

DEVELOPMENT OF A HOTEL RESERVATION AND BILLING SYSTEM FOR THE MARY ALSTON HOTEL AT TRINITY UNIVERSITY OF ASIA

**A Thesis Project Presented to the Faculty of the
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CHAPTER I

THE PROBLEM AND ITS BACKGROUND

Background of the Study

The Mary Alston Hotel is a fully functional mini hotel. The building has a number of laboratories, facilities, and equipment that the CHTM students can use for their classes. Aside from these, the building can accommodate guests from and outside of TUA where they can stay in the rooms available.

The Mary Alston Hotel only operates when there are guests that will check-in at the hotel and usually, the hotel rooms are open at 7:30AM and closes at 10:00PM. However, if there is a university campus tour or event, the hotel will be opened in order to accommodate the guests and/or visitors. The hotel is also open during the holidays as more people could unwind at the building. Regarding the guests' check-in and check-out dates and time, they will be asked to fill out a form prior to their stay where they will indicate their preferred dates and time. On the other hand, the hotel does not allow walk-ins because it does not operate publicly yet, and only accepts guests through a referral. In terms of the hotel's cancellation policies, it does not have one because it rarely happens. If ever a guest cancels their appointment, the hotel's management discusses it with them. In relation to the hotel's management, only one person manages the hotel which is Ms. Jamie Gajolin. The hotel does not have any other employees but the CHTM students, who are being trained to operate and handle the hotel.

The Mary Alston Hotel has 5 rooms where the guests can stay. On the first floor of the hotel, the Pahiyas Executive Suite could be found where it can accommodate 2 people. The standard rate for the room is Php 2,500.00 and an additional fee of Php 1,000.00 will be charged per day in excess of 2 pax. This is Mary Alston's best room because it has a double size bed, an en suite bathroom with a bathtub, a TV, and a receiving area. On the second floor of the hotel, 2 Junior Suites and 2 Dormitories are found. On each Junior

Suite (Harana and Imbayah), a maximum of 2 people could be accommodated, and it has two single beds, a TV, and an en suite bathroom. Each Junior Suite costs Php 1,800.00 per day. There will be an extra charge of Php 600.00 per day for groups of more than two people. In each Dormitory (Pagdayao and Moriones), a maximum of 5 people could be accommodated with a daily cost of Php 2,800.00. There will be an extra charge of Php 500.00 per day for groups of more than five people. It used to have 2 double-decker beds, but it was then replaced with 4 single beds. Similar to the Junior Suite, the Dormitory also has a TV and an en suite bathroom. The hotel also has a function room on the second floor which is named the Sinulog Function Room, where conferences, seminars, and symposiums are held. Free Wi-Fi is available at the hotel and guests can access it in their hotel rooms.

The guests staying at the hotel can request for specific items that they need for their room such as pillows and blankets. These requested items do not have any fees associated with it. But, if a guest requests for laundry service, the hotel will charge them for it.

Current State of Technology

Regarding the Mary Alston Hotel's current reservation process, they also have a manual procedure which is through pen and paper, specifically through forms. The guest has to come to the hotel prior to their stay in order to fill out the form that includes their name, contact number, check-in and check-out dates and time, the number of nights they are staying, select their mode of payment (cash or credit card), and the room type. The hotelin-charge (HIC) will manually check the availability of the requested accommodation and block off the reservation on the calendar. Once the guest is done filling out the form and the HIC confirms the date, the guest will proceed to the finance office to pay the amount in full.

Regarding the hotel's monthly and annual reservation reports, the manager does it manually by typing into the computer and printing it. Additionally, the hotel does not have any form of promotion which may lead to budget problems, low customer volume, and diminishing development of the company's growth.

Statement of the Problem

General Problem

How to develop a system that will solve the problem regarding the billing and reservation in Mary Alston's hotel.

