ONLINE REGISTRATION AND RESERVATION SYSTEM FOR ST. JOHN EVANGELIST CHURCH

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ABSTRACT

As the technology is emerging around the world, the development of technology is contributing a great result for the development of our economy and it also helps our living to be more convenient. This project is a learning system that helps to improve quality of education and makes studying and generating reports easier. St. John the Evangelist Church is a public use property located in A. Mabini Avenue, Tanauan City, Batangas. It accepts reservation manually. Client reservation has two options, it can be made through cell phone or landline or the client can go to the parochial office personally to inquire and make the reservation. In reserving for the services in St. John the Evangelist Church, the secretary browses on a record book for the service and will manually find if the reservation date and time is available for that day. If the service is not available in the preferred schedule of the client the secretary will ask for another time and date and will check again if it is available. Then the secretary will ask the information of the person and the requirements for making reservation. After the client had completed the reservation, he/she will have to pay the fee for the service and will be given a receipt. The fee for each service varies and depends on the details added in each service, in wedding service from simple nuptial mass to nuptial mass with ctd with additional carpet and flowers the price would range to 1,650.

INTRODUCTION

Today, technology is evolving fast and is constantly bringing new dimensions to our daily life.Internet, Intranet, and online systems as new work tools lead to organizational change and offers numerous opportunities to develop new products, new services which will simplify business processes. The application of online system in registration and reservation has become a major course in practice and generated a prime stream of research in the fast changing technology environment.

The proponents proposed to incorporate the many advantages of online technology to Registration and Reservation for St. John the Evangelist Church. It is located at A. Mabini Avenue Tanauan city, Batangas.It was established by the Agustin Congregation on May 5, 1584. The church offers services such as Wedding, Baptism, Funeral blessing and mass, Masses, Blessings and Confirmation.The way of accepting a reservation on a certain services in St. John Evangelist Church is manually operated by their staff. The client need to go personally to the main office of the church wherein they can get forms that they need to fill out to make a reservation. Sometimes one whole day is not enough to make a reservation because of long queue of people and completing all the requirements need to make a reservation. This process is time consuming, tedious and difficult. The church have to check first the records on what days are available so that no conflict will take place. If the staff made a double reservation on the same date and time it will probably cause a delay on the event. Furthermore, the manual process of transaction is inaccurate for the customer because of possible loss of records.

According to Gilbert K. Gidiglo (2012), he mentioned that “If the systems used are wrought with human errors and mistakes, could there be a more efficacious means that could minimize or solve some, if not all the problems associated with the old systems”.

The researchers conducted this study by careful considerations of the above problems. Online Registration and Reservation System for St. John the Evangelist Church aims to centralize the management of their church events whether it’s one event at a time or multiple and back-to-back events. The researchers will develop a system to design an online system to efficiently process the reservation and management of the church events, to create a database for every

transaction and to make it easier to find the availability of events using dashboard and reporting functions. The proponents can make their online information with reservation system easier and less time-consuming by using technology.

Objectives

General Objective:

The main objective of the study was to design and develop an Online Registration and Reservation System for St. John the Evangelist Church.

Specific Objectives:

Specifically, the study aims:

- create an intuitive system that will automate the process of reservation of an event in the church.
- store all transaction in the database for efficient retrieval and reporting process.
- develop a system that allows the administrator to approve the client's request.
- create a system that will allow administrator and user to read and send messages through the system.
- evaluate the system functionality, portability, maintainability, usability and efficiency using the ISO 9126 quality standard

