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ONLINE DORM RESERVATION FOR ISPSC STA. MARIA CAMPUS

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Chapter 1

INTRODUCTION

Background of the Study

In today's generation, living through technology has a wide impact to citizens. Moreover, the world continues to evolve through the power of technology. Dormitories need a friendly high-tech technology too, in order to achieve a manageable, easy to access-navigate, an eligible transaction through reservation system. Online Dorm Reservation for ISPSC Sta. Maria Campus should assist students and faculty staffs online booking, payment, and reservation processes.

In addition, the system allows monitoring processes to inform or confirm certain actions or allocation processes as well as for reservation reporting purposes. This study looks into a number of students and faculty staffs who were able to be accommodate into a dormitory through online-based transaction to be associated inside the ISPSC Sta. Maria Campus.

A significant number of students and administrators may board in the dorms. Traditionally, dormitories are run on-site. The manual process entails a lot of paper works that needs to be physically stored. Records are prone to human mistake and are not very precise or reliable. Owners of dorms require a reliable method for automating management procedures and online transactions offer a faster and easier method (inettutor.com, 2021).

Similar to Dorm Reservation, it is stated that the incredible growth of information technology, particularly in the tourism industry, has made it more important than ever for hotels to incorporate technology into their whole operations. The purpose of the



study is to ascertain the relationship between perceived value, trust in the hotel, belief in third-party booking services, and intention to book a hotel continuously online. In addition to conducting quantitative research with 543 respondents who had made reservations on the website, this study also conducted qualitative research, including in-person interviews. The findings showed that the continuing intention to book hotels online was favourably influenced by confidence in hotels and belief in third-party booking services. Additionally, the association between trust in third-party booking services and ongoing desire to book hotels online was negatively impacted by perceived value. Some managerial recommendations were made for lodging enterprises to create successful business plans (Khoa, T. B. et. al., 2022).

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A quick, dependable, and entirely integrated hospitality management system is what makes every smooth booking experience possible, whether it be online or off. In this article, we'll go over how hotel reservation systems operate, the main advantages of an integrated platform, and what to look for when choosing bookings software. Additionally, it was demonstrated to you how to use this innovative technology whether



rooms which takes longer process. Therefore, the researchers proposed an Online Dorm Reservation Website for ISPSC- Sta. Maria Campus to help the management assist those students and faculty staff that wants to reserve a dormitory room.

Based on an interview with Mr. Alfred P. Pantaleon, ISPSC Dormitory Manager, one of the issues being encountered in the accommodation process is the hassle of time of students inquiring about the dormitory especially the students from far areas. This is also relevant issue to be addressed during this time of pandemic.

Hence, this website will give much convenience to the Dormitory Manager. It gives faster access to both administrators and applicants. Some features of this website is that administrators are notified for the list of occupant that want to avail through message. Since the new system is adopted digitally, applicants will be messaged back for possible appointment date. In addition, the applicant is required to be interviewed face-to-face for approval. The server will be updated for availability and vacancy of remaining dorm rooms. If the applicant did not come on the said appointment, reservation is automatically disapproved.

This study will provide the importance and usefulness of online dorm reservation and its capability to help the manager to easily update and view occupants. Therefore, it is very timely to conduct a study along this issue.



Conceptual Framework

Figure 1 shows the conceptual framework of the study. It will serve as the outline of how the researchers will conduct the study.

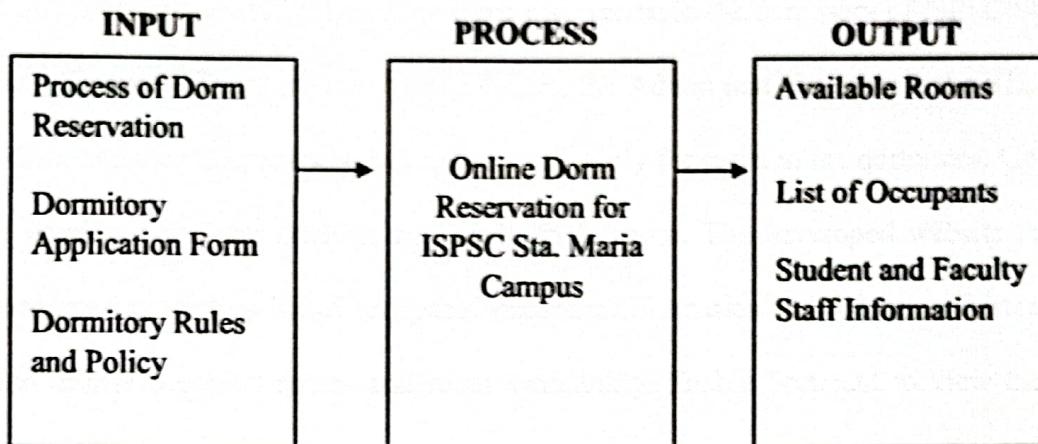


Figure 1. Conceptual Framework of the Study

In the conceptual framework, the study was guided by the use of the input-process-output. The input part was included the current process of Dorm Reservation that has Dormitory Application form upon reserving. Dormitory rules and policy was included. The Online Dorm Reservation for ISPSC- Sta. Maria campus was developed to ease the process of Dorm reservation. The output of system can view its room availability, the list of current occupants and the student and faculty staff information.