Specific Problem

1. Ineffective monitoring of room availability leads to conflict in room scheduling.
 - Customers' schedules at the hotel should be accurately done for them to be satisfied. It is critical to keep track of available rooms in order to avoid clashing with other clients' schedules. This ensures that the resources and the customer's time are not wasted. Effective monitoring of room availability will help in managing the reservation process. Since the hotel has a certain number of rooms, projecting the number of rooms available also anticipates the number of rooms expected to be occupied on a specific date to avoid scheduling conflicts.
2. Loss in revenue due to inaccurate computations of the billing statement of a customer.
 - It is important that the billing statement must be computed accurately to determine whether the hotel's generated sales reports are improving or not. This is significant since it will allow the hotel to acquire a thorough understanding of their financial situation. This will allow the hotel to be kept up to date on the status of their business on a regular basis. As a result, the hotel will be able to make better decisions and achieve greater results. It also makes managing easier because keeping accurate data saves time and work for the hotel.
3. Lack of online reservation leads to limited inquiries and reservations.
 - It is essential for the hotel to have a customer reservation system in order to improve customer relationships. Having a reservation system will improve the

hotel's chances of a guaranteed customer accommodation. This will assist the hotel in maintaining a consistent flow of customers while also satisfying their needs. Easy access to a hotel's room data bank aids in meeting customers' requests as well as achieving a desired daily occupancy rate and average daily rate. A reservation system is also the most common way to generate positive cash flow and a favorable income statement.

4. Inefficient tracking of the performance of the hotel due to lack of on-demand reports.
 - It is necessary to provide enough reports in order to maximize the hotel's efficiency. Having a sufficient number of reports will provide important data, such as spending, earnings, and growth, that can be utilized to generate the hotel's marketing strategies, budget planning, and decision-making. Preparing daily, monthly, and annual reports are indeed an important and helpful tool for the hotel. It will provide critical information that will assist in the development of strategies. This will grow and draw more customers in the long run.
5. How to evaluate the efficiency and functionality of the system.

Objective of the Study

General Objective

The main objective of this study is to develop a reservation and billing system for the Mary Alston hotel.

Specific Objectives

Specifically, the proposed study aims to:

1. Develop a module that will eliminate conflict in hotel room scheduling.
 - With a hotel room monitoring module, the guest can easily view the currently available rooms at the hotel's website when they want to book a reservation. Moreover, the hotel receptionist can also view the rooms available at the

moment when a walk-in guest would like to check-in at the hotel. This module will provide the users to accurately keep track of the available rooms which will avoid clashing with the schedule of other guests, as well as manage the reservation process.

2. Develop a module that will accurately compute the billing statement of a hotel guest.
 - A billing system will capture the customer's billing information and process their payment. Therefore, this module will accurately compute the guest's billing statement which will avoid errors that could potentially lead to customer dissatisfaction. In addition, this module will allow the hotel to thoroughly understand their financial situation and determine if it is improving or not.
3. Develop an online reservation module that will help to increase the number of inquiries and booking reservations.
 - With the use of a customer reservation system, an increase in customers booking at the hotel is guaranteed since they will be provided with the information they need for reservations. Additionally, having this module will provide an effective process of reserving a hotel room.
4. Develop a module that will provide on-demand reports that will help in tracking the performance of the hotel.
 - With the help of a report system, the hotel will be able to collect the data they need which will help them in tracking their performance, therefore making better-informed decisions, developing strategies, and maximizing their efficiency and operations.
5. Evaluate the system's functionality and efficiency based on a standard criteria.
 - A system evaluation will verify and validate if the developed system meets the objectives, if there are errors needed to be fixed, and if it fulfills all of the requirements of the client.

Scopes and Delimitations

This study mainly covers automation of reservation and billing system to admins and room booking facility to guest using a website that enables the hotel to track the accommodations and aims to provide accurate and reliable hotel reservation to the customers.

In terms of reservations, it is included that guests will have the ability to manage and choose rooms they need. They can also set the date of their stay in the hotel based on availability and specify the number of adults and children. The information and photos of the rooms can be viewed in the gallery to let the guests know more about the hotel. For reservation assurance, 50% of the total price must be paid or sent to the hotel's bank account as a down payment before the reservation deadline, and the remaining balance can be paid on the day of check-out. When the hotel receives the down payment, a notification message will be sent to the guest's email address for the confirmation of booking reservation. Cancellation of any reservation can be made within 24 hours, no refunds for the clients who already deposited their down payment. The report module allows the admin to view all of the hotel's previous, current, and upcoming reservations. This will also provide a report that shows which month has the most reservations, which reservations have been canceled by the customers or by the system itself, and what types of rooms their customers typically book.