PROJECT METHODOLOGY

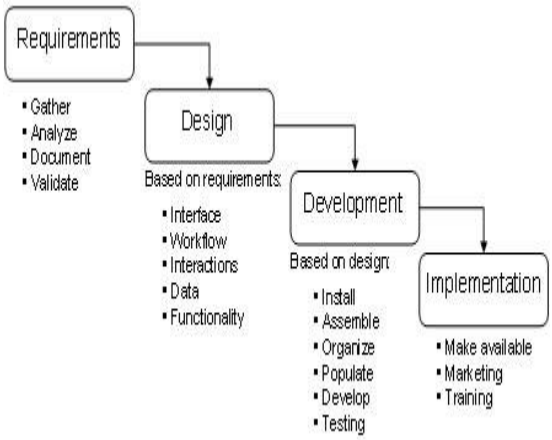


Figure 1.Software Development Life Cycle-Waterfall Model

Figure 1 has diagramed the software development used which is the waterfall model. The Modified Waterfall Model is a sequential development model that needs each phase of development proceeds in order without any overlapping and should be completed every tasks within a specified time period. The first phase is compose of requirements given by the client and this requirements will be gather, analyze and should be validated by the researcher and should be clear before proceeding to the next phase.

The design phase is the whole plan for implementing the requirements given. It includes the interface, workflow, interactions, data and the functionality of the system. The development phase is the developing step where the researcher will start the coding of the system.

The last phase is the implementation where the system should be working and passes through testing; this last phase will make the system available to the market.

RESULTS AND DISCUSSION

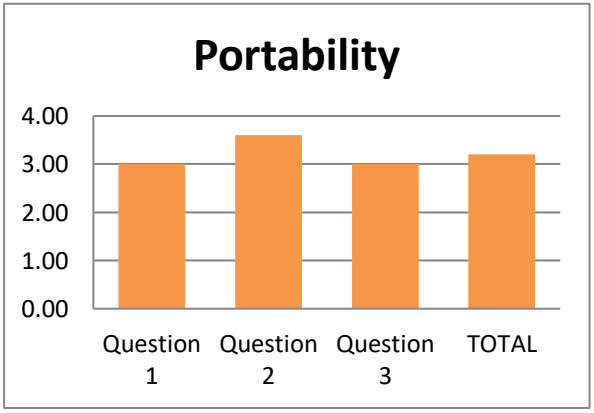
Evaluation on System Performance

Graph 1. System Performance evaluation in terms of Functionality

Graph 1 shows the respondents' evaluation on system performance in terms of functionality. It can be seen in the table that "F2 - The proposed system can view the information and requirements of the church" obtained the highest weighted mean of 3.63. The second highest rated item under evaluation on system performance in terms of functionality is "F1 - The proposed system is able to accept reservations" which received a weighted mean of 3.53.

The lowest rated is "F3 - The proposed system provides faster decision making process" with weighted mean of 3.20. According to Erik Larson (2016) decisions are the most powerful tool managers have for getting things done. Setting goals (another tool) is aspirational, but making decisions actually drives action.

Most respondents "strongly agree" on all statements in evaluating the systems performance based on functionality.

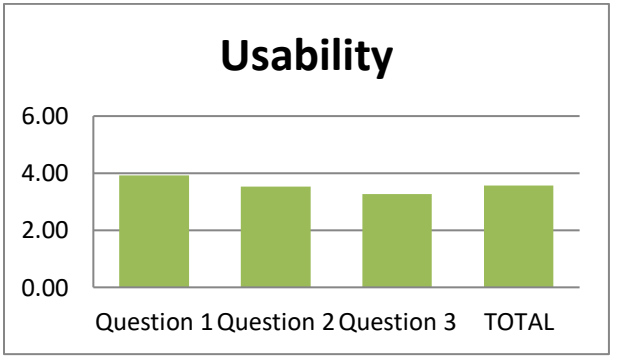


Graph 2. System Performance evaluation in terms of Portability

Graph 2 shows the respondents' evaluation on system performance in terms of portability. It can be seen in the table that "P2 - The proposed system can be accessed anytime, anywhere as long as there is internet connection" obtained the highest weighted mean of 3.60.