Objectives of the Project

The main objective of the study is to design and develop an Online Dormitory Reservation for ISPSC Sta. Maria Campus to manage the dormitory reservation process of the employees and students of ISPSC Sta. Maria Campus.

Specifically, this study aimed:

1. To determine the existing process of room reservation in the dormitory of ISPSC Sta. Maria Campus.



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2. To determine the functional and non-functional requirements of the system.
 3. To evaluate the level of acceptability of the developed system.

Scope and Limitation

The scope of the study covers the room reservation in the dormitory of ISPSC Sta. Maria Campus. There are two types of users, the Admin that can operate the whole system, and the occupant who can register and apply for room in the dormitory. Only the employee and the students can apply for a room. The developed website can formulate data such as list of occupants, occupant information and occupancy history. Auto update occupied rooms and room availability. Enable occupant to view their profile and change profile photo. Also, the admin can view occupied rooms. It will be hosted in a cloud hosting service. The website does not provide online payment options to users since part of the dorm policy is that each occupant's payment transaction history is documented by cashier's office. Occupants can only choose whatever room is available. The developed system can formulate data but does not required printing button. Only the administrator or owner of the system can operate users to access it using web browsers.

Importance of the Study

This study provides the importance of online dorm reservation and its capability.

The study is beneficial to the following:

The Dorm Manager can easily monitor the available rooms in the dormitory. It can accept occupant faster since the reservation process is web-based.

The Employees and Students of ISPC Sta. Maria Campus can easily apply for room reservation in the dormitory anytime and anywhere. Using the developed system notification of acceptance in the dorm is faster and efficient.



The Researchers enhanced their knowledge and skills in the development of the web-based applications.

The Future Researchers will use the results of this study in developing and implementing web-based applications considering other systems that will explore the benefit of having an online dorm reservation.

Conclusion

The researchers used the descriptive design research type of research to organize the organization, presentation and interpretation of findings and the results serve as a basis for the proposed system, the Online Dorm Reservation of ISPSCS Students.

Recommendations

This method of research will make the organization and related work to a clearer view of the current situation of the dormitory of ISPSCS students.

Future opportunity for the researcher is to continue the research on the dormitory management and the dormitory and continue the system design analysis, system implementation, and system evaluation of the system.

Future research can be conducted about the current problem of dormitory allocation of ISPSCS and the problems of dormitory allocation of ISPSCS and the improvement of the dormitory allocation of ISPSCS.

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Chapter 2

METHODOLOGY

This chapter presents the research methodology which includes the research design, software model, sources of data, instrumentation and data collection, and tools for data analysis.

Research Design

The researchers used the descriptive developmental type of research to organize the presentation, prescription and interpretation of the data and the results served as a basis to developed system, the Online Dorm Reservation of ISPSC (ShonaMcCombes, 2022).

This method of research will make the researcher understand and have a clearer view of the current situation of the reservation of rooms in dormitory at ISPSC Sta. Maria Campus specifically the occupants who were currently living at the campus dorm. Thus, the researchers will then formulate and develop the system through analysis, interpretation, and determination of its defects, the researchers use this method to gather information about the current process of dorm reservation of ISPSC and the problems that will be encountered in terms of reservation. The observation of the procedures and policies inside the ISPSC Sta. Maria campus and the analysis of documents will be use especially the forms that the occupants needed to fill in. All the gathered information through this method will be analysed, interpreted, and integrated into the proposed system.



The developmental method of research was on the development of the system. Developmental research was a study focused on the progressive changes that occur as an organism develops. Developmental research studies organisms as they progress through change. This research method will assist the system developers.

Various programming languages and packages suitable for the system were also identified. The best user interface will be designed and integrated into the system to allow smooth data flow. (Devin Kowalczyk, 2021)

Software Model

This study used the Agile Method. The Agile SDLC model by (Agile Manifesto, 2022) is used to this study for a combination of iterative and incremental process adaptability and customer satisfaction by rapid delivery of working software product. Agile methods break the product into small incremental builds. These builds are provided in iterations.



Figure 2. The Agile SDLC Model



The figure shows the Agile Software Development Life Cycle Model. The five phases that will be used to implement Agile Software Development Life Cycle are as follows:

Planning. In this first phase, brainstorming is necessary. Ideas are gathered and transformed that resulted in a final output. It is then divided into smaller pieces of work (the features), then prioritized each feature and assign it to an iteration. The researchers chose to develop the Online Dorm Reservation of ISPSC based on the interview and observations gathered regarding the said dormitory. The proponents prepare a time frame for the schedule of activities in conducting the study.