The system also has its delimitations. The hotel reservation can only be accessed by the admins and not front desk staff since this is an online website system. The website does not have a customer service chat feature where visitors can ask questions. They must contact the hotel by phone or email. Other services such as booking of room for events, add-ons of pillows, blankets, etc., and laundry are not covered in the website. The hotel has no inventory system for the add-ons. Guests can only pay the down payment through Gcash, bank transfer, and bank deposit, and does not accept credit card basis. Additionally, the Manager's Lounge Café, which is located on the hotel's ground floor, is not covered by the system's billing provisions.

Significance of the Study

The beneficiaries of the study are listed in this section:

The College of Hospitality and Tourism Management, the college that will benefit from this study since the proponents' system introduces them to a new technological trend that will lead to increased earnings and clients. This would assist the college in maintaining operations within the hotel, while also improving the skills of its staff. The proposed system could also potentially assist them in promoting the courses they're offering.

Trinity University of Asia will undoubtedly benefit from this study since it will assist in the promotion of the hotel. This could potentially bring in additional income, especially once the hotel is open to the general public rather than simply guests and clients.

The Mary Alston Hotel Administrators will greatly benefit from this study because it will enable them to manage and attend to their guests' bookings through an online reservation process. Because of the system's convenience, it will help them in increasing their income by allowing them to reach a larger number of guests.

Hotel's Guests/Clients will be able to schedule and book rooms more easily, saving time and effort in the process. With just a few clicks, they will have the ability to create their own reservations at the hotel through the website. In addition, since it saves time and effort over performing it manually, the system will provide them with a more secure and reliable payment transaction.

Students and Teachers would benefit since it would direct them toward a more thorough knowledge of the study. This study could be used as a guide and reference for those who are conducting similar research.

The Proponents will benefit the most from this study. This will benefit them by providing extra knowledge and skills that will aid in the completion of this study. It provides

proponents with experience and training in which they can apply to future careers they pursue.

Future researchers will also benefit from this study because it will act as a guide for them to conduct similar research or develop their own version of the project. They can continue to improve and upgrade the systems covered in this study.

Definition of Terms

1. Online

Available on or done via the Internet or another computer network.

2. Reservation

Booking a certain accommodation type for a specific guest for a definite period of time.

3. Billing

The process of charging a guest for a hotel stay.

4. System

A set of hardware and software components that work together to run in a computer.

5. Website

A set of related web pages located under a single domain name, typically produced by a single person or organization.

6. Reports

An account given of a particular matter, especially in the form of an official document.

7. Ratings

A classification or ranking based on a comparative assessment of a given criteria.

8. Evaluation

The process of critically examining a program based on a criteria.

9. Hotel Scheduling

The arrangement that you make when you schedule something such as a hotel room

10. Hotel Monitoring

Observe and check the progress or quality of the system over a period of time; keep under systematic review.

11. Hotel Performance

Ability to manage the business effectively in order to provide a product or service that meets the expectations of its clients.

12. Module

A software component that is designed to perform a routine operation, which makes up a program.

13. Data

The facts that the computer system requires in order to process and produce necessary information.

14. Administrator

Managing, maintaining, and configuring business computer systems on a daily basis.

15. Room Assignment

Identifying and allocating an available hotel room in a specific room category for guests.

CHAPTER II

CONCEPTUAL FRAMEWORK

This chapter covers the review of related theories, ideas, systems, and principles that are related to the study and development of a Hotel Reservation and Billing System for the Mary Alston Hotel.