The second highest rated item under evaluation on system performance in terms of portability is "P3 - The website can be easily accessed in any browser" which received a weighted mean of 3.00 and "P1 - The proposed system can be used through mobile devices, desktop, computer, and laptop" which has the same weighted mean of 3.00.

Most respondents "strongly agree" on all statements in evaluating the systems performance based on portability.



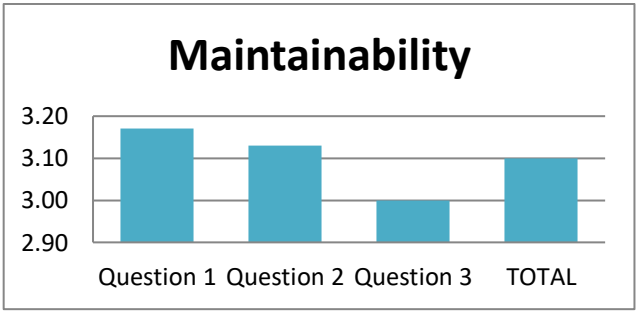
Graph 3. System Performance evaluation in terms of Usability

Graph 3 shows the respondents' evaluation on system performance in terms of usability. It can be seen in the table that "U1 - The proposed system provides attractive and user friendly interface" obtained the highest weighted mean of 3.93. According to Burleson (2005), a website must be simple and focused site to succeed. One that is easy to build, maintenance-free, low cost, trustworthy, and a powerful traffic-builder and customer-converter. Having the right tool and the right product alone doesn't ensure the success of the website.

The second highest rated item under evaluation on system performance in terms of usability is “U2 - The proposed system can be easily used by clients and staffs” which received a weighted mean of 3.53.

The third highest rated item under evaluation on system performance in terms of usability is “U3 - The customer and staffs can access the functionalities of the system”with weighted mean of 3.27.

Most respondents “strongly agree” on all statements in evaluating the systems performance based on usability.



Graph 4. System Performance evaluation in terms of Maintainability

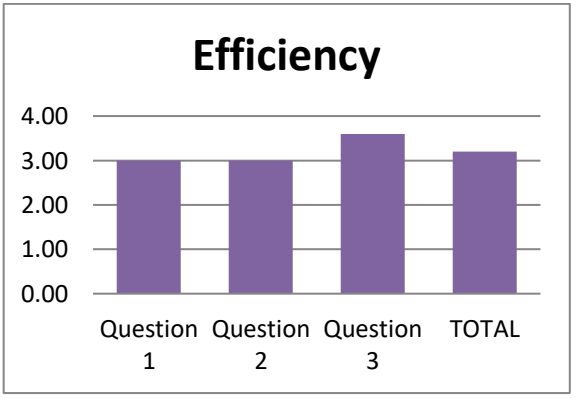
Graph 4 shows the respondents’ evaluation on system performance in terms of maintainability. It can be seen in the table that is “M1 - The proposed system can keep the files up to the present” obtained the highest weighted mean of 3.17. Muldner (2005), stated that a system must be designed in such a way that the addition of new entities or services to the network does not hinders the application’s performance.

The second highest rated item under evaluation on system performance in terms of maintainability is “M2 - It is easy to adjust the system” which received a weighted mean of 3.13. Maintainability is defined as when a system can be updated in a required manner that

continues to provide system availability, security, and integrity. (Douglas, 2010).

The lowest rated is “M3–The proposed system can be used or function properly and independently without the proponent’s aid “with a weighted mean of 3.00. Even without the proponents the system will run and function properly.

Most respondents “strongly agree” on all statements in evaluating the systems performance based on maintainability.

