The Management Systems Disciplined of Students

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Abstract—This paper presents the development of the Management Systems Disciplined of students (MSD). Working on manual discipline is time-consuming and inconvenience process, since there is a huge number of students have to be checked. Moreover, it might probably to lose the collected data during the processes. Therefore, researchers have an idea to develop a system to a major issue addressed. After the pretest, the users' satisfactions were evaluated. The population in this study was the staffs at the Faculty of Science and Technology, Rajamangala University of Technology Suvarnabhumi (RUS). The samples in this study were divided into two groups. The first group was undergraduate students. The second one was a group of professors, administrator, and other concerned people from Faculty of Science and Technology, RUS.

The results were as follows: Using the MSD, the students' disciplines were checked and storage as a database. After the operation, students have to maintain and improve their discipline behaviors. The result showed the highest level of satisfaction. The MSD assisted the system operators to evaluate easier and economically save budget, time and resources in one hand. On the other hand, MSD built awareness and strengthen proper behavior of RUS students

Keywords—The Management systems disciplined of students, Education management systems, Academic Support Services.

I. INTRODUCTION

Higher education is not only generating manpower but also create a good behavior and national intelligence for the society. Undergraduate students are sooner to step out into working society after their graduation. So, cultivating students to be good manpower with excellent knowledge as well as raising their awareness to dress properly are also one of the importation tasks of a university. RUS realizes about that. As a result, the database of discipline (MSD) was created and developed to be easier to access, be more convenient and be able to reduce the difficulty of data collection.

Students benefit from the development of the discipline. Researchers have a concept to develop a system to the major issues addressed. To apply technology to benefit, support management of education by help in the development of MSD discipline students more effectively.

II. LITERATURE REVIEW

To develop and evaluate the user satisfaction of the Management Systems Disciplined of students (MSD), several related pieces of literature were divided. Some of which are as follows:

In university education, a flexible academic environment (FAE) is advantageous compared to the rigid one because of its ability to handle student friendly flexibilities. However, implementation of FAE is hindered by the challenges in

maintaining the databases to keep track of the students' academic progress. These challenges can be overcome by designing and using systematic processes and software support. This paper presents the design and implementation of the processes, divided into various phases viz. Pre – Registration, Registration, and Post – Registration phases. The process of development and use of corresponding software modules viz. Premo, ReMO, Promo using software tools such as MySQL, J2EE, JDBC, HTML, CSS, JavaScript etc., is also presented. It has been suggested that with suitable modifications, the presented processes/software support may be used to implement FAE in any university [2].

In today's world, Web-Based Distance Education Systems have a great importance. Web-based Distance Education Systems are usually known as Learning Management Systems (LMS). In this article, a database design, which was developed to create an educational institution as a Learning Management System, is described. In this sense, developed Learning Management System consists of the basis of Virtual Education Institutions. In this study, a fully relational database design has been realized in compliance with SCORM standards and got ready to be used as Virtual Education Institutions. This system can be used for any required education institute and it can be run within the same interface. In LMS that will be generated, a faculty or institute can be defined and academic and all administrative processes of the defined institute can be managed with the designed system. Proposed database design has been used in an LMS of Afyon Kocatepe University. In this system, many processes like indexing, uploading, downloading, production and editing of web based learning materials can also be performed easily and safely [3].

There is a big need for evaluating the effectiveness of the emergent technologies in educational environments and their contribution in the achievement of the educational institute's goals. Course Management System (CMS) is one of these technologies which is used in knowledge transfer and management. It is a rich and confidant data source about student's behavior. The aim of this paper is to analyze this behavior for evaluation purpose by extracting useful knowledge from applying data mining techniques on the generated logs from this system [4]. And other research: nformation Security Management in Academic Institutes of Pakistan [1], The Developmental Directions and Tasks of the School Based Curriculum Management System in Korea [7].

The above researches show the importance and implementation of information systems which were used to collect, access and retrieve the data based. In this research, an aim to support speedy of the work for educational institutions to be more efficiency has been applied to the evaluation of the data, retrieved, and developed the disciplined of students in RUS.

III. METHODOLOGY

The populations in this study were the staffs from Faculty of Science and Technology, RUS. The samples were sampling by purposive sampling method [5]. The instruments in this research consist of MSD, and MSD user satisfaction surveys. To perform the research, data were collected and then the results were analyzed accordingly.