Review of Related Literature and Studies

Automated/online reservation

Online hotel reservations are becoming more common. Rooms can be booked from the convenience of one's own home by using internet security to protect personal and financial information and comparing pricing and features at other hotels through multiple online travel agents. Delizo & Esguerra (2013) presented an on-line hotel reservation and management system for the College of International Tourism and Hospitality Management of the Lyceum of the Philippines University, Batangas Campus. The research project is entitled "Online Hotel Reservation and Management System for The College of International Tourism And Hospitality Management (CITHM)". The researchers utilized Microsoft Web Developer 2008 as the programming language and followed the System Development Life Cycle. The CITHM students used the built software to learn how to use an online hotel reservation system. Instructors found the produced software to be a useful tool in teaching their students the fundamentals of hotel reservation systems. It also offered online security to ensure clients' privacy and financial information.

Sarmiento (2020) developed an online hotel reservation system to replace the manual method of room reservation, information record keeping and report generation. The hotel currently uses a manual booking system. This manual booking process has various flaws, so the best answer is to move to a database-driven system. The newly designed system handled most, if not all, of the end-users' problems. The information-based solutions do not only solve the difficulties, but also provide the company's administrator/management

a competitive advantage. Their records will be more structured, safe, and dependable thanks to this database systems.

Chan et al. (2015), proposed an online reservation and billing system for Yuj Inn Hostel. The proposed system helped the hotel grow and extend their business by attracting more guests through the usage of the internet, reducing the time spent on manual computation and transaction recording. Despite their inexperience, the hostel was encouraged to provide convenience to its visitors and to streamline their operations. Yuj Inn Hostel used to book their rooms manually. Walk-in guests were required to inquire about their reservation and fill out the appropriate information using forms. The proposed system assisted the hotel in operating more efficiently. The system aided in the expansion of the hotel, resulting in a profit increase.

A project entitled “Hotel Management System” focuses on the maintenance and management of the different hotels that are available. Deeti et al. (2016) created this project and implemented it according to the needs of customers. In the database's core component, it is largely responsible for hotel management. The system provides details on the numerous hotels available as well as their current availability. Visitors can visit the website and fill out the required information to register with the system. Unit reservations are available to all registered guests. The guests are informed about the availability of the unit since they have requested it. The previous system is in an undeveloped state, and the whole system's manual procedure is inconvenient and complicated. Clients in the real-time consultancy system can be excessively thick, necessitating the utilization of numerous resources on the system. This is why the proponents developed their proposed system.

Researchers from iNetTutor presented a mobile app hotel reservation system. The project is entitled “Mobile App Hotel Reservation System with SMS Notification using iTexMo AP”. The goal of the study was to design, develop, and implement a mobile-based application that would allow hotel visitors to book rooms ahead of time. The application speeded up the hotel reservation process. The study allows the hotel guests to easily

book rooms while also making the job of the hotel reception desk easier. Hotel customers can plan their visit by choosing a date, room, and duration of stay. The hotel industry benefited significantly from the application's implementation. Hotels can handle a higher number of guests each day and process their queries and bookings more efficiently. Hotel guests can also book hotel accommodations quickly and easily without wasting time or effort.

Godfrey (2011) developed a management system for the Ranova Hotel. It is designed for hotel workers to utilize, for better managing of the hotel operations, and to provide user convenience. This dynamic web-based application was developed with the objectives of providing users a platform to reserve accommodations at the Ranova Hotel. Due to several issues with manual systems, such as data redundancy, loss, or damage, it is also developed to replace the manual system that was previously in use. Problems with the manual system were addressed with the implementation of this system.

Hotel room reservations are the focus of a web-based application project called "Hotel Booking System Android Project" created by researchers from Freeprojects. This project, which is an android-based system, seeks to give users a more practical way to reserve hotel rooms through their mobile device. This app may be installed and set up by users, and it works with all Android mobile devices. This system for managing hotels has a number of modules available. A few of the system's main modules are payments, services, clients, guests, and booking. In developing this project, the researchers have used MySQL database, PHP was used to create the entire WebAPI, and Android Java was used to create the all the front-end logic.

