

## “AN AUTO-MANAGEMENT THESIS PROGRAM WEB-MIS SUPPORTED WORKFLOW”

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An auto-management Web-MIS supported workflow for the bachelor thesis program is given during this paper. A module used for workflow dispatching is meant and realized using MySQL and J2EE per the working rule of the workflow engine. The module can automatically dispatch the workflow in line with the date of the system, login information, and user's work status. The WebMIS changes the management from handwork to computer work, which standardizes the thesis program and keeps the information and documents clean and consistent.

### 1.Introduction

WebMIS is more and more popular for its hypertext link, platform irrelevant, distributed, dynamic, and alternative features. except for the MIS during which operations demand a limit and/or have a compulsive logical relationship, the Web-based on TCP/IP won't work well[1].

Workflow could be a series of tasks that are linked up and might be processed automatically. The workflow management system could be a computing system that not only can define, process, and manage the workflow, but can also coordinate the knowledge among workflow and users. The workflow should be handled only by the workflow management system.

Workflow technique could be a new domain comprised of multiple subjects, which pulls more and more attention for its effectiveness in applications. Workflow reference model among different workflow management systems and a series of workflow industry standards are set by the Workflow Management

The coalition, which is that the workflow industry standardization organization and was founded in 1993. There are 3 main aspects in workflow technique research including workflow theory research, workflow system realization technology research, and workflow application research now[2].

The bachelor thesis program is manually managed within which the pc and Internet are used even as a tool in our university for an extended time. the shape of bachelor thesis program is more and more diversified and more and more people value more highly to communicate and transform their documents on the online. To meet these requirements, the thesis management WebMIS is meant and programmed, which boosts management from handwork to computer work. The WebMIS not only can dispatch task automatically according to the preset task schedule and therefore the user work status but can also standardize documents during the thesis program automatically consistent with the information within the system, which not only improves the efficiency of the thesis program management but also ensures the uniformity of the documents and data of the system.

## **2.WebMIS Design**

The thesis management WebMIS is intended and developed on a Linux platform, during which Apache and Tomcat are used as an internet server and MySQL is employed because the database server. MVC is chosen because the development model and therefore the system architecture conforms to J2EE.

The rules and regulations of the thesis management include thesis mobilization, program planning, user qualification, thesis topic submission, and checking, two-way selection between teachers and students, thesis opening report, thesis monitoring and checking, thesis paper and result submission, thesis evaluation, thesis debate scheduling rejoin arrangement, thesis result management, leader inspection and other tasks are analyzed and optimized firstly.

The basic function of the system is extracted in keeping with the user requirement and therefore the rules and regulations of thesis program management. to focus on the time-limitation and logicity of every workflow, the thesis program is split into 12 operation flows, illustrated in figure 1, including mobilization and arrangement, thesis topic submission, thesis topic selection, thesis opening report, intermediate checking, thesis results submission, thesis results evaluation, thesis scoring arrangement, abnormal operation processing, communications arrangement, inspection and checking, data statistics and the system business multidimensional language.

According to the user qualification, the user of this technique is categorized into the teacher, student, leader, and secretary. the ultimate workflow of thesis program management and system functions are determined after being modeled and optimized. the link among operation flow, user actors is set as described in figure 2.

