E-Booking System for Local Store on Customer Loyalty.

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Abstract

The E-Booking System is an effective solution for local stores to attract and retain customers. This research paper explores the impact of E-Booking System on customer loyalty in local stores. The paper discusses the benefits of E-Booking System for local stores and how it influences customer satisfaction and retention. It also examines the factors that affect customer loyalty and how E-Booking System can contribute to customer loyalty. The study uses primary data collected from customers of local stores that implemented E-Booking System. The results show that E-Booking System has a significant positive impact on customer loyalty, as customers are more likely to continue shopping at stores that offer the convenience of E-Booking System. local market vendors and customers to determine their perceptions of the proposed system.

The online booking system for local stores employs a variety of technology tools to provide a seamless and efficient customer experience. On the client-side, JavaScript is utilized to create interactive features and enhance the user interface. The frontend framework, comprising of HTML and CSS, creates an attractive and user-friendly website design.

On the backend, the database of customers and local stores is stored

using SQL, which enables effective management and storage of large data sets. To connect the frontend and backend, PHP is employed, providing robust connectivity and efficient data exchange.

This advanced technology solution ensures customers can quickly and easily access the availability of products at local stores, compare prices, and place orders from the comfort of their own homes. Payments are securely processed through a variety of online modes, ensuring customer satisfaction and repeat business. The primary goal of an online booking system for local stores is to provide potential customers with the ability to conveniently check the availability and pricing of products from multiple local stores on a single platform. By utilizing the system, customers can place orders for their daily use groceries and general items from the comfort of their homes. The platform also facilitates secure payment transactions for added convenience. Additionally, customers can easily review product quality and other relevant details before making a purchase decision.

With our online booking system for local stores, customers can enjoy a hassle-free shopping experience. As soon as users access our website, they will be able to instantly check the availability of products at their local stores, eliminating the need to wait or waste time searching for items. Customers can easily compare prices for products at different local stores, making informed purchase decisions. The system also allows for convenient remote ordering, meaning customers can place orders from the comfort of their homes without waiting in line at local stores. Payment for products can be made using various online modes, providing a secure and hassle-free transaction process.

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1.0 INTRODUCTION

The local store online booking system has been designed to provide an effortless and convenient shopping experience to customers. By accessing our platform, potential customers can seamlessly check the availability of products, compare prices across different local stores, and complete secure payment transactions through our website.

Customers can effortlessly order their daily groceries and general items from the comfort of their homes, without the need to physically visit the local store. Our platform allows customers to review product quality before making a purchase decision, ensuring their satisfaction with their order.

The system has been designed to streamline the ordering process, making it effortless for customers to place their orders without facing any issues. The platform provides a comprehensive range of products, ensuring customers can conveniently purchase all their daily essentials in one place.

A renowned company has recently upgraded its booking system from manual to web-based, which will allow them to manage customer bookings efficiently while maintaining high standards of data security. This transition to a web-based system will also simplify the process of handling customer feedback and keeping track of online booking requests. To facilitate this, the company has engaged the services of a skilled developer to design and develop the web-based booking system.

This documentation provides a detailed illustration of the system's user interface, which will serve as the backbone of the web-based system. The user interface has been carefully designed to ensure a seamless and intuitive experience for both customers and staff. The new system will be easily accessible through a web-based platform, enabling customers to make bookings with ease, and allowing staff to manage bookings and customer data with enhanced efficiency.

The company's investment in a web-based booking system is a testament to their commitment to providing high-quality services to their customers.

With the help of a skilled developer, the company aims to build a robust and user-friendly system that can cater to the evolving needs of their customers.

2.0 UML DESIGN

Unified Modeling Language (UML) design is a simplified form of visualizing the system's design, which helps to depict the system's functionality and structure. The primary objective of UML design is to provide a clear understanding of the system's architecture and its components.

