1.0 Introduction

Background

A hotel requires proper documentation and recording activities to track customers, reservations and ensure efficiency. In order to ensure all hotel's activities, run well, HighLife Hotel Management System is introduced. The HighLife Hotel Management System will be beneficial to the hotel management to ensure a smooth process of booking, payment and checking in and out of the hotel. Additionally, in this hotel management system, it is expected to have a strong database to ensure all information of customers are stored in the system and all records can be accessed. In today's world, a hotel is expected to work at its best and continuously for long hours, same as its system. Hence, the management system of a hotel is believed to be strong, efficient, and always active. The HighLife Hotel Management System offers a plethora of functionalities which makes it a complete and a go-to desktop-application. This hotel management system provides users with the ability to make reservations, payment, and view customer's bookings along with its details. The HighLife Hotel Management System also has forms and reports which displays the payment, cancellation, booking process and the booking confirmation along with all its details. The data is also stored in a database which eases the management to view all reservations and its types. Overall, the HighLife Hotel Management System offers efficiency, effectivity, ease, directness, and user-friendly layout which makes it a go-to system.

Previous work

This hotel management application can be used to handle tasks including maintaining client information, reserving rooms of four distinct types, ordering food for specific rooms, unbooking rooms, and displaying the bill. It can also be used to view available rooms and various room attributes. The application is menu-driven and runs until the user closes it. When the programme ends, file handling is used to save the hotel's current status (customer information and reserved rooms) in a file so that the old information is preserved when the programme is restarted. When the software is restarted, it examines the file to determine the hotel's prior status. Since it may be done concurrently, writing to files has been done in a separate thread. The user defined exception is thrown if they attempt to reserve a room that has already been reserved. Any unexpected exception is carefully handled in order to handle it.

2.0 Motivation

When developing a desktop-application for a hotel management system, the main motivation is to provide an easy and convenient way for hotels to manage their operations and for customers to book and manage their reservations. A desktop-application based system allows for easy access from any location, which can increase efficiency and flexibility for hotel staff. Additionally, a desktop-application based system can provide customers with a user-friendly interface for searching, booking and managing reservations. The system can also be integrated with online payment gateways, allowing customers to make payments online, and it can also be integrated with other systems like Global Distribution System (GDS), Channel Manager, and Property Management System (PMS). This will allow hotels for better occupancy management, reservations, prices and delivers real-time information across multiple platforms, which can help to increase revenue and hotel businesses. A hotel management system of an desktop-application can also provide valuable data and insights on customer behaviour and hotel operations, which can help hotels to improve their performance and profitability. This approach will aid hotel managers and investors in continuing to build their companies in light of the revolution taking place in our society right now. Young and inexperienced hotel managers will also benefit from and find it easier to operate their own establishments with the aid of this technology. As a result, these have been considered when creating a hotel management system.

3.0 Enhancement

Original Module Diagram

Module	Functionality	Team member
1.User options 2.Exit	User options allows the admin to manage activities like display room details, display room availability, room booking, check out and exit. Exit functionality allows the admin to exit the system.	Bryon Savero A/L Michael Leo
1.Check Out	Check Out functionality allows the admin to check guests out from the hotel by entering the guest's room ID.	Suvarnaa Mugunthan A/L Raman
1.Room Details & Availability	Room Details functionality allows the admin to view and choose the available room types. The chosen room's features and price per night will be displayed.	Thanees A/L Sehkar
1.Room Booking	Room Booking functionality allows the admin to manage the guest's booking information and payments.	Veytri A/L Yogan

Updated Module Diagram

Module	Functionality	Team member
1. Login 2. Log Out 3. Settings 4. Database Systems 5. GUI (Login, Log Out & Settings)	• Login functionality typically allows users, such as hotel staff and managers to access the system using a unique username and password. • Log out functionality allows users to securely end their session within the system, usually by clicking on a "log out" button. • Settings functionality allows the hotel admin to add, delete and view users. • Database system allows the admin to store and manage guest's personal information, room reservations and room availability. • GUI for Login, Log Out and Settings functionality includes: - Designing a form for entering a username and password and a button to submit the form. - Designing a button or link which the admin can click to log out of the system - Designing a tab that allows the admin to add, delete and show system users.	Thanees
1. Home Page 2. Check In 3. Check Out	• Home page serves as a dashboard for hotel staff and management to access the various features and	

4. GUI (Home Page, Check In, Check Out)	functions of the system. The features include: - Check In - Room Booking - Rooms - Check Out - Cancel Booking - Guests • Check In functionality allows the admin to check in guests into the hotel. • Check Out functionality allows the admin to check guests out from the hotel. • GUI for Home Page, Check In, Check Out functionality includes: - Designing a graphical view that displays the room availability. - Designing a form for entering guest information such as name, address, and credit card details. The form also consists of options to select the type of room, number of guests and length of stay. Once the admin has filled the information, they can submit the form and check-in. - Designing a form for entering room ID and the date of check-out.	Mugu
1. Room Booking 2. Rooms	• The room booking functionality system is used by the hotel admins	

3. Add, Delete and Show users 4. GUI (Room Booking, Rooms)	to reserve rooms for upcoming stays. The features include: - Room Selection - Reservation Management - Reservation Confirmation • Rooms functionality allows the admin to see the room availability. • Add, Delete and Show Users functionality allows the admin to add new admins into the system, delete admins from the system and show the current admins who are working in the system. • GUI for Room Booking, Rooms functionality includes: - Designing a form for selecting the date of check in, number of guests and type of room. It also have a calendar view for selecting the dates, and a list of available rooms with pricing. Once the guest has filled the information and confirmed the booking, they can submit the form and make the reservation. - Designing a list view of all the rooms in the hotel, including information such as room number, room type, occupancy status, and pricing. - Designing a billing system that generates invoices .	Veytri

1. Cancel Booking 2. Guest 3. GUI (Cancel Booking, Guests)	• The cancel booking functionality allows the admins to cancel or modify bookings on behalf of guests. The process for canceling a booking involves entering the room ID and then selecting an option to cancel it. • Guest functionality allows the admin to view the guest booking details which includes Room ID, room Type, Room Capacity, Check-In Date and Check-Out Date. • GUI for Cancel Booking, Guests functionality includes: - Designing a form for searching an existing booking by entering guest's room ID. Once the booking is found, the admin can cancel it with a confirmation step. - Designing a list of guest booking details which includes Room ID, room Type, Room Capacity, Check-In Date and Check-Out Date.	Bryon

4.0 Graphical User Interface (GUI)

Requirements

1. Download and install Java 8 (Oracle JDK 8)
2. Download and install XAMMP for MySQL server
3. IntelliJ IDEA

How to Run

1. Open XAMMP control panel, then start Apache & MySQL services
2. Import hotel.sql to import the database.
3. Run the Program using Project.java.

Login Credentials