



A

**CAPSTONE REPORT ON
“HOLIDAY HOMES MANAGEMENT SYSTEM”**

**UNDER THE SUBJECT
“CAPSTONE PROJECT PLANNING [22518]”**

**IN PARTIAL FULFILMENT OF THE AWARD OF
DIPLOMA IN
COMPUTER ENGINEERING**

SUBMITTED BY

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UNDER THE GUIDANCE OF

Mrs. M. A. BIRNALE

GOVERNMENT POLYTECHNIC KARAD 2023-2024

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Certificate

This is to certify that the project work titled

“Holiday Homes Management System”

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have completed the Capstone Project Report titled as “Holiday Home Management System” as part of curriculum of Capstone Project Planning [22018] of Maharashtra State Board of Technical Education, Mumbai for the partial fulfilment of Diploma in Computer Engineering in the Academic Year 2023-2024.

Place: **Karad**

Date:

Mrs. M. A. Birnale

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ABSTRACT

In this micro-project, we will create Website on topic of Holiday Homes Management System. At tourism place there are many holiday homes are present , there is no any system or web application to manage it. Purpose of this project is to develop web application so that online platform is become available for that homes. Through this system, potential customers will have the capability to effortlessly search for available rooms and make reservations, streamlining the booking process and enhancing the overall holiday home experience.

After admin login, an "Admin Dashboard" is typically presented. This dashboard provides the administrator with a centralized interface to manage and oversee various aspects of the Holiday Homes Management System. After logging in, users are presented with a user-friendly interface known as a "User Dashboard." This dashboard typically offers a personalized and intuitive interface where users can easily search for holiday homes, view detailed property listings, check their booking history, manage reservations, and update their profile information.

In developing the Holiday Homes Management System, the front-end components are built using HTML, CSS, and JavaScript to create the user interface. AJAX is employed for asynchronous data transmission, enhancing the user experience, while the Bootstrap CSS framework is utilized to expedite design development. Additionally, various plugins and libraries are integrated to facilitate animations and invoice generation. On the back end, PHP serves as the server-side scripting language, handling core functionality, while MySQL is the chosen database management system for storing and retrieving data. This combination of frontend and back-end technologies ensures a robust and responsive platform for managing holiday homes efficiently. The project streamlines the management of holiday homes, making it easier for property owners to list, update, and handle reservations, ultimately maximizing their property's occupancy and revenue potential.

ACKNOWLEDGEMENT

We take it an opportunity to thank all those who had directly and indirectly inspired us and lead to successfully completion of this Capstone Project report.

We express sincere thanks to the Principal **Dr. Patil R. K.** for allowing us this report as part of our academic learning. We extend our sincere and heartfelt thanks to our esteemed guide, **Mrs. M. A. Birnale** of Computer department, for providing us with the right guidance and advice at the crucial junctures and for showing us the right way.

We also take this opportunity to express a deep sense of gratitude to our class coordinators for their cordial support, valuable suggestions and guidance. We extend our sincere thanks to our respected Head of the Department **Mrs. Patil S. B.** for allowing us to use the facilities available. We would like to thank the other faculty members also, at this occasion.

Last but not the least, we would like to thank our friends and family for the support and encouragement they have given us during the work of our project.

Yours sincerely,

Mr. Pratik Pramod Shejwal

Miss. Pratiksha Arjun Pawar

Miss. Riya Sunil Kharade

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Chapter 1

1.1 Problem statement

In this micro-project, we will create Website on topic of Holiday Home. Management System. At tourism place there are many holiday homes are present , there is no any system or web application to manage it. Purpose of this project is to develop web application so that online platform is become available for that homes. Through this system, potential customers will have the capability to effortlessly search for available rooms and make reservations, efficient the booking process and enhancing the overall holiday home experience.

1.2 Objectives of project

Efficiently Manage Bookings: Enable users to easily book, modify, and cancel reservations for holiday homes through an accessible and user-friendly platform.

Streamline Operations: Automate administrative tasks such as managing reservations, payments, and property maintenance to increase operational efficiency.

Enhance Customer Experience: Provide a seamless and enjoyable experience for guests, from booking to check-out, ensuring satisfaction and encouraging repeat visits.

Resource Allocation: Optimize resource allocation by efficiently managing House inventory, and services to meet guest demands effectively.

Financial Management: Facilitate financial transactions, including secure payment processing, invoicing, and financial reporting for property owners and management.

Data Analysis and Reporting: Collect and analyze data to gain insights into customer preferences, popular booking times, and other trends, facilitating informed decision-making.

1.3 Organization of the dissertation report

1. Chapter 1 starts with the introduction of the project background which is the analysis of the Book store management system Website. Next this report will touch on the objective, necessity and problem definition that need to be carried out in order to complete this project . Thus, this chapter sketches an overview of the report.
2. Chapter 2 contains literature review on Holiday homes management system Website which is helpful for us to develop our project in proteus.
3. Chapter 3 gives a detailed block diagram description & about.
4. Chapter 4 contains working of UML diagrams of Website development.
5. Chapter 5 discusses the programming part.
6. Chapter 6 describes results of the computational study.
7. Chapter 7 concludes the report with directions for summary and discussion.

