



Multi-Hotel Booking System

¹Pratik Sanjay Shewale , ²Rohan Raosaheb Khode, ³Abhishek Mohansingh Pardeshi ⁴Vikash Prabhu

Yadav ⁵Dr. Pankaj Dashore

^{1,2,3,4,5} Computer Science and Engineering

¹Department of Computer Science and Engineering,

^{1,2,3,4,5} Sandip University, Nashik, India

Abstract : In the contemporary landscape of travel and hospitality, the demand for efficient and user-friendly hotel booking platforms has surged exponentially. The Context of this project emerges from the evolving dynamics of the hospitality industry, where travelers seek a centralized and streamlined solution to cater to their diverse accommodation needs. The Problem identified revolves around the fragmentation and inconvenience prevalent in existing hotel booking websites. Navigating multiple platforms, managing disparate bookings, and ensuring a cohesive travel experience pose a significant challenge for users.

This project addresses this problem by proposing a comprehensive Solution - a Multihotel Booking Website that integrates diverse accommodation options into a single, cohesive platform. This web application aims to enhance user experience by simplifying the booking process, providing a centralized management system for reservations, and fostering a seamless travel journey. Multihotel Booking Website leverages advanced technologies to aggregate a wide array of hotels, ranging from budget to luxury, on a single platform. Users will benefit from a unified search interface, enabling them to compare and select accommodations effortlessly. The platform also facilitates secure and efficient booking transactions, ensuring a hassle-free experience for travelers. By addressing the current challenges in the hotel booking landscape, this project seeks to optimize the user journey, offering a one-stop solution for all accommodation needs.

The Multihotel Booking Website aims to transform the way individuals plan and execute their travel arrangements, simplifying the process and enhancing overall user satisfaction in the realm of hotel reservations. Through this initiative, we anticipate contributing to a more convenient and enjoyable travel experience for users across diverse demographics.

Keywords : Online hotel booking, Hospitality industry, Hotel reservation systems, User experience in hotel booking

I. INTRODUCTION

In the dynamic and ever-expanding realm the advent of digital technology has revolutionized the way travelers plan and book their accommodations. Our project aims to contribute to this transformative landscape by introducing a comprehensive multi-hotel booking website. This platform seeks to streamline the hotel booking experience for users, offering a one-stop solution for finding and reserving accommodations across a multitude of hotels. With a user-friendly interface and advanced search functionalities, our website aims to enhance the convenience and efficiency of hotel booking, diverse needs and preferences of a wide-ranging audience. The key feature of our multi hotel booking website is its extensive database, encompassing a vast array of hotels spanning various categories, from budget-friendly options to luxury establishments. Users can easily navigate through this rich repository of accommodations, leveraging advanced filtering options to refine their search based on location, price range, amenities, and other personalized criteria. By consolidating a diverse range of hotels on a single platform, our project aims to empower users with the ability to make informed decisions, ensuring they find the perfect lodging that

aligns with their unique preferences and travel requirements.

Multihotel booking website goes beyond conventional reservation platforms by incorporating social and community-driven features. Users can access reviews and ratings from fellow travelers, fostering a sense of trust and transparency in the booking process. Through this innovative approach, our project not only aims to simplify the booking process but also seeks to create a collaborative space where travelers can connect and enrich their journeys through shared insights and local knowledge.

II. EXISTING SYSTEM

The current system only offers information about specific hotels, with only a few allowing room reservations. The previous system failed to display room availability across multiple hotels and lacked security measures to protect both admin and customer information.

III. DISADVANTAGES OF EXISTING SYSTEM

- Users were restricted to making only one booking each.
- The process of updating the list of available rooms was sluggish.
- Security measures for both admin and user information were insufficient.
- The encryption used for passwords lacked adequate security.

IV. PROPOSED SYSTEM

The objective of the hotel management system is to deliver high-quality services to customers. This system is designed to cater to the needs of administrators, vendors, and customers, allowing them to efficiently reserve hotel rooms in advance to ensure a comfortable stay. Users, including admins, customers and vendors, can register and log in to the system. The administrator and vendor has access to booking information, enabling them to stay informed about reservations and daily income details. The primary goal is to streamline the reservation process and enhance the overall experience for all stakeholders.