The users in an MSD were categorized into three groups. The first group was instructors and system administrator, who have permission to access all functions for managing the system. This group of users was able to edit profile, add/remove/edit managing the system, add/remove/edit MSD detail, add/remove students group, checking disciplined detail, report the MSD, entrance exam cards, and manage system logout. The second group was 110 students. This group of users can only access the system as follows: view the news, edit their own profiles, view their own checking disciplined and print their own entrance exam tickets. The last group was the guest, users. This group of user can view only the news from MSD. The MSD has the facility to produce the entrance exam cards and follow up the checking disciplined of each student. The MSD has reliability, satisfaction, and efficiency, as show in Fig.1-4.
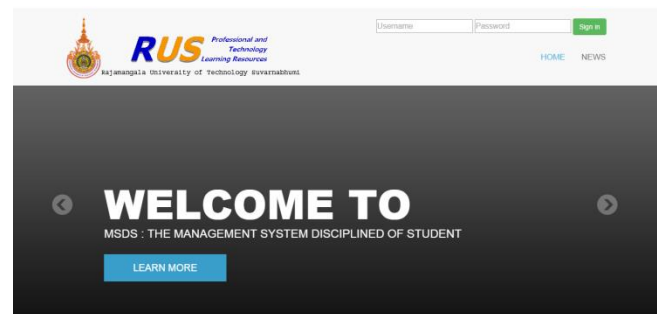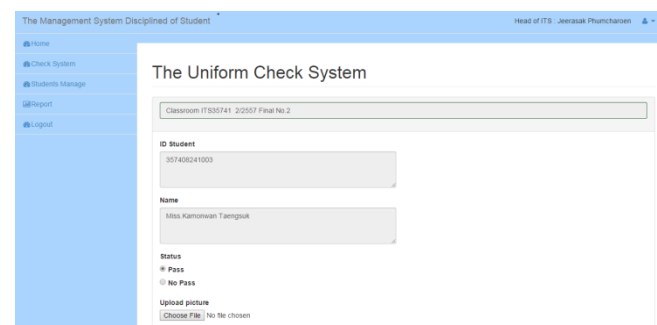

Fig 1. Introduction pages of the website.

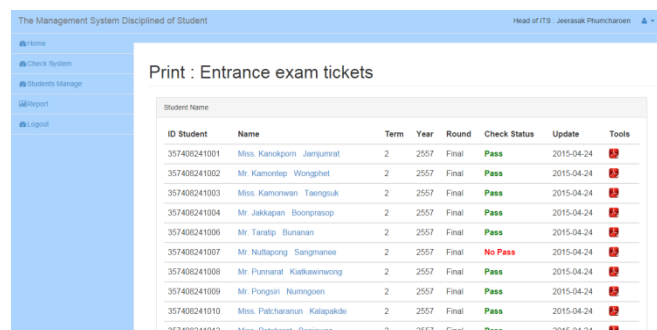Fig 2. The uniform check system pages.

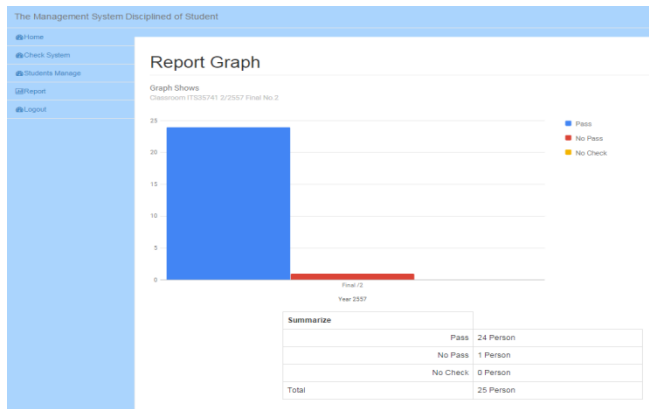Fig 3. Print: entrance exam tickets pages.

Fig 4. Report graph pages.

Undergraduate students and instructors of Faculty of Science and Technology, RUS were asked for their satisfactions toward MSD. The findings showed that all the users had an excellent level of satisfaction.

Survey was used as a research methodology in order to evaluate the user satisfaction level. The survey form is a rating scale, which was classified into five levels. Each level is summarized the score in form of interval scale [6] as follows:

Excellent	5	points
Very good	4	points
Good	3	points
Fair	2	points
Poor	1	points

Then we calculate the average of the score and compute the significant level of user satisfaction. The calculations for significant level of user satisfaction were shown as follow:

$$\text{Range} = \text{Maximum point} - \text{Minimum point}$$
$$= 5 - 1$$
$$= 4 \qquad (1)$$
$$\text{Class interval} = \text{Range/number of interval}$$
$$= 4 / 5$$
$$= 0.8 \qquad (2)$$

The average points as follows:
4.21 – 5.00   mean the users have an excellent level of satisfaction to the system.
3.41 – 4.20   mean the users have a very good level of satisfaction to the system.
2.61 – 3.40   mean the users have a good level of satisfaction to the system.
1.81 – 2.60   mean the users have a fair level of satisfaction to the system.
1.00 – 1.80   mean the users have a poor level of satisfaction to the system.