Chapter 2

2.1 Rationale

A Holiday Homes Management Website, it is justified by the shifting dynamics in travel preferences and the desire for unique, personalized experiences. Recognizing the demand for diverse accommodation options beyond traditional hotels, this platform provides an array of choices, from vacation homes to unconventional properties. Modern travelers increasingly seek localized and authentic experiences, craving stays in residential areas rather than typical tourist districts. The platform's flexibility, offering various booking options and customizable features, caters to the individual needs and preferences of diverse travelers.

For property owners, the website serves as an avenue to monetize their spaces, contributing to a decentralized network of income-generating holiday homes. The inclusion of transparent review and rating systems builds trust among users, fostering a community-driven approach to accommodation selection. Leveraging technology, these platforms streamline the booking process, making it user-friendly and accessible globally. In essence, a Holiday Homes Management Website responds to the evolving expectations of travelers, providing a convenient, diverse, and trustworthy platform for securing unique holiday accommodations worldwide.

2.2 Literature Review

Josh Bivens (2019) in his paper titled “The economic costs and benefits of Airbnb”, majorly emphasises on the following discoveries like cost viability of Airbnb as a first inclination for stay. The study states that the rental business of Airbnb makes cash by charging visitors and has for transient rental remains in private homes or condos booked through the Airbnb site. In numerous nearby markets, the appearance and extension of Airbnb is bringing up issues about its latent capacity negative effects on neighbourhood lodging costs, personal satisfaction in private neighbourhoods, business quality in the accommodation business, and neighbourhood governments' capacity to uphold civil codes and gather fitting duties.

We referred following Papers:

<https://www.epi.org/publication/the-economic-costs-and-benefits-of-airbnb-no-reason-for-local-policymakers-to-let-airbnb-bypass-tax-or-regulatory-obligations/>

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2366898

Chapter 3

3.1 Scope of the Project

Platform Development:

Create a user-friendly website or mobile app that allows hosts to list their properties and travellers to search and book accommodations. Implement secure and efficient payment processing systems. Develop features for profile creation, messaging, and reviews.

Search and Recommendation Algorithms:

Implement advanced search algorithms to help users find suitable accommodations based on their preferences (location, price range, amenities, etc.).

Develop recommendation systems to suggest properties to users based on their past searches and preferences.

User Authentication and Security:

Implement a robust user authentication system to ensure the security of user accounts and personal information.

Incorporate encryption measures to protect sensitive data, such as payment details.

Reviews and Ratings:

Create a system for users to leave reviews and ratings for both hosts and guests.

Develop algorithms to filter and display reviews, maintaining the credibility of the feedback system.

Booking and Reservation System:

Implement a reliable booking and reservation system that synchronizes availability calendars, handles booking requests, and sends confirmation notifications.

Host Management:

Provide hosts with tools to manage their property listings, including the ability to update availability, set pricing, and respond to booking inquiries.

Incorporate features to verify and validate host information to build trust in the platform.

Customer Support:

Develop a customer support system to address user inquiries, issues, and emergencies.

Consider integrating chatbots or automated systems for handling common queries.

Legal and Compliance:

Ensure that the platform complies with local laws and regulations related to short-term rentals and accommodations.

Implement terms of service, privacy policies, and other legal documentation.

Localization and Internationalization:

Make the platform accessible and user-friendly for a global audience by providing multiple language options, local currency support, and adapting to different cultural norms.

Marketing and Promotion:

Implement features to promote special offers, discounts, and events.

Integrate social media sharing and referral programs to enhance user acquisition.

Analytics and Reporting:

Incorporate analytics tools to track user behaviour, monitor the performance of listings, and gather insights for business improvements.

Generate reports on key performance indicators (KPIs) to inform strategic decision-making.

Integration with External Services:

Consider integrating with external services such as mapping and navigation tools, local event calendars, or transportation services to enhance the overall user experience.

Mobile Responsiveness:

Ensure that the platform is responsive and user-friendly across various devices, particularly on mobile devices.

Scalability:

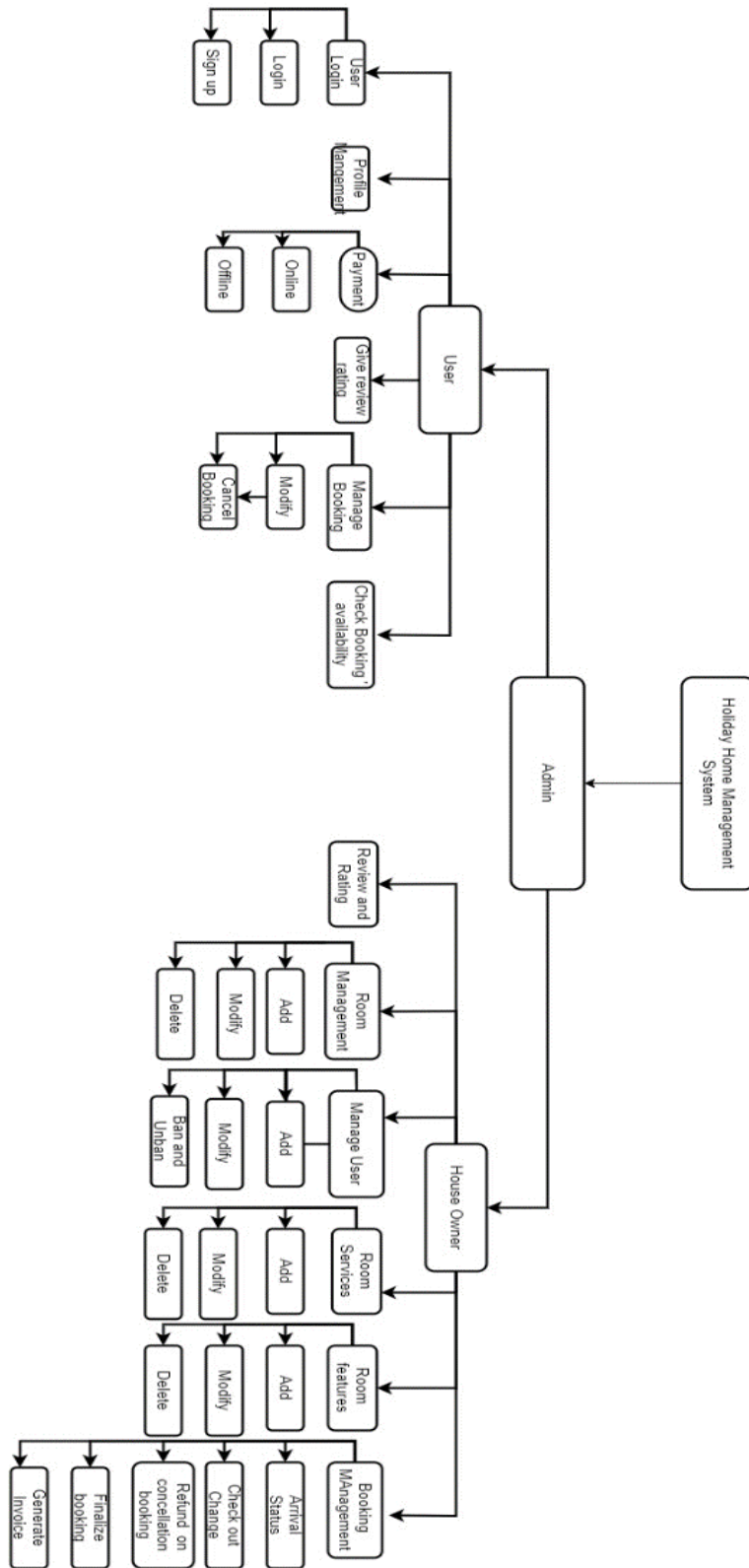
Design the platform to handle growth in terms of users, listings, and transactions.

Consider cloud-based solutions for scalability.

Feedback and Iteration:

Implement a system for collecting user feedback and iterate on the platform based on user suggestions and evolving market needs.

3.2 Proposed Methodology



Proposed Modules:

1. HOST:

1.1 PROPERTY MANAGEMENT:

Hosts can use this module to manage their properties on “Holiday Homes”. It includes features such as adding new properties, updating property details, setting availability, and managing pricing.

1.2 BOOKING MANAGEMENT:

This module allows hosts to view and manage incoming bookings. Hosts can accept or reject booking requests, view guest details, and communicate with guests directly through the platform.

1.3 GUEST COMMUNICATION:

Hosts can communicate with guests through the platform, addressing inquiries, providing additional information, and ensuring a smooth pre-arrival experience. This module centralizes communication to enhance host-guest interactions.

1.4 FINANCIAL TRACKING:

Hosts can track their earnings, view transaction history, and manage financial aspects related to their listings. This module provides transparency and accountability in financial transactions between hosts and Airbnb.

1.5 REVIEW AND FEEDBACK:

Hosts can leave reviews for guests, and vice versa, enhancing the trustworthiness of the platform. This module encourages a feedback-driven community, improving the quality of stays for both hosts and guests.

2. GUEST:

2.1 PROPERTY SEARCH:

Guests can search for properties based on location, dates, and specific preferences. The module includes filters for amenities, property type, and other relevant criteria to help guests find the perfect accommodation.

2.2 BOOKING REQUESTS:

Guests can send booking requests to hosts, specifying their dates of stay and any additional requirements. This module facilitates the booking process and ensures a secure transaction between guests and hosts.

2.3 COMMUNICATION WITH HOST:

Guests can communicate with hosts regarding property details, check-in procedures, and any other inquiries. This module centralizes communication, providing a convenient platform for clear and efficient dialogue.

2.4 PAYMENT AND TRANSACTION HISTORY:

Guests can make payments securely through the platform, and this module enables them to view transaction history, receipts, and details of their financial interactions with hosts.