V. ADVANTAGES OF PROPOSED SYSTEM

- Admin has complete control and oversight of the entire platform, allowing for efficient management of multiple hotels and vendors from a single dashboard.
- Admins can easily customize the platform, including pricing, availability, and promotional offers, to meet the changing market demands.
- Vendors can receive and respond to customer reviews, helping them improve services and build a positive reputation.
- Vendors can easily update their hotel information, room availability, and pricing in real-time, ensuring accurate and up-to-date listings.

VI. MODULE DESCRIPTION

There are Three Modules in the Hotel Management System

i. Admin

ii. Vendor

iii. User

i. Admin Module

Dashboard: In this section, admin gets overview of earnings, profit, total transactions, recent room bookings and package bookings.

Room Management: In this section, admin manages room settings, coupons, amenities, room categories and total rooms.

Room Bookings: In this section contains all bookings, paid and unpaid bookings.

Package Management: In this section, admin can manage package settings, coupons, categories.

Package Bookings: In this section contains all package bookings, paid and unpaid bookings.

Withdrawals Management: In this section contains payment methods and withdraw request.

Transactions: In this section consist all booking transactions.

Vendor and User Management: In this section admin can add vendor and customers, check registered vendors and customers.

Support Tickets: In this section admin manages all, pending, open and closed tickets.

ii. Vendor Module

Dashboard: In this section, vendor gets overview of total room, transactions, total room booking ,total packages and balance.

Room Management: In this section, vendor can add and manage rooms.

Room Bookings: In this section vendor manages all, paid and unpaid bookings.

Package Management: In this section, vendor can add packages and manage all packages

Package Bookings: In this section contains all package bookings, paid and unpaid bookings.

Withdrawals: In this section consist of vendor can make withdrawal request and also consist of withdrawals history.

Transactions: In this section consist all booking transactions.

Support Tickets: In this section vendor manages all, pending, open and closed tickets.

ii. User Module

Dashboard: In this section, consist of user information, room bookings, package bookings and support tickets.

Room bookings: In this section, user and view recent room bookings and can print invoices.

Package bookings: In this section, user and view recent package bookings and can print invoices.

Edit Profile: In this section, user can change profile details such as first name, last name, email, password and profile picture

