THE DEVELOPMENT OF ONLINE REGISTRATION SYSTEM FOR PICKING-UP TABLET OF THE OFFICE OF GENERAL EDUCATION AND INNOVATIVE ELECTRONIC LEARNING

Anutsara Chanprapas
e-mail: anutsara.ch@ssru.ac.th

The Office of General Education and Innovative Electronic Learning,
Suan Sunandha Rajabhat University,
Bangkok, Thailand

The study aims to develop one stop service system with the focus on picking-up tablet of students; and to survey the satisfaction level of the service receivers. The tools used for collecting data are picking-up tablet registration system and satisfaction evaluation form. The system is developed in the form of web application, with ASP.Net (C#) language and backing database with Microsoft SQL server, which can be accessed by all types of equipment. The system can offer service in advance, can accept and support cueing process online, and can summarize all service providing – fast and accurate. According to satisfaction survey from 385 students, who enroll the GE courses, the score is at the average mean of 4.70 and standard deviation at 0.53.

Keywords: service to students, web application, online system, general education courses

Introduction

Today, information technology plays a very important role in the development of convenient living facilities which can produce products and provide various services to meet more needs. Including the use of information technology to be used in services and managing information in the work to be more efficient. Especially the use of information technology to develop in the form of web applications that provide services and manage data through the system in an online format. From the policy of Suan Sunandha Rajabhat University assigned to the Office of General Education and Electronic Learning Innovation conducting student services approximately 8,000 first-year undergraduate students come to get a tablet from the agency. To be ready for student services, the Office of General Education and Electronic Learning Innovation requires the preparation of equipment, location, date-time, along with forms and documents associated for services. From the past service, there has been a problem of service that takes a long time because the number of people who come to contact each day is not the same, Preparation of documents and incomplete evidence causing to waste time and preparing new documents again. Including the preparation of portable computers on a daily basis requires a lot of staff and do not know the exact number of student services each day The form used for registration must be made by the document system. For documents and forms that are used to record and receive a tablet, students have to write a lot of their names and information, causing the service delays and a longer waiting queue. In addition, there is no system for recording information about the service of receiving a portable computer that cannot monitor information and view the results of the service in a timely manner.

Office of General Education and Electronic Learning Innovation therefore developed the online registration system for tablet computers which was developed in the form of web applications written in ASP.NET (C #), managed database with Microsoft SQL Server, and responsive designing. The information system that supports online student services can manage student services in advance. There is a support system for queuing to receive a portable computer and a data recording system for summarizing the results of timely services (real time).
The researcher is therefore interested in researching the subject "The Development of Online Registration System for Picking-up Tablet of the Office of General Education and Innovative Electronic Learning". The objective of developing a system for providing One Stop Service and emphasize to focus on providing services to students who come to contact the portable computer (Tablet) and to study the level of satisfaction and suggestions of students who use the services. The results of the research will be used to improve the service to be faster and more accurate, resulting in the service recipients being more satisfied with the service of the agency.

**Literature review**

Management Information System (MIS) is a system that contain groups of information and elements related for supporting the organization operations, management and decision making in the organization. The system requires the collection of processing data and must use computer equipment and programs together with users in the preparation of information (Sakrungphongsakun & Yuthwiboonchai, 2006). Use of management information systems can be used from individual levels, corporate groups and between departments. Management information systems help users to solve difficult business problems and complex business problem effectively. The management information system must have three important elements (Kiratitikomol & Khejoranan, 2008) as follows.

1. Information, including detailed information used in sub-level management and various regulations.
2. In general, organization and management must consist of personnel organization management structure to clearly separate duties according to various tasks.
3. Technology and equipment is an important tool in the development of management information systems which includes computer hardware, software, networking and communication devices that connect these systems together for efficient operations.

Web Application is a program in the web server that serves requests from the client via protocol HTTP, which displays the requested results in the form of an HTML page via a browser. We use the service that the web application can respond to the idea of distributed processing to a certain extent. The processing is divided into the client side and server side, and the database is often used together with the web application. (Uaipanich & Chanpla, 2010).

**Methodology**

Processes and procedures for developing online registration systems for tablet computers of the Office of General Education and Electronic Learning Innovation, use the method of software development with the Water Fall Model which consists of 4 major steps that are system analysis, system design, system development and system testing. This model can be applied to develop the system to meet the needs of users as well. Because it focuses on using search techniques from users before developing the real system (Aiamsiriwong, 2012) that are

1) System analysis starting from collecting information on service procedures, analyze problems and the need for providing a tablet.

2) System design consists of database design, design of the registration screen for the receipt of the user's computer and the administrator's screen, conditions for determining the registration status, receiving status, including setting and checking various information.

3) System development is developed as analyzed and designed.