2.5 REVIEW AND FEEDBACK:

After the stay, guests can leave reviews for the hosts, contributing to the overall reputation of the property and host. This module encourages accountability and transparency within the Airbnb community.

3. ADMIN:

3.1 USER MANAGEMENT:

The admin module allows for the management of user accounts, ensuring a secure and reliable platform. It includes features for account creation, verification, and user role assignments.

3.2 LISTING MANAGEMENT:

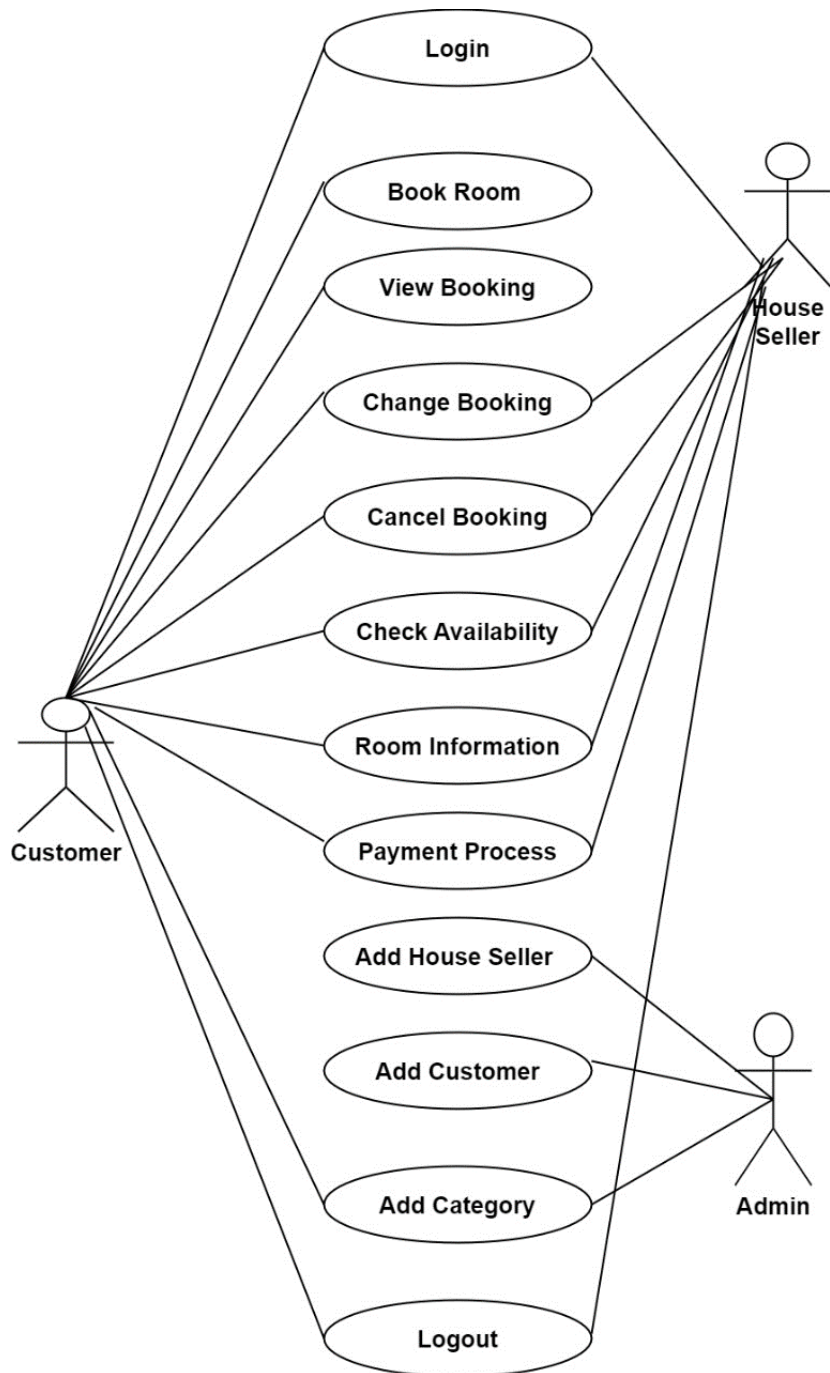
Admins can oversee and manage property listings to ensure compliance with Airbnb policies. This module includes features for reviewing, approving, or removing listings as necessary.