Real-time Monitoring

This feature is used in the proposed system to allow customers to book whenever they want, day or night, and receive immediate confirmation of their reservations. Customers can avoid calling and making repeated daily inquiries by using real-time booking. According to Jun Rey Esparago (2013), an online hotel reservation system allows clients and visitors to book rooms directly over the internet after confirming room availability in

accordance with the schedule. OHRS is a powerful and effective piece of software that is very simple to operate. The OHRS gives you complete control and authority when reserving a hotel or motel room online. This means that they may keep track of all guest payments, as well as submit their own room descriptions, amenities, rates, and allocations into the Reservation System. You can also use OHRS to confirm your reservation on the hotel's website in real time and complete the transaction quickly.

Sarmiento (2020) also developed a monitoring system that allows users to track the status and updates of their reservations in real time. Prior to the development of the online system, the hotel used a manual booking system in the form of Excel, which required guests to book rooms by phone or visit the hotel to access the company's services. The previous method lacked a feedback mechanism and was unable to deliver real-time updates on their services to their clients. The manual method of hotel reservation, information record keeping, and report generating was replaced with the online system.

Online payment processing

This feature is also used in the proposed system. Online payments have numerous advantages for all parties involved. Hotels that prioritize accepting online payments might benefit from increased data security and improved client experiences. In this day and age, having online payment methods is beneficial to the hotel because guests today want smooth and seamless transactions. Chan et al. (2015), who developed an online reservation and billing system for Yuj Inn Hostel. The proposed system also aided in providing guests with quick access to room reservations and a billing system that made it easier for management to compute guest bills. The invoicing method includes the cost of the room rental as well as other Yuj Inn Hostel services. Every transaction is automatically kept in a database that can only be viewed by the management admin with the use of a password. The system also handles rescheduling, rebooking, and cancellation of reservations for visitors.

Delizo and Esguerra (2013) included an online payment option in their proposed hotel reservation and management system for the Lyceum of the Philippines University,

Batangas Campus. When the reservation button on the main page is clicked, the procedure for making reservations will be displayed as part of the system's user interface. To make a reservation, the user must first complete the necessary registration information. After clicking the Rooms link, the user will be asked to enter their preferred rooms. At the Detail link, users must provide their login and password, as well as their personal details. After clicking the Rooms link, the user will be asked to enter their preferred rooms. At the Detail link, users must provide their login and password, as well as their personal details. The user/client must submit a 10% down payment through credit card to confirm the reservation procedure. The system will first compute the overall reservation fee based on the hotel room pricing and length of stay, and then take 10% of that as a down payment. The payment details will be displayed, as well as the ability to update the payment. This is required in order to review the client's information before it is sent to the system.

Making payments through the system was one of the features Godfrey (2011) included in his management system project for the Ranova Hotel. A customer's bill is automatically generated upon check-out by subtracting the check-in date from the check-out date and multiplying the result by the daily room rate plus extra fees. Then the bill must therefore be saved in the system's database table. This hotel management system's main objective is to standardize and simplify the monthly and daily operations of the hotel, such as room operations, customer check-ins and check-outs, room assignment based on customer needs, and, most importantly, bill computation for which online payment options are available. Each of these is performed repeatedly on a regular basis.

In their project entitled "Hotel Booking System Android Project", researchers from Freeprojects included a payment module that allows customers or users to make online payments using a mobile device. This system, which is an android-based application, can handle payments, services, customers, rooms, and reservations for hotels. This system consists of a number of modules accessible for managing hotels, and one of the main modules is payments. All operations related to payments are controlled by this payment module. In this project, an advanced search tool has also been implemented enabling

records to be searched on different criteria, including payments. All the modules, such as Hotel, Customers, and Payments, are tightly integrated and can track the information easily.

Advanced Reporting

This is an essential feature that can allow the proposed reservation system to generate reports on a daily, weekly, monthly, quarterly, and yearly basis, providing historical data on the hotel's performance. It will be much easier for Mary Alston Hotel employees to assess and forecast accurately based on market demand, occupancy, and season, especially when the hotel starts to be accessible to the public. As a result, it will assist in determining the appropriate pricing to sell the right room to guests, resulting in increased revenue. Deeti et al. (2016), developed a hotel management system that can generate reports to measure the performance of the hotel. When a client visits the website, the user components are designed to handle the transactional state that arises on the system. The system's major outputs are tables and reports. Tables are constantly being generated to meet the needs of the moment. Reports, as one might expect, carry the gist of all information flowing through the institution. This system is able to generate reports for various inputs at different modules. Reports are issued weekly and monthly to assess performance. This system, like the one proposed for the Mary Alston Hotel, is primarily concerned with hotel maintenance and management. In the database's core section, it is largely responsible for hotel management. The system provides details about the many hotels that are available, as well as their current availability status. Guests can visit the website and fill out the required information to register with the system. Each registered guest has the ability to request unit reservations. The guests are given information about the availability of the units because they have requested a specific time.