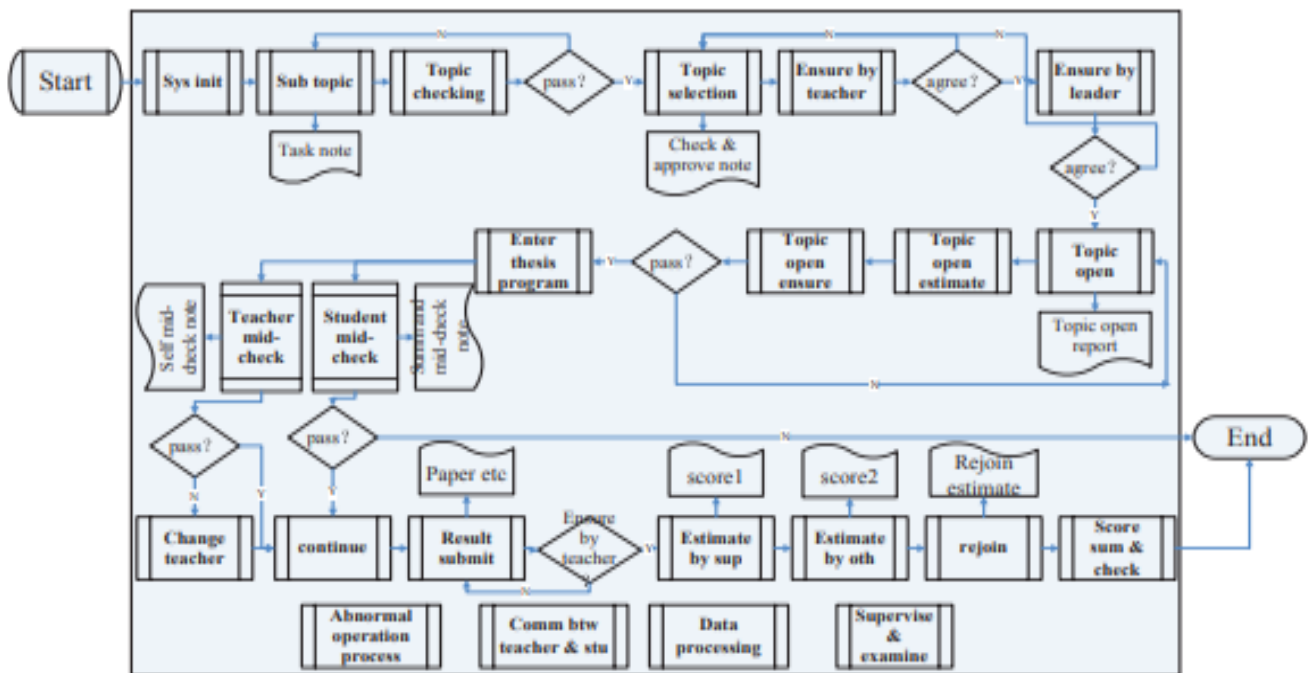


Figure 1. Diagram of System Business Flow

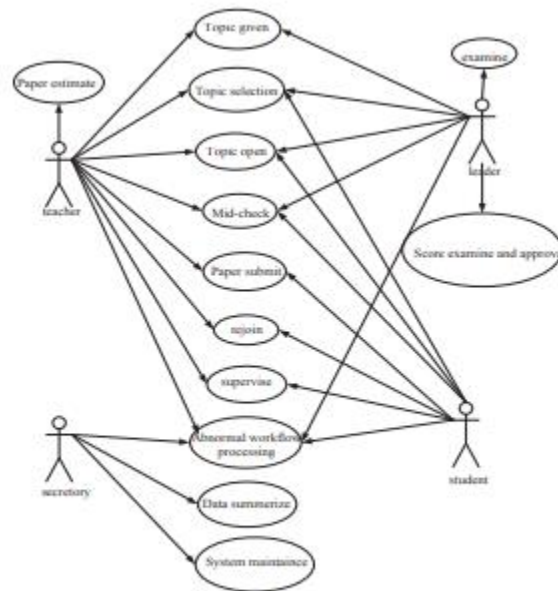


Figure 2. Relationship between Users and Main Workflow

page name, task result wont to describe the task result, result page wont to store the page name through which the task result is used, result users indicates who can use the task result, the beginning date is that the start date of the task, end Date is that the date by which the task should be finished, the executor is that the actor of the task executor, task description wont to describe the task.