3.3 PLATFORM ANALYTICS:

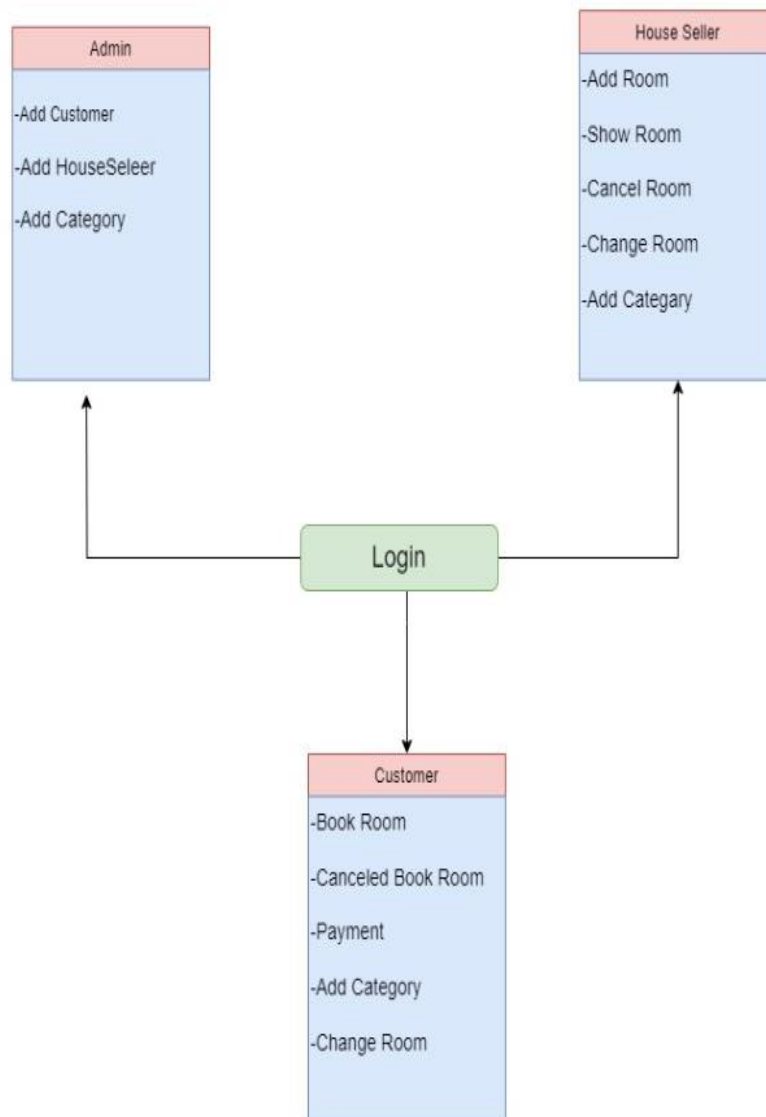
Admins can access analytics and reports to gain insights into user behavior, popular listings, and overall platform performance. This module supports data-driven decision-making for continuous improvement