VII. Figures and Diagrams

i. Zero-Level DFD Diagram

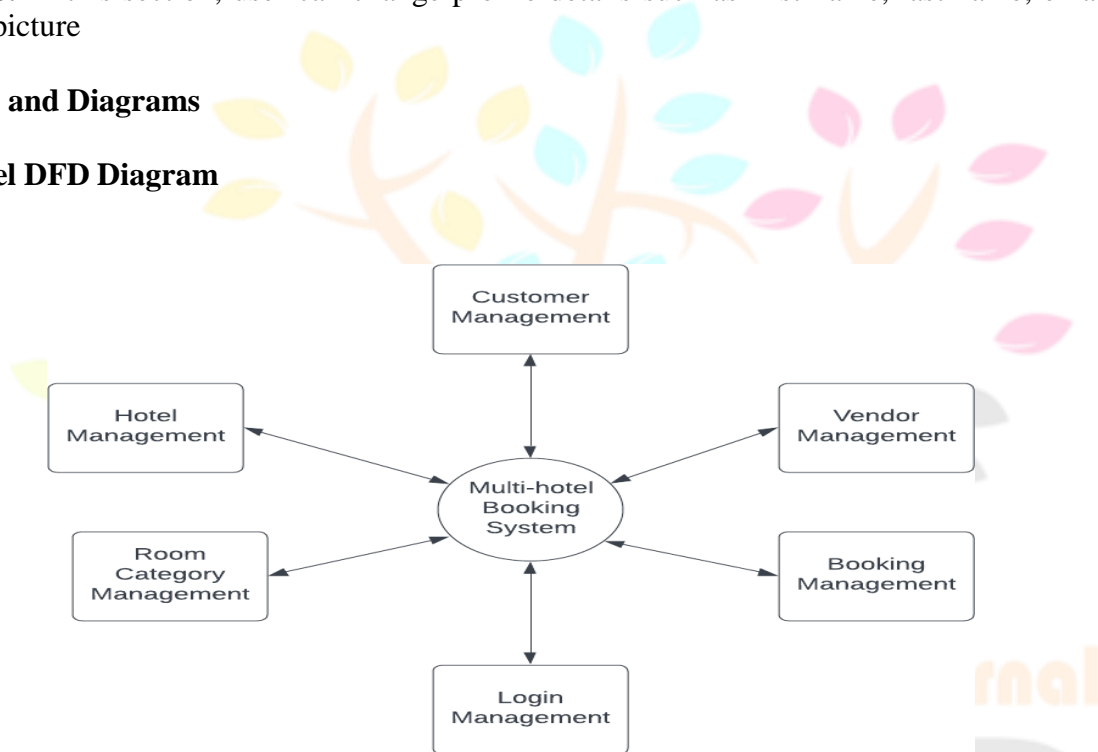
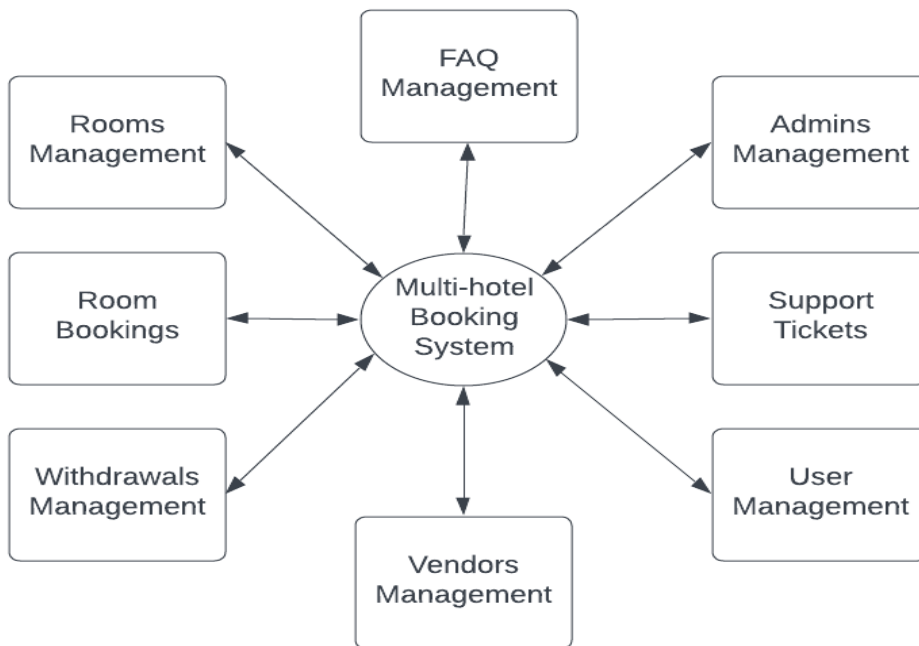