The workflow engine provides the task interface only if the previous task has been finished on time and also the date is that the preset date for this task. If the previous task isn't finished on time, the workflow engine provides the user an interface to mend it upon approval. This workflow jumps consistent with an abnormal task. a table which incorporates fields like userID accustomed indicate who should finish this task, user class gives the our class, taskID is that the task ID, appId is that the ID of abnormal task application, AppData is that the date of abnormal application, appApv is that the user who approved the abnormal task application, the update is that the date of the applying being approved, an apology may be a user who logs the applying within the system, Applegate is that the date of the appliance being lodged, the task start

date is that the start date of the abnormal task and also the task finish date is that the date by which the abnormal task should be finished.

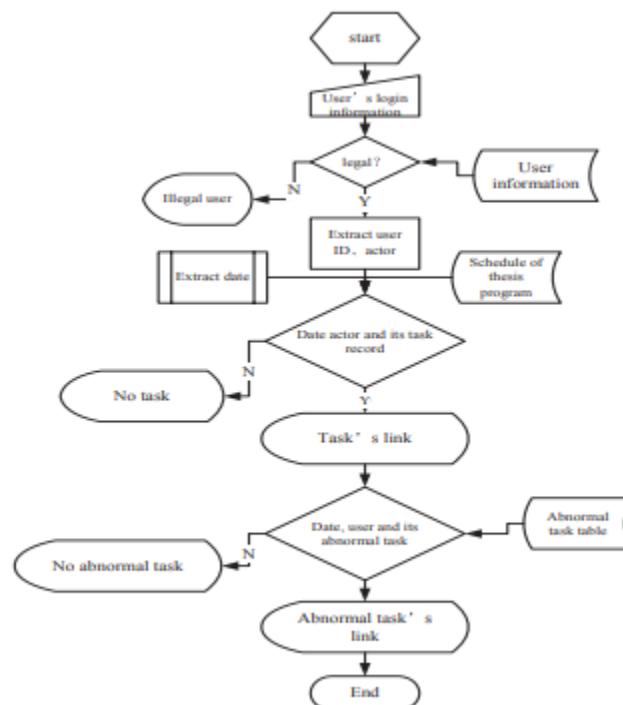


Figure 3 Chart of the Workflow Engine of the Thesis Program WebMIS

#### 4.System Structure And interface

In the self-workflow engine which may be a servlet. Tasks are processed through the jsp page given by the workflow engine. during this self- sis program webMIS, java beans are wont to handle the business operation because the model in MVC, java servlets are used as a controller to receive input and initiate

used while logging, the e-mail URL is validated by regular expression, and also the ID code is additionally validated. The actor homepage is that the second layer interface page including title, navigation bar, and main display area. The navigation bar is formed by the workflow engine automatically consistent with the user and date. The

third layer is that the interface jsp pages which display within the main display area within the actor homepage. The detailed structure and therefore the interface of the Web-MIS are given in figure 5, the homepage of the system and therefore the actor homepages are presented in figure 6.

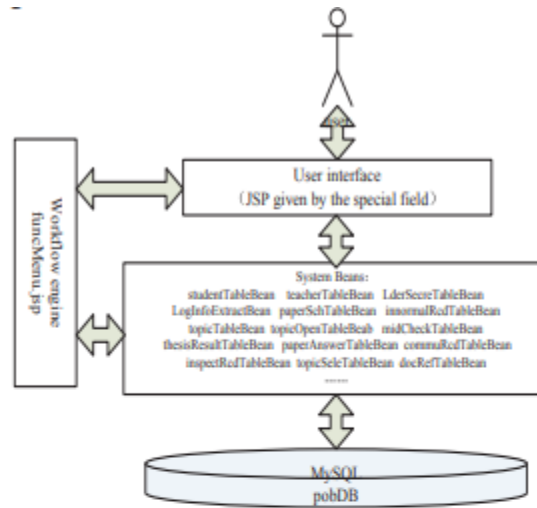


Figure4 System Architecture



Figure5 System Structure Map

## 5.Conclusion

This auto on which Apache and Tomcat are used because the webserver, MySQL is

employed as a database server. The webMIS can manage the full workflow of the program per the preset scheduling and management rules. This webMIS not only standardize also keeps all the info and documents clean and consistent. The webMIS has been employed in test running and was approved by teachers, students, and leaders.

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