Rating scale provides an effective method for measuring the user satisfaction, which are classified into five levels from highest (5) to lowest (1). For example, 5 mean that the user has the highest satisfaction toward the system.

The results of satisfaction of instructors toward MSD were summarized as follows:

TABLE I
SATISFACTION OF INSTRUCTOR TO MSD

	Topics	average points	S.D.	Satisfaction Level
1	The MSD has a beautiful design and appropriate function to use.	4.33	0.71	Excellent
2	The MSD is easy and convenience to used.	4.33	0.75	Excellent
3	The data in MSD are reliable.	4.47	0.68	Excellent
4	The MSD are display the information fast.	4.47	0.62	Excellent
5	The MSD is comfortable to use.	4.43	0.62	Excellent
6	The MSD has high performance in data editing.	4.33	0.60	Excellent
7	The MSD provides and effective solution for education.	4.37	0.71	Excellent
8	The data in system is useful for checking disciplined.	4.30	0.70	Excellent
9	The MSD is useful for instructors and student.	4.50	0.57	Excellent
10	The satisfaction to the MSD.	4.17	0.79	Very good
	Total Mean points	4.37	0.67	Excellent

Table I: Shown average and standard deviation (S.D.) of instructors' satisfaction to MSD. The highest average point of instructors' satisfaction was 4.37. The instructors have the high level of satisfaction to the system in nine topics and have the very good level in one topic. Therefore, this could be implied that the instructors satisfy this developed system very much. (See Table I)

The results of satisfaction of undergraduate students toward MSD were summarized as follows:

TABLE II
SATISFACTION OF STUDENTS TO MSD.

	Topics	average points	S.D.	Satisfaction Level
1	The MSD has a beautiful design and appropriate function to use.	4.30	0.78	Excellent
2	The MSD is easy and convenience to used.	4.57	0.69	Excellent
3	The data in MSD are reliable.	4.47	0.67	Excellent
4	The MSD are display the information fast.	4.45	0.62	Excellent
5	The MSD is comfortable to use.	4.35	0.84	Excellent
6	The MSD has high performance in data editing.	4.52	0.65	Excellent
7	The MSD change the behavior of students.	4.34	0.80	Excellent
8	The data in system is useful for checking disciplined.	4.68	0.61	Excellent
9	The MSD is useful for instructors and student.	4.61	0.54	Excellent
10	The satisfaction to the MSD	4.59	0.60	Excellent
	Total Mean points	4.48	0.68	Excellent

Table II: Shown average and standard deviation (S.D.) of students satisfaction to MSD. From Table II, the highest

average point of student satisfaction to MSD was 4.48. The students have the high level of satisfaction to the system in all topics. As a result, this could be interpreted that the students satisfy this developed system. (See Table II)

IV. CONCLUSION

This research described the development of Management Systems Disciplined of students (MSD). Apart from that, the user satisfaction to the developed system was also evaluated. Moreover, the research raises awareness for the students to maintain discipline behavior after the operation. The MSD provides facilitation and minimizes the redundancy in checking disciplined of students. The system is a useful and effective tool for instructors to follow up and disseminate the student disciplined information. The system also offers assistance to the Faculty of Science and Technology of RUS with its fast and effective processing.

The average of satisfaction of instructors and students to MSD were 4.37 and 4.48, respectively. Both instructors and students have very high level of satisfaction to the system. Besides that, in the same way, this system has the ability to print out report, print entrance exam cards, check disciplined of students, reduce the mistake and complication of information, and provide an easy way to collect/check the document in a systematic manner. Lastly, the students are simply able to follow their student of checking disciplined and entrance exam cards.

V. FUTURE PLANS

It would be more benefit to add a chat system to the MSD on mobile, which provides the opportunity for students to contract with their instructor easily. Developing more data security and facilities to the system is also an interesting area needed to be taken into consideration. Moreover, the system should not only be connected to the students' record database of Faculty of Science and Technology, but it should also be extended to the MSD of another faculty in the RUS for manage educational.

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