Chapter 4

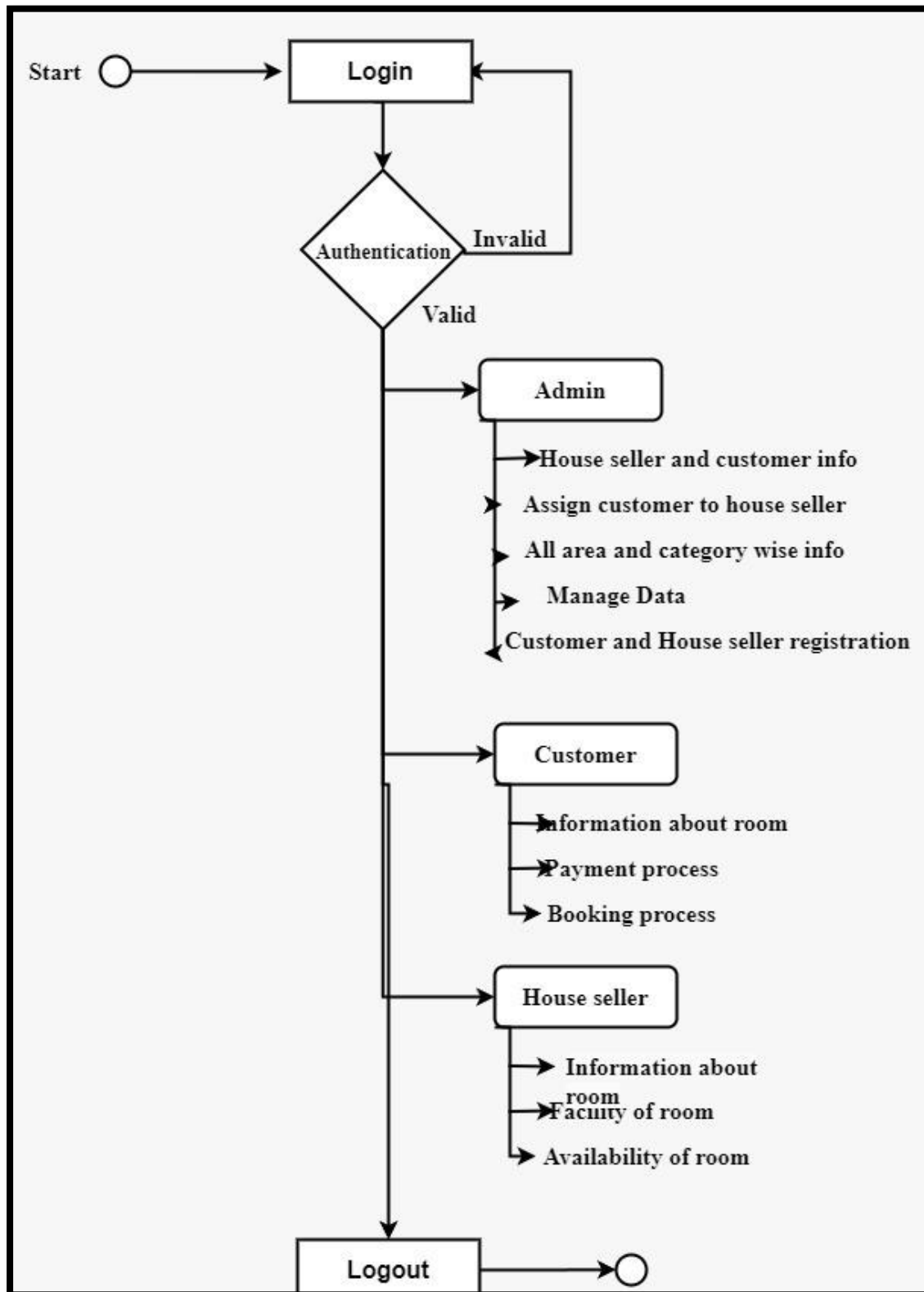
4.1 Use Case Diagram



4.2 Module Diagram

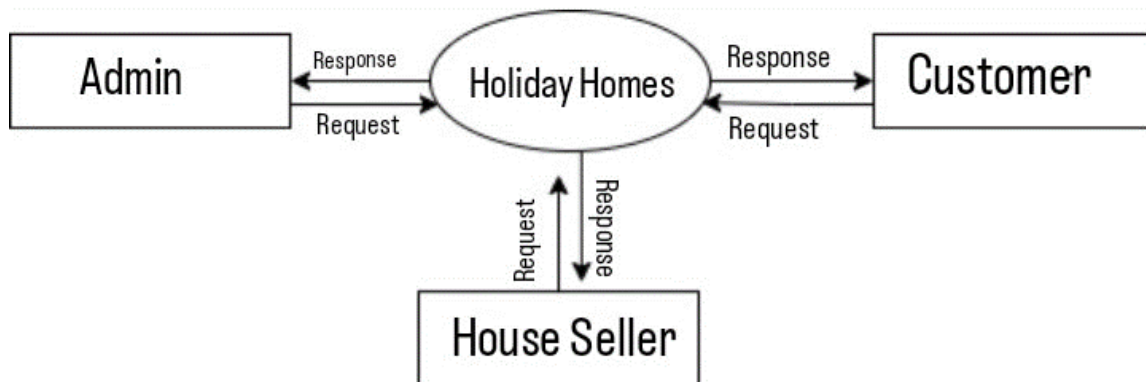


4.3 Activity Diagram

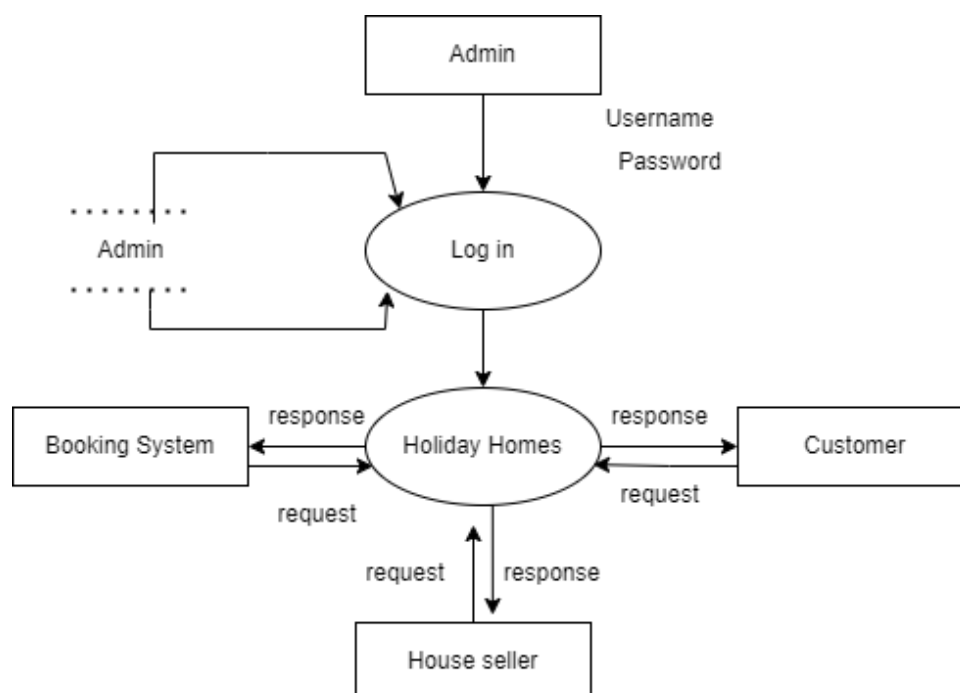


4.4 Data Flow Diagram

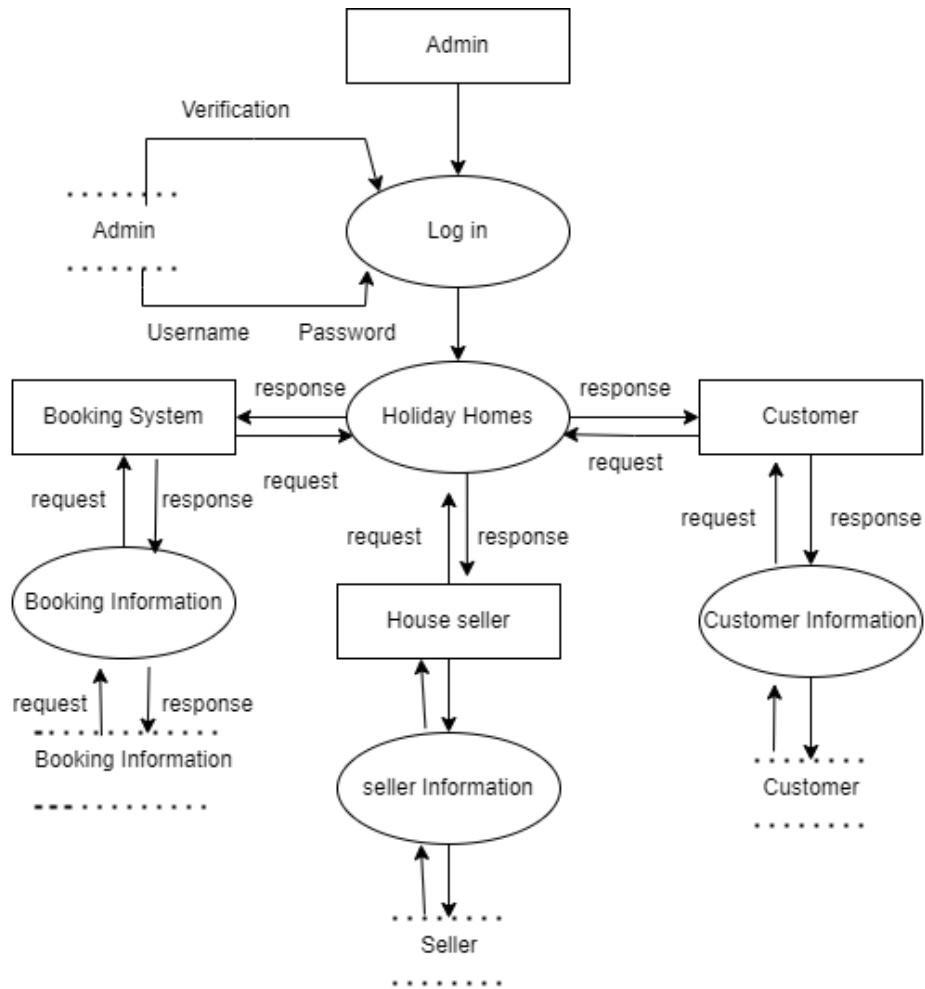
0 level DFD



1 level DFD



2 level DFD



Chapter 5

5.1 Software/ Hardware Requirements

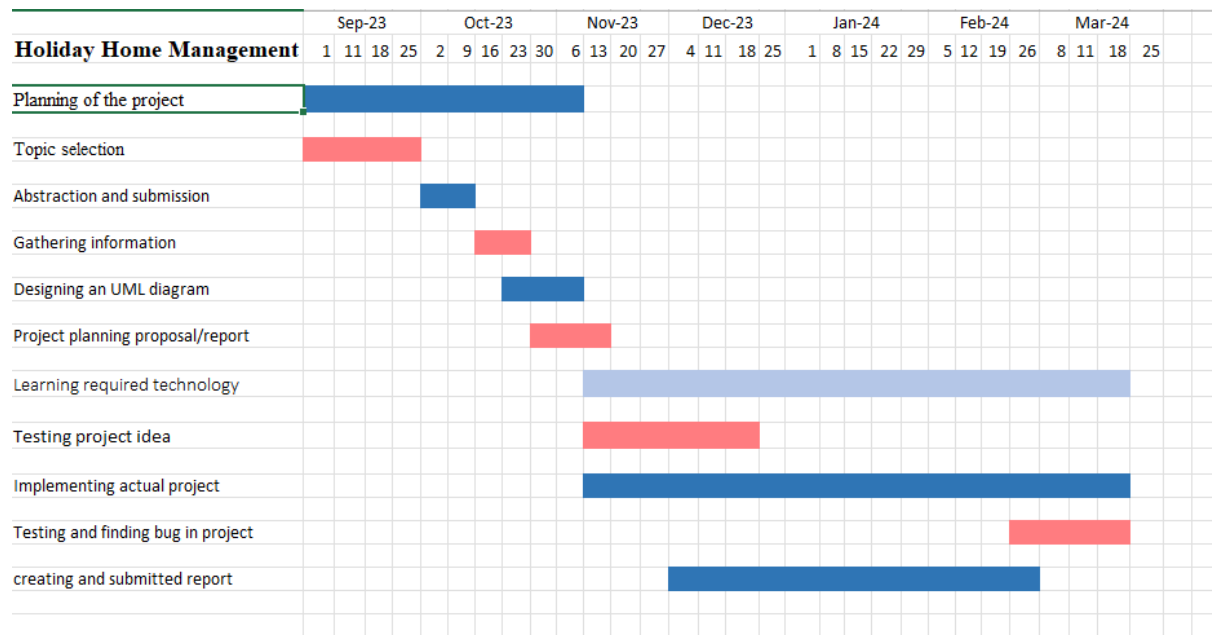
Sr. No	Name of resource	Specification	Quantity
1.	Computer System	Device Name: DESKTOPSUS0KGR Processor: 11th Gen Intel(R) Core (TM) i51135G7@ 2.40GHz 2.42 GHz System Type: 64-bit operating system, x64-based processor Version: 21HP	1
2.	Software	Microsoft Visual Studio Code	1
3.	Browser	Firefox	1
4.	Office S/W package	Microsoft word 2011	1
5.	Database	Mysql	1