UML design comprises of 14 different types of diagrams, which serve different purposes in visualizing the system's design. These diagrams include Class Diagram, Component Diagram, Deployment Diagram, Object Diagram, Package Diagram, Profile Diagram, Composite Structure Diagram, Use Case Diagram, Activity Diagram, State Machine Diagram, Sequence Diagram, Communication Diagram, Interaction Overview Diagram, and Timing Diagram.

For the purpose of this project, we will focus on two primary UML diagrams - Use Case Diagram and Class Diagram. The Use Case Diagram provides a clear understanding of the system's behavior and how it interacts with its users. On the other hand, the Class Diagram depicts the system's structure and the relationship between its components, including classes, objects, attributes, and methods.

By utilizing these UML diagrams, we can develop a comprehensive understanding of the system's design, enabling us to create an efficient and effective system that meets the needs of its users.

Class Diagram

The Class Diagram is a widely used UML diagram in the field of software engineering design, known for its ability to represent the essential components of any object-oriented solution. It provides a detailed visualization of the system's classes, their respective attributes and operations, and the connections that exist between them.

In software development, the Class Diagram serves as a critical tool for effectively communicating the

system's design and structure to both developers and stakeholders. By providing a clear illustration of the system's components and their relationships, it enables developers to make informed decisions throughout the development process and ensures that stakeholders have a clear understanding of the system's functionality.

For our proposed new system, we have included a Class Diagram below, which provides a comprehensive overview of the system's design and structure. By utilizing this diagram, we can effectively communicate the system's functionality to developers and stakeholders, ensuring the successful development and implementation of the new system.

Literature Review

Customer loyalty is an essential component of business success. Loyal customers are more likely to make repeat purchases and recommend products to others. Studies have shown that customer loyalty is influenced by various factors, including convenience, customer service, product quality, and price. Local stores face the challenge of providing a personalized and convenient shopping experience to

customers while competing with larger retailers and online platforms.

