contrary, the secretary can view, edit and delete the registration details except the paper submission details. The chairman however, is given authority to access all controlled pages.

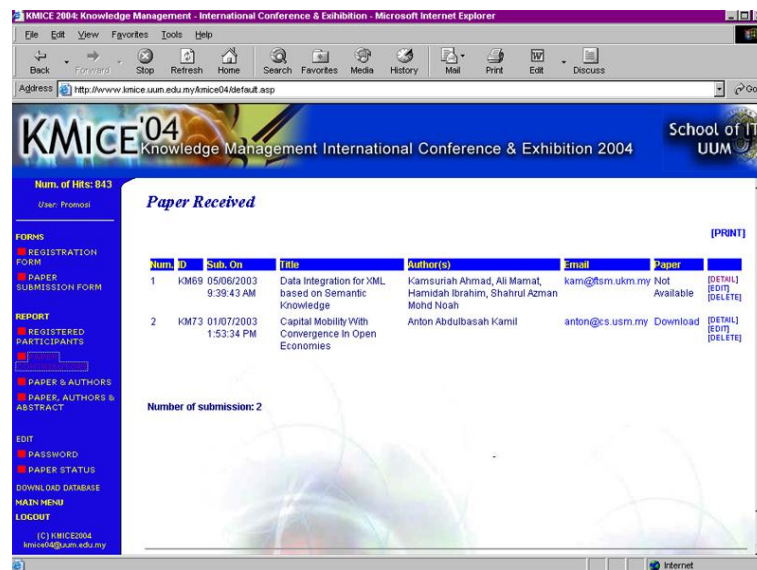


Figure 4 List of paper contributors

Conclusion

In this paper, the status and nature of the Conference Management System for KMICE 2004 has been discussed. The system has been designed with five dynamic features. Four of them have been implemented while the final feature will be completed soon. The KMICE 2004 website is now available for access at <http://www.kmice.uum.edu.my/kmice04/>.

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