Chapter 6

6.1 Action Plan

Sr. No	Details of Activity	Planned Start Date	Completed Finish Date	Name of responsible Team Members
1.	Information Collection	01-08-2023	20-08-2023	Whole Team
2.	Presentation	21-08-2023	31-08-2023	Whole Team
3.	Topic confirmation	01-09-2023	19-09-2023	Whole Team
4.	Discussion	21-09-2023	30-10-2023	Whole Team
5.	Actual requirement collection	01-11-2023	20-11-2023	Whole Team
6.	Designing	21-11-2023	31-12-2023	Whole Team
7.	Construction of hardware	01-01-2024	30-01-2024	Whole Team
8.	Code Implementation	01-02-2024	26-02-2024	Whole Team
9.	Assembling of Code into Hardware	04-03-2024	18-03-2024	Whole Team
10.	Final Presentation	04-03-2023	18-03-2024	Whole Team
11.	Final Reporting	23-03-2024	23-03-2024	Whole Team

6.2 Gantt Chart



Chapter 7

7.1 Advantages

1. Efficient bookings, reservations, and property management processes, saving time and reducing administrative workload.
2. Provides a convenient and user-friendly platform for guests to explore, select, and book holiday homes easily.
3. Expands the visibility of homes, reaching a broader audience through an online presence and potentially attracting more guests.
4. Automates tasks like payment processing, reminders, and notifications, improving operational efficiency.
5. Collects data that can be analyzed to understand user preferences, popular times, and trends for better decision-making.

7.2 Dis-advantages

1. Technical issues or system failures can disrupt bookings and operations, impacting user satisfaction.
2. Relies on stable internet connections and technical infrastructure, making the system susceptible to outages or downtime.
3. Requires robust security measures to safeguard user data and financial information against cyber threats.
4. In a competitive market, standing out among numerous similar platforms can be challenging.
5. Regular maintenance and updates are necessary to ensure the system functions smoothly and remains up-to-date.

Chapter 8

8.1 Conclusion

In conclusion, the proposed Holiday Homes Management System aims to revolutionize the vacation rental experience by leveraging technology to enhance convenience, accessibility, and personalization. By providing a comprehensive platform for both property owners and holidaymakers, the system seeks to streamline the process of discovering, booking, and managing holiday homes.

The system prioritizes a user-friendly interface, ensuring that users can easily navigate the platform to explore a diverse selection of holiday homes. Whether seeking luxurious villas, cozy cottages, or unique accommodations, the system caters to the varied preferences of holidaymakers, contributing to a dynamic and personalized booking experience.

In summary, the Holiday Homes Management System aspires to redefine how holiday accommodations are discovered, booked, and enjoyed. By embracing modern technology, the system aims to make holiday planning more accessible, enjoyable, and tailored to the individual preferences of holidaymakers, ushering in a new era of efficiency and satisfaction in the realm of holiday home rentals.

8.2 Future Scope

Sustainability Initiatives:

Implementing eco-friendly features and promoting sustainable practices to attract environmentally conscious travellers.

Collaborations and Partnerships:

Forming strategic partnerships with local businesses, travel agencies, or experience providers to offer users a more comprehensive travel experience.

Flexible Booking Options:

Offering innovative booking options such as flexible check-in/check-out times, subscription-based models, or bundled travel packages.

Continuous Mobile Optimization:

Prioritizing mobile optimization and exploring future technologies that may redefine the mobile experience for users.

By staying abreast of technological advancements, market trends, and user preferences, a holiday home management system can position itself for sustained growth and success in a dynamic and competitive landscape.

Chapter 9

9.1 References

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- <https://www.epi.org/publication/the-economic-costs-and-benefits-of-airbnb-no-reason-for-local-policymakers-to-let-airbnb-bypass-tax-or-regulatory-obligations/>
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