The E-Booking System is an effective solution for local stores to enhance the customer experience and build customer loyalty. E-Booking System allows customers to book products online and pick them up in-store at their convenience, reducing the time and effort required to shop. This system offers customers a convenient and efficient shopping experience, which contributes to customer satisfaction and loyalty.
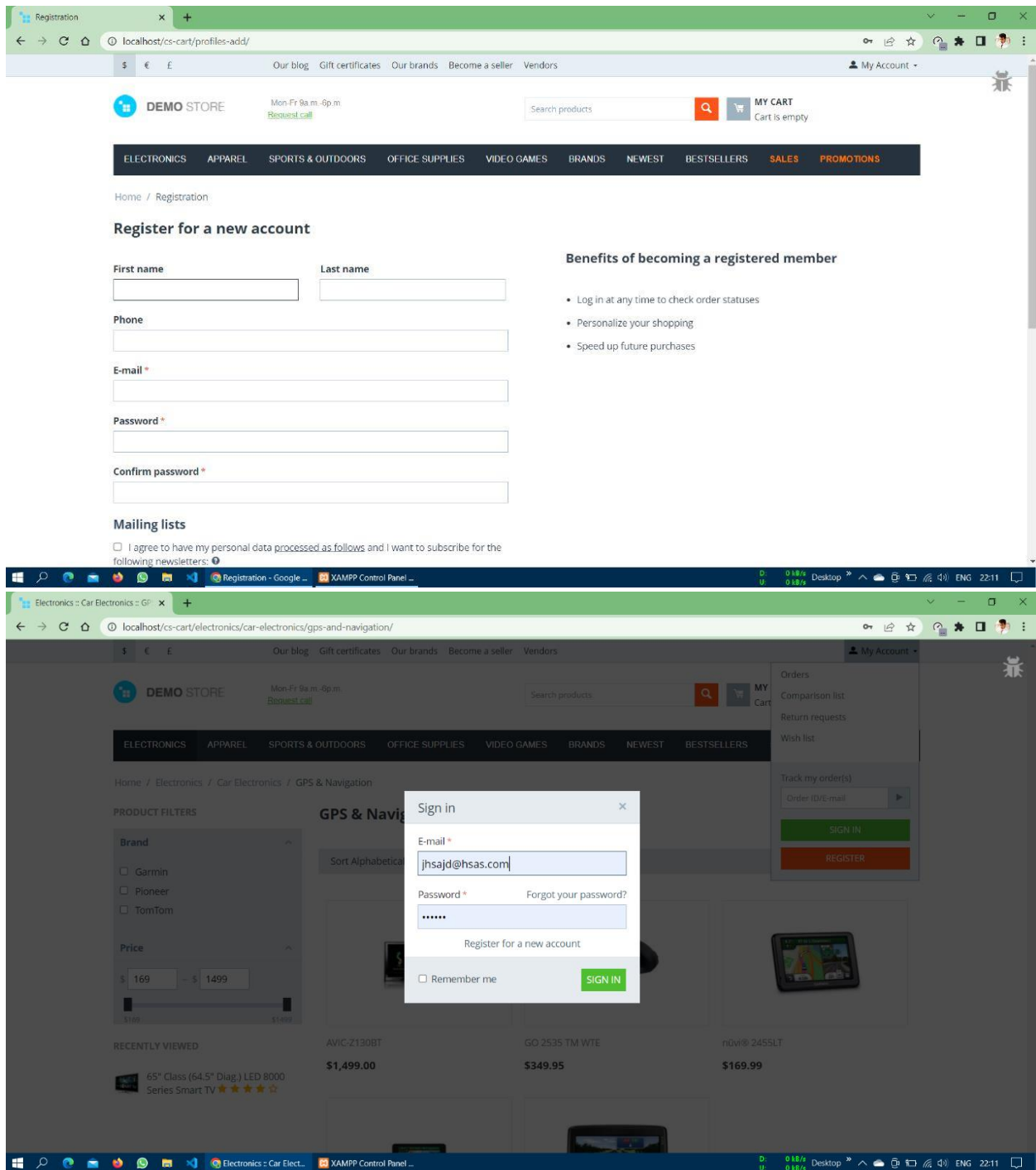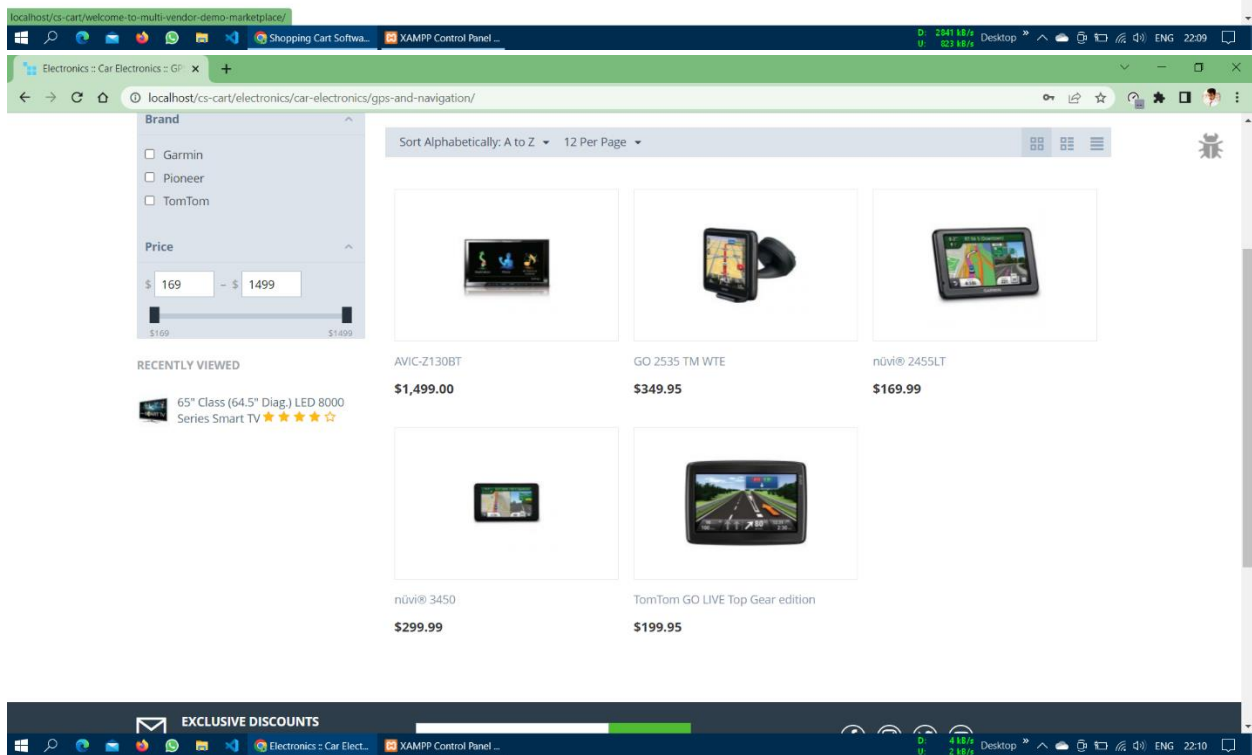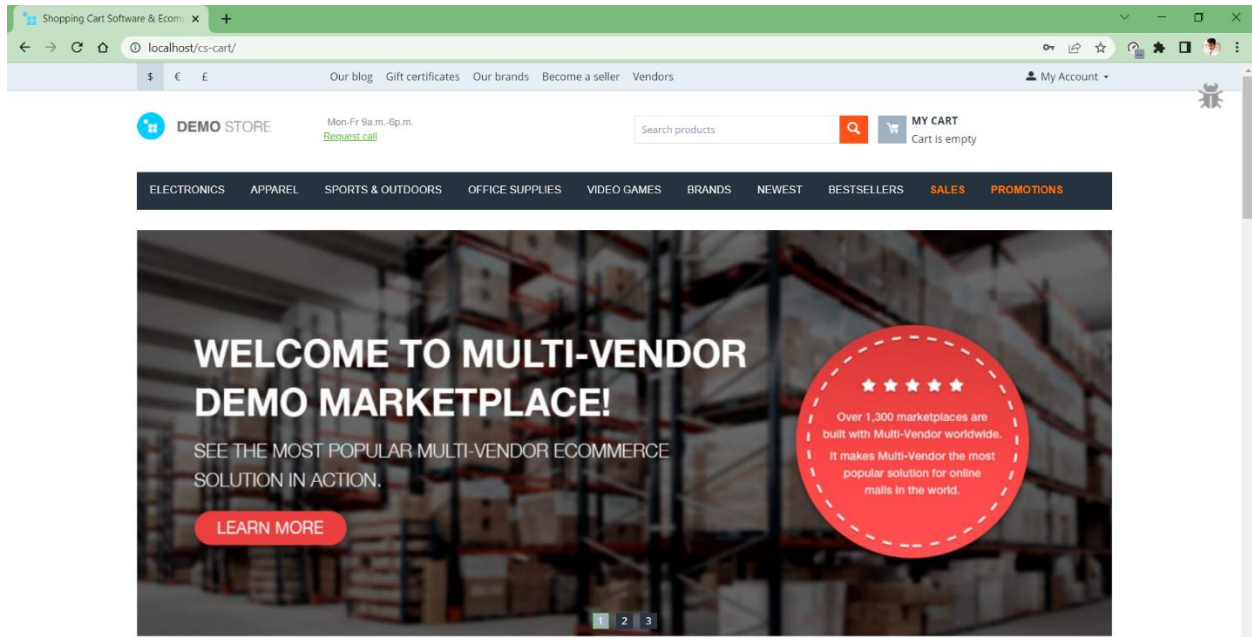
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