Godfrey (2011) developed a management system with a report-generating feature for the Ranova Hotel. With the help of this feature, a number of reports based on the information gathered by the system can be generated. The hotel management can track the hotel's performance in the hospitality industry with the aid of these reports. This system also keeps track of customers' requests as they move through different offices while their

transactions are being processed. This system generates reports on the status of clients' requests that are accessible to the staff, reducing the amount of time clients must wait for responses when they check on the status of their requests. The system's ability to generate summary reports makes it easier for the employees to keep track of the transactions that are being processed. Additional modules in this system produce reports including those on room status and reservation requests. The room status module is used to search the database using room types and generate reports detailing the room number, room type, and current status of the rooms of the requested type. The reservation request module runs a database search based on check-in dates or room type, and it generates a report of all requests for particular rooms between certain check-in dates. The results of the search include the room type, room number, check-in and check-out date, and client name.

The generation of reports is another function included in Patrick Sarmiento's project entitled "System Modules of Online Hotel Reservation System." The researcher designed an online platform that will feature customer profile management, room management and reservation, and report generation, since manual booking is not a good option for report generation and archiving of information. It's a web-based project that caters to the needs of the end user. The management acted as the administrator and had complete access to the system's functions. The system includes a front-end part that allows customers to view the hotel's rooms and other amenities. Most importantly, the system can produce reports that show the hotel's overall performance.

Another feature of the "Hotel Booking System Android Project," developed by Freeprojects researchers, is the ability to generate reports. There are many different types of modules available in this project to operate a hotel. Reports on various criteria, including payments, bookings, clients, rooms, and services, can also be generated using this system. All of the hotel's reports can be viewed online, and it can export the reports in excel and pdf formats. With all reports, print functionality is also implemented.

Review Management

This kind of feature on websites has become a valuable source of information and plays a significant role in customer decision-making, particularly in the hotel industry. Before choosing a hotel, potential guests would check for comments from former customers to get the most valuable stay. It also makes it easier for businesses to improve the quality of their products and services. Robbiani (2016) conducted a study entitled “Management of Online Customer Reviews in The Hospitality Industry: An Empirical Analysis of Management Practices in Three and Four Star Hotels in Switzerland”, showing the results of the analysis suggest that the rooms, location, and quality of staff service are the most important criteria, according to customer reviews. The breakfast, the quality of staff service, the location, and the rooms are the most positively reviewed areas by guests. The accommodations, loudness, and price have received the most unfavorable feedback from guests. Furthermore, it confirms that hotels with a higher score are more likely to respond than hotels with a lower score. Finally, the research suggests that hotels are more likely to respond to favorable remarks than bad ones.

Mobile Responsive

A research project entitled “Mobile App Hotel Reservation System with SMS Notification using iTexMo API” developed by the researchers from iNetTutor, is designed to make hotel reservations more convenient. The researchers proposed a mobile app for automating hotel reservations. Their aim was to provide hotel guests with a platform where they could book their schedules and rooms in advance in a quick, accurate, and convenient manner. The proposed system will take the place of the manual method, which has numerous problems. The study's goal was to determine whether the manual process of making hotel reservations is effective or needs improvement. The researchers discovered that the manual process is inefficient and inconvenient for both hotel guests and staff. To overcome the challenges of the manual method, the researchers created a mobile application that can be used to make hotel reservations electronically. The study found that the mobile application satisfied the respondents' needs and requirements. The majority of them saw the application's potential in enhancing the hotel reservation

procedure. The researchers strongly recommend that the developed application be implemented. This kind of feature is recommended by the researchers because of its efficiency and dependability in serving the intended users. Using this feature can also help in improving the reservation process of the Mary Alston hotel since it also removes all of the challenges that come with the manual method.