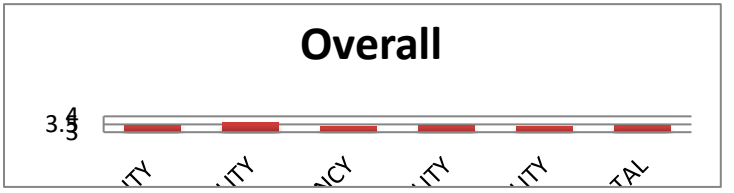


Graph 5. System Performance evaluation in terms of Efficiency

Graph 5 shows the respondents’ evaluation on system performance in terms of efficiency. The respondents strongly agreed that is “E3 - The proposed system can accommodate all the clients in reserving services”It has obtained the highest weighted mean of 3.60. Gerald (2002) stated that “the flexible online information system was created as a tool with the two main purposes the reservation theory and its application. The usage of computers is more efficient, accurate and faster than the manual or traditional system of working”.

The second third highest rated item “E2 - The time spent for scheduling reservation is reduced compared to manual scheduling” obtained a weighted mean of 3.00 and “E1 - The proposed system can retrieve and record data” which has the sameweighted mean of 3.00.

Most respondents “strongly agree” on all statements in evaluating the systems performance based on efficiency.



Graph 6. Overall system performance

Graph 7 shows the overall system performance based on the ISO 9126 Standard for software evaluation. The highest criteria for system performance is Usability which received an overall composite mean of 3.60. Respondents strongly agreed that using a website for registration and reserving church services provides attractive and user friendly interface that can be easily used by clients and staffs. Meanwhile, the lowest criteria for system performance is efficiency which receive an overall composite mean of 3.33.

To sum it up, the system did not just pass the software evaluation, but received high remarks from the respondents. It received a composite mean of 3.41. Overall the system has met all criteria for functionality, portability, usability, maintainability and efficiency.

CONCLUSIONS AND RECOMMENDATIONS

Findings

The performance of the ORRS-SJEC was validated using the ISO 9126, an international standard and for evaluation of software. Graph 7 above shows that the highest criteria for system performance is Usability which has received a composite mean of 3.60 because the system is usable in providing attractive and user friendly interface.

The lowest criteria for system performance is efficiency which received an overall composite mean of 3.33 because in efficiency of the system. Even though the system can reduced the time spent for

scheduling reservation, users are needed to be trained in order to use the system.

CONCLUSIONS

The proponents have developed a system that will streamline the procedure of processing reservations with an online registration and reservation system and have come up with the following conclusions: the proponents created an intuitive system that automates the process of reservation of an event in the church, aside from increasing the church's exposure, this will also serve as their marketing strategy of the church to promote their services. The system stores all transaction in the database for efficient retrieval and reporting process, With the implementation of MySQL as the systems back end which is more advance and has additional features compare to other databases, the company will have the benefit of a less expensive data storage because it is popular and free to download in addition it is very customizable, the user can customize its function with the knowledge of technical know-how. Furthermore data's that are stored in MySQL are very accessible and can be easily manipulated with a basic knowledge of Structured Query Language (SQL) which is easy to learn and use, and is available on different operating systems moreover creating backup for the saved data's will provide ease for every user of the system. The system allows administrator and user to read and send messages through the system. They can communicate and see if the request for reservation has been approved. Based on the data gathered from the respondents the participants have agreed that the system has passed the quality standards of a system. The system has been evaluated using the ISO 9126 quality standard and is functional, portable, maintainable, usable and efficient.

RECOMMENDATIONS

In this generation there is an increasing demand for a faster and more high tech way of processing or doing any kind of transactions. Most of reservations provide services using web-based system. It helps to perform task in an easy way with less time consumed.

St. John the Evangelist Church's manual reservation and booking system is old, outdated, worn down, and cannot be expected to be

applied to the increasing demand for a higher and much better services. The proponents have developed an online registration and reservation system and recommend the next developer or future researcher to:

1. Notify the client in all transactions through text messaging,
2. Upgrade the system by including online payment through PayPal, thus giving their client the ease of easily and immediately paying their reservation fee without leaving their own home.
3. Upgrade the system into Android that can be used in mobile phones and tablets.
4. Allow other email accounts in registering for the reservation of the services of the church.