Requirement Analysis. This phase involved meetings with manager and occupants to identify business requirements. The researchers gathered information like who will use the accommodation and how they will use it online.

Designing. The system and software design are prepared from the requirements identified and the previous phase. The researchers needed to think about what the website will look like, the test also come up with the test strategy or plans to proceed.

Developing. This phase involves system development and documents. The researchers derived various detailed in functions, layout, process, and other documentation are done here.

Testing. In this stage, the website where tested if defects are reported, then problems are tracked and fixed, and retested until the website reaches the quality standards defined in the Software Requirements Specification (SRS). The researchers used this technique to test its acceptability by testing it on users.

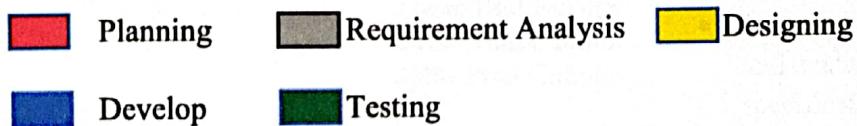


Project Plan

The Figure 2 show the activities undertaken by the proponents in developing the website for the ISPSC Dorm Reservation. It is also present the duration of the research until to its final presentation.

Activities	Sep 2022				Oct 2022				Nov 2022				Dec 2022				Jan 2023	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Planning	■	■	■															
Requirement Analysis					■	■												
Designing							■	■										
Develop									■	■								
Testing										■	■	■	■	■	■	■		

Figure 2. The Project Schedule Gantt Chart





Roles	Names	Functions
Project Manager	John Paul Cabalo	<ul style="list-style-type: none">• Responsible for coordinating with the project team.• Maintain open communications with all the members
System Analyst and Designer	Elmer Comilang Jr. Angelo Cabreros	<ul style="list-style-type: none">• Responsible for maintaining software systems; performing system problem solving, meeting with users to define business needs
Programmer	Louie Dell Europa Czar Andre Bano	<ul style="list-style-type: none">• In charge of coding as well as providing software support.
QA/Tester	Rica Jane Macabeo Angelo Cabreros Elmer Comilang Jr. Louie Dell Europa Czar Andre Bano John Paul Cabalo	<ul style="list-style-type: none">• In charge of monitoring the project's debugging queries.• In charge of examining and evaluating the system specification• Responsible for reviewing results.
Document/Technical Writer	Rica Jane Macabeo Angelo Cabreros Elmer Comilang	<ul style="list-style-type: none">• responsible for writing documentation that explains the system's features and advantages.• A status report on the whole project.• Publish project plan timeline and project requirement sheet.

Table 2. Project Assignment



Population and Locale of the Study

The researchers utilized purposive sampling as guide to the outcome of their research, that helped them determined the distribution of respondents. The respondents of the study are: employees and students, a total of forty (40).

Table 3 shows the distribution of the selected respondents who participates in the acceptability of the developed system.

Respondents	N
EMPLOYEES	20
STUDENTS	20
Total	40

Table 3. Distribution of Respondents

Research Instruments

The following were the tools that are used in the study, which also involved the participation of the occupants in the dormitory.

The WAMMI (Website Analysis and Measurement Inventory) by Muylle et al. (2022) was used to evaluate the level of acceptability of the developed system. The researchers distributed WAMMI questionnaire to users and evaluated the acceptability of the website.

Data Analysis

Questionnaires and interviews were served as tools in gathering the data. Mean, Frequency Count, and the following indicators: ease to use, satisfaction, usefulness, and ease of learning were needed to treat the needed data to identify the acceptability of the proposed system Online Dorm Reservation for ISPSC.



The descriptive interpretation of the proposed system's level of acceptance is displayed in Table 4.

Point Value	Mean Range	Descriptive Rating	Descriptive Interpretation
5	4.21-5.00	Strongly Agree	Very Highly Acceptable
4	3.41-4.20	Moderately Agree	Highly Acceptable
3	2.61-3.40	Neutral	Moderately Acceptable
2	1.81-2.60	Moderately Disagree	Slightly Acceptable
1	1.00-1.80	Strongly Disagree	Not Acceptable

Table 4. Descriptive Interpretation on the Level of Acceptability of Online Dorm Reservation for ISPSC Sta. Maria Campus.

The data gathered were categorized from Not Acceptable to Very Highly Acceptable. Mean ranges from 1.00-1.80 described as Strongly Disagree and interpreted as Not Acceptable, 1.81-2.60 described as Disagree and interpreted as Slightly Acceptable, 2.61-3.40 described as Neither Agree and interpreted as Moderately Acceptable, 3.41-4.20 described as Agree and interpreted as Highly Acceptable, and 4.21-5.00 described as Strongly Agree and interpreted as Very Highly Acceptable. Table 2 showed the purposive interpretation on the level of acceptability of the proposed system