Researchers from Freeprojects which is the one of the largest web portals for the IT and management, developed a project entitled “Hotel Booking System Android Project”. It is a web-based application that is accessible online and allows users to manage their personal info, services, and hotel details with ease from their mobile device. This system, which is an android-based project, can manage a hotel's payments, services, clients, rooms, and bookings. The main objective of this application is to provide customers a more convenient way of booking hotel rooms using their mobile device. All Android mobile devices can use this application, so users can install and set it up. There are various modules available in this system for managing hotels. Payments, services, customers, rooms, and booking are a few of the system's primary modules. The researchers claim that this is also a major android project for a hotel booking system. It includes a function for advanced searches that allows you to look up records using different criteria, such payments and rooms. Additionally, the admins have the ability to add, edit, and remove bookings, customers, and services.

Table 2.1
Benchmarking

Features	<i>Online Hotel Reservation and Management System For The College of International Tourism And Hospitality Management (CITHM)</i>	<i>System Modules of Online Hotel Reservation System</i>	<i>Hotel Information with Online Reservation and Billing System for Yuj Inn Hostel</i>	<i>Hotel Management System</i>	<i>Ranova Hotel Management System</i>	<i>Hotel Management Of Online Customer Reviews In The Hospitality Industry: An Empirical Analysis Of Management Practices In Three And Four Star Hotels In Switzerlandsystem</i>	<i>Mobile App Hotel Reservation System with SMS Notification using iTexMo API</i>	<i>Hotel Booking System Android Project</i>	<i>Development of a Hotel Reservation and Billing System for the Mary Alston Hotel at Trinity University of Asia</i>
Automated/online reservation	✓		✓						✓
Real-time monitoring	✓	✓		✓					✓
Online payment processing	✓		✓						✓
Advanced reporting	✓		✓	✓	✓				✓
Review management						✓			✓
Mobile responsive	✓		✓	✓			✓	✓	✓

Synthesis

The researchers found that the above related literature and studies contain features that are similar to the proposed system. The purpose of this project is to automate the Mary Alston Hotel's room reservation and payment processes. This project also aims to attract the attention of potential hotel clients/guests, resulting in increased revenue.

The automated/online reservation feature is introduced in the first literature. When guests/clients request a room reservation, they can easily contact with the hotel administration via this system. This kind of system delivers the following occupancy levels, technological concerns, software license limits, operational policies, and regulatory compliance to users who use the internet or wifi. The second study in the literature focuses on the feature of real-time monitoring, which can allow guests and clients to book at any time of day or night and receive instant confirmation of their reservations. This powerful and effective real-time monitoring feature gives complete control and authority when booking a hotel or motel room online. The third feature that has been discussed in the literature is the ability to make payments online. In this day and age, having online payment options is important for the hotel because guests prefer smooth and easy transactions. This feature will be highly convenient when compared to traditional payment methods such as cash or check. This feature could also help the proposed system eliminate the security risks that come with dealing with cash. Advanced reporting is the fourth feature presented; it allows to run reports on demand, making it simple to review data, spot patterns, create charts, and evaluate your influence and outcomes. Review management is the fifth feature. This is important feature because it allows guests to submit reviews. Both the guest and the hotel owner benefit much from reviews. It is a helpful resource for potential bookers looking for an overnight stay. It's a technique for the hotelier to raise exposure and improve customer engagement, which benefits the guests as well. The final feature which is discussed in the literature is mobile responsiveness, which will make it easier for hotel visitors to book rooms and for hotel staff to access information.

Therefore, the researchers conclude that every system has strengths and weaknesses after reviewing the related literature and studies. The objective of those online reservation systems is essentially the same: to allow guests and clients to book rooms online. In addition to online reservations, several features can provide other valuable functions for visitors. As a result, the proposed reservation system is expected to be more advanced than those current systems. All of those features are likely to be applied to the proposed system, making it innovative. This project will be more advanced and responsive than the previously mentioned related literature and studies.

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