Fig no. 1: Zero Level DF



ii. First-Level DFD Diagram



iii. Second-Level DFD Diagram

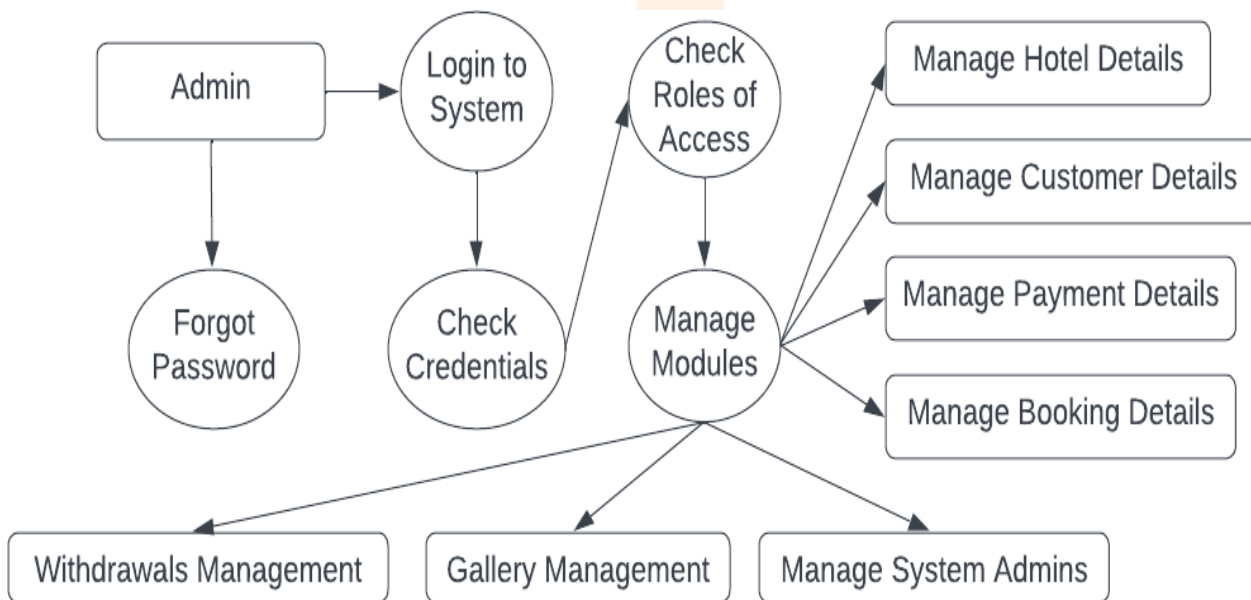


Fig no. 3: Second Level DFD

VIII. UML DIAGRAMS

i. Use Case Diagram

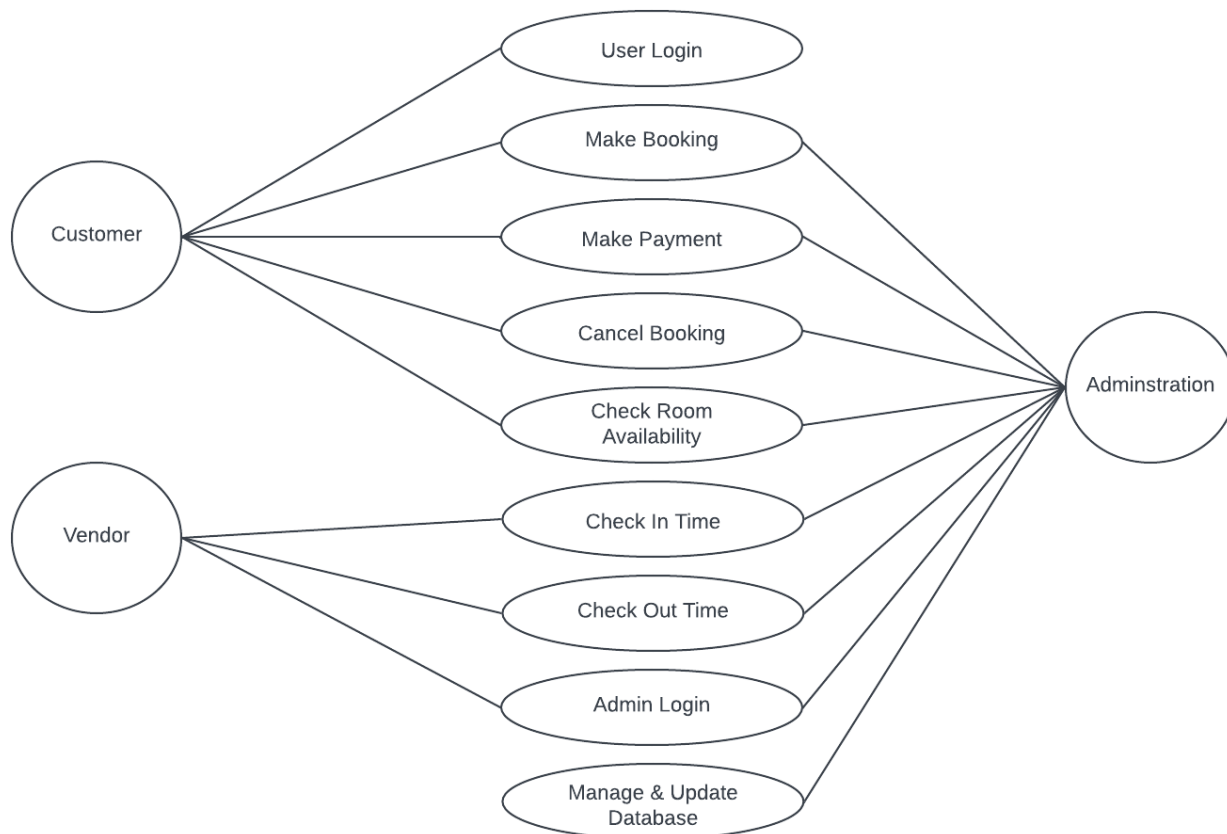


Fig no. 5: Use Case Diagram



ii. Sequence Diagram

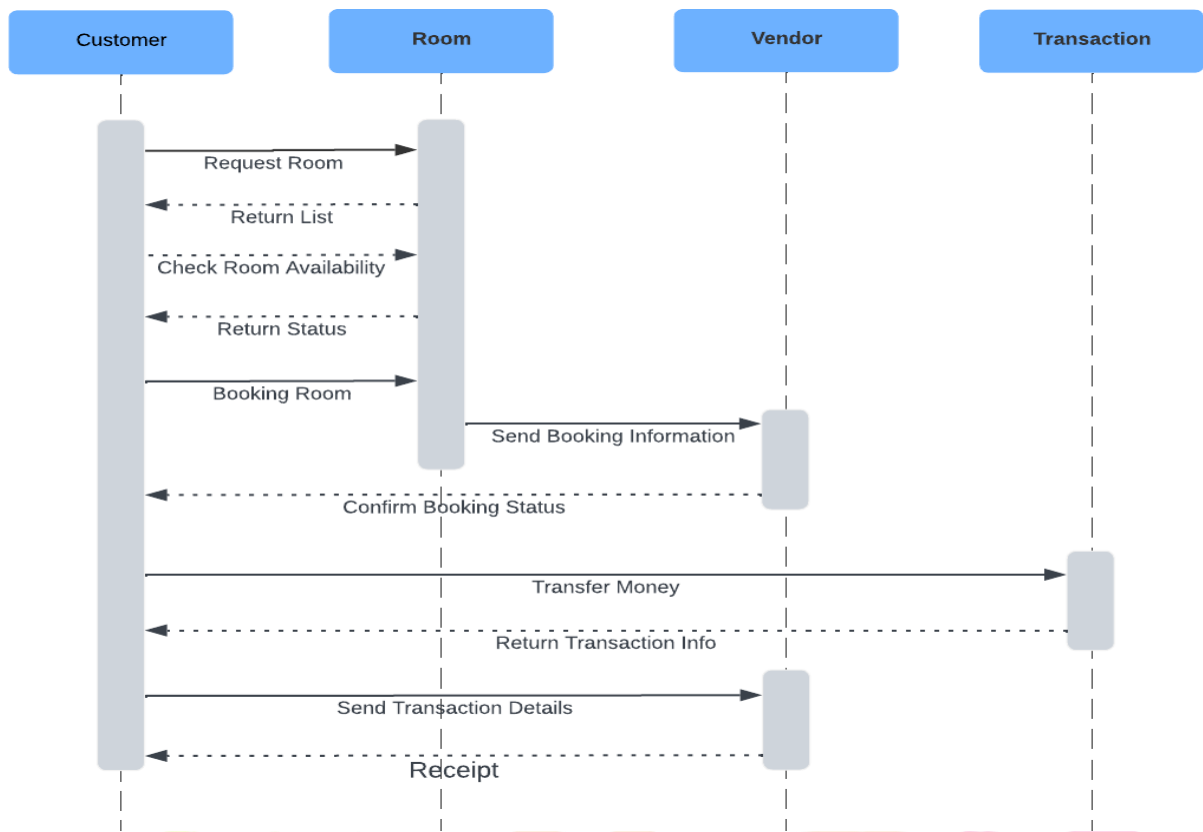


Fig no. 6: Sequence Diagram

IX. SCREEN SHOTS

I. Home Page

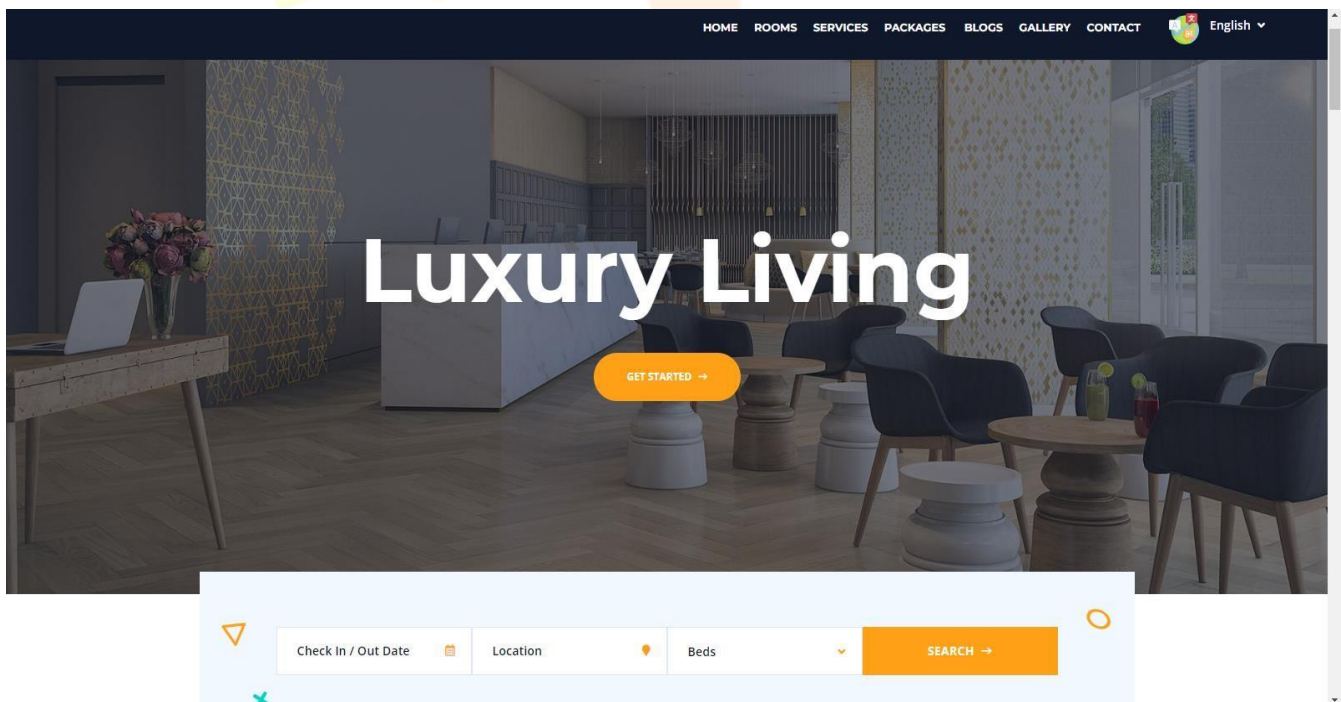


Fig no. 7: Home Page

II. Login Page

A login form with a white background. At the top, there are two buttons: a blue one with a Facebook icon and the text "LOGIN VIA FACEBOOK", and a red one with a Google icon and the text "LOGIN VIA GOOGLE". Below these are two input fields: "Username*" containing the text "user" and "Password*" with masked characters "*****". A reCAPTCHA widget is present with the text "I'm not a robot:" and the reCAPTCHA logo. At the bottom, there is an orange "LOG IN" button and a link "Lost your password?".

Fig no. 8: Login Page

III. User Registration

A registration form with a white background. It contains four input fields: "Username*", "Email Address*", "Password*", and "Confirm Password*". A reCAPTCHA widget is present with the text "I'm not a robot:" and the reCAPTCHA logo. At the bottom, there is an orange "SIGN UP" button.

Fig no. 9: Sign up Page

IV. Admin Dashboard

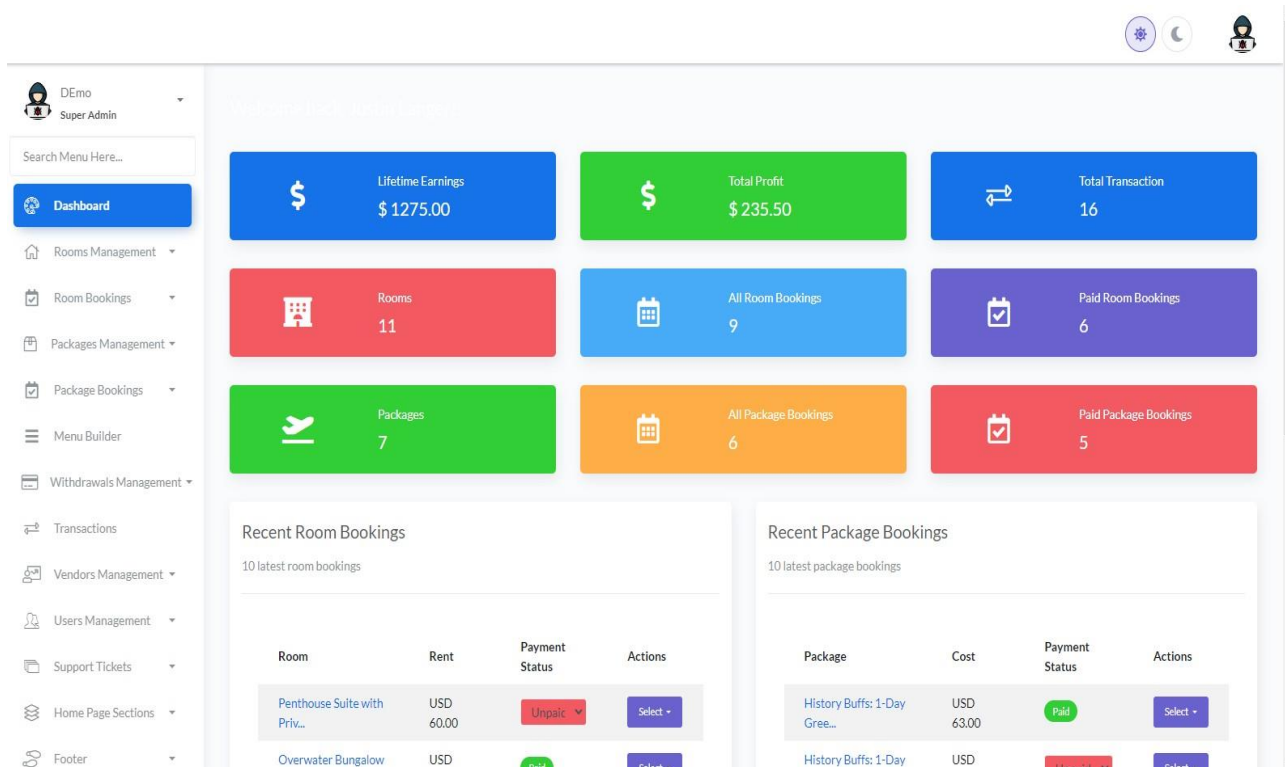


Fig no. 10: Admin Dashboard

V. Vendor Dashboard

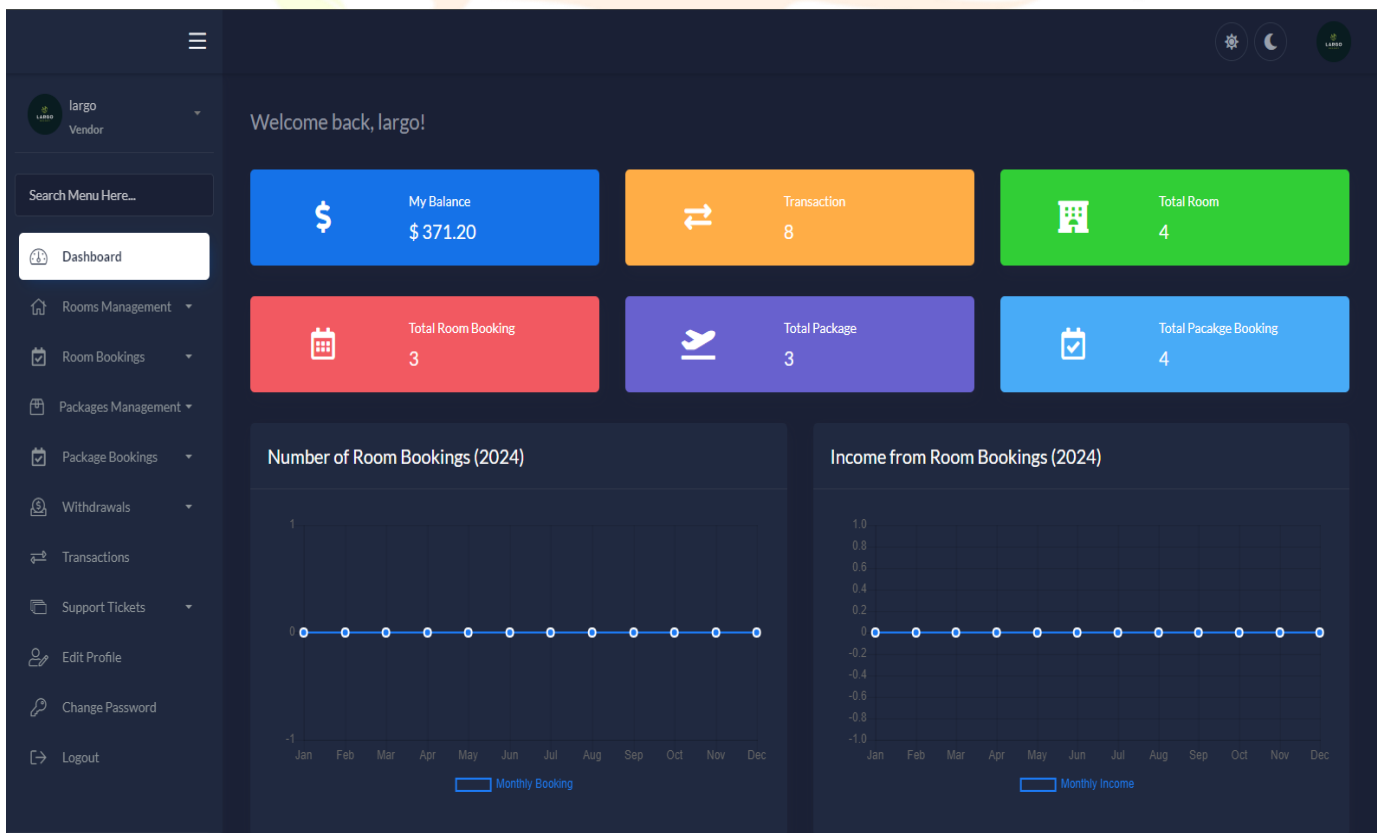


Fig no. 11: Vendor Dashboard

X. CONCLUSION

The development and implementation of a multi-hotel booking website present numerous advantages and opportunities for both users and businesses in the hospitality industry. By offering a centralized platform where users can conveniently browse and book accommodations across a diverse range of hotels, the website enhances the overall user experience and streamlines the booking process.

One of the key benefits is the increased choice and flexibility it provides to travelers, allowing them to explore various options and select accommodations that best suit their preferences, budget, and travel requirements. The website's comprehensive search and filtering features contribute to a more personalized and tailored booking experience.

For hoteliers and property owners, participating in a multi-hotel booking website expands their reach and visibility, tapping into a broader audience and increasing the chances of attracting bookings. The centralized management system simplifies the administration of room availability, rates, and reservations, reducing the risk of overbookings and ensuring efficient operations.

Additionally, the website fosters healthy competition among hotels, encouraging them to improve their services, offer competitive pricing, and enhance their online presence. This competition ultimately benefits the end-users as they can access better deals and promotions.

REFERENCES

- [1] Pattan, Azgar, et al. "Hotel Booking Management System." *International Journal of Creative Research Thoughts*, vol. 10, 6 June 2022.