4) System testing is a test of the accuracy of functionality and testing applications from the evaluation of user satisfaction with ease of use, completed content and can display information correctly with the speed of data processing and modern design. The system test will simulate actual usage in registering for a portable computer and setting up the system before the actual registration with different circumstances and assessments from respondents' questionnaires.
Conclusions

The results of the analysis of the function which will receive two important functions are
1) the function of registration, search for registration forms, checking the receipt status and
downloading documents that is called the user part and
2) the functions of data management, importing general information of the recipient is
eligible to receive a tablet, setting the date of registration, determine the date of receipt of a
portable computer, employee eligibility, cancellation of registration, confirmation of receipt of
portable computers and browsing various reports called the admin section.

The design and development of an online registration system for tablet computers is
developed in the form of web applications written in ASP.NET (C #). Together with using
Microsoft SQL Server as a database for data storage, and ready to design the system to use every
device (responsive design) as well and present the work process with the data flow chart.

The work of the system will focus on the registration of a portable computer (Tablet) to
allow students to fill out notes, check the relevant information in the registration process and
print out the document form for entering the screen as Figure 1-4.
The administrator section is the part of the developed system that supports the management of student services in advance. It also supports the conclusion of the service to present the management in real time. The system is developed to support every device, anytime, anywhere via the web application.
System evaluation to test the proposed system, the researcher evaluated the satisfaction of 385 students enrolled in general education courses, evaluated online using Google Form, which is a survey tool. And ask suggestions from students Can summarize student satisfaction assessment results for the use of developed systems as follows: List of details of the assessment results as shown in Table 1.

<table>
<thead>
<tr>
<th>Assessment Items</th>
<th>Performance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The system for online registration system for picking-up tablet is easy to use.</td>
<td>4.63</td>
<td>.568</td>
</tr>
<tr>
<td>2. The completeness of the contents in the registration system for picking-up tablet.</td>
<td>4.64</td>
<td>.561</td>
</tr>
<tr>
<td>3. The registration system for picking-up tablet can display information correctly.</td>
<td>4.64</td>
<td>.587</td>
</tr>
<tr>
<td>4. Data processing of the registration system for picking-up tablet is fast.</td>
<td>4.64</td>
<td>.597</td>
</tr>
</tbody>
</table>

Results:

- Very High
5. The display of the size and color of the font on the screen of the registration system for picking-up tablet is appropriate. 4.65 .590 Very High
6. The screen of the registration system for picking-up tablet has a modern style. 4.65 .584 Very High
7. The registration system for picking-up tablet is useful for you. 4.67 .565 Very High
8. The registration system for picking-up tablet is convenient to use. 4.66 .582 Very High
9. Users are satisfied with the speed of response of the registration system for picking-up tablet. 4.66 .576 Very High
10. Overall satisfaction with the use of the online registration system for picking-up tablet. 4.70 .533 Very High

From the evaluation of the overall satisfaction level of the students on the system usage, 385 people found that the satisfaction with the use of the system is at the highest level, 283 people, accounting for 73.5 percent, at a high level, 88 people, accounting for 22.9 percent, at a moderate level, 14 persons, representing 3.6 percent, at a low level of 0 people, representing 0 percent, and at the lowest level, 0 people representing 0 percent, respectively. Therefore, it can be concluded that students are satisfied at a high level with an average of 4.65, accounting for 93.08 percent.

**Conclusion and discussion**

From the development of online registration system for tablet computers of the Office of General Education and Electronic Learning Innovation can conclude that this system has been developed in the form of web applications written in ASP.NET (C #), together with using Microsoft SQL server as a database for data storage and ready to design the system for every device (responsive Design). There is a system that allows students to register to receive a tablet computer online in advance via the website (web application) anywhere, anytime and can prepare relevant documents or evidence in the registration system. As well as, the system can check the details schedule to book a queue for a portable computer at any time.

For administration the registration system, the staff can receive the tablet of students in advance and able to record student service information daily report release or summarizing the reports of student services in real time. As well as, the system can help to reduce the time for student services faster with the student queue system and the barcode scanning system to record the information of the tablet computer and can check student service information to reduce errors in providing students with duplicate information. In addition, executives can view the summary of real-time services with accuracy and support the management in planning and management's decision which will create innovations that will benefit the student services to the maximum.

**Acknowledgement**

The author would like to thank to Suan Sunandha Rajabhat University that supports the participation in research presentations at international academic conferences in the Federal Republic of Germany. The study of development of online registration system for picking-up tablet of the office of general education and innovative electronic learning, was be achieved due to support from the administrators of the Office of General Education and Electronic Learning Innovation In consultation and suggestions for improvement And develop information systems to support student services that come to contact to get a portable computer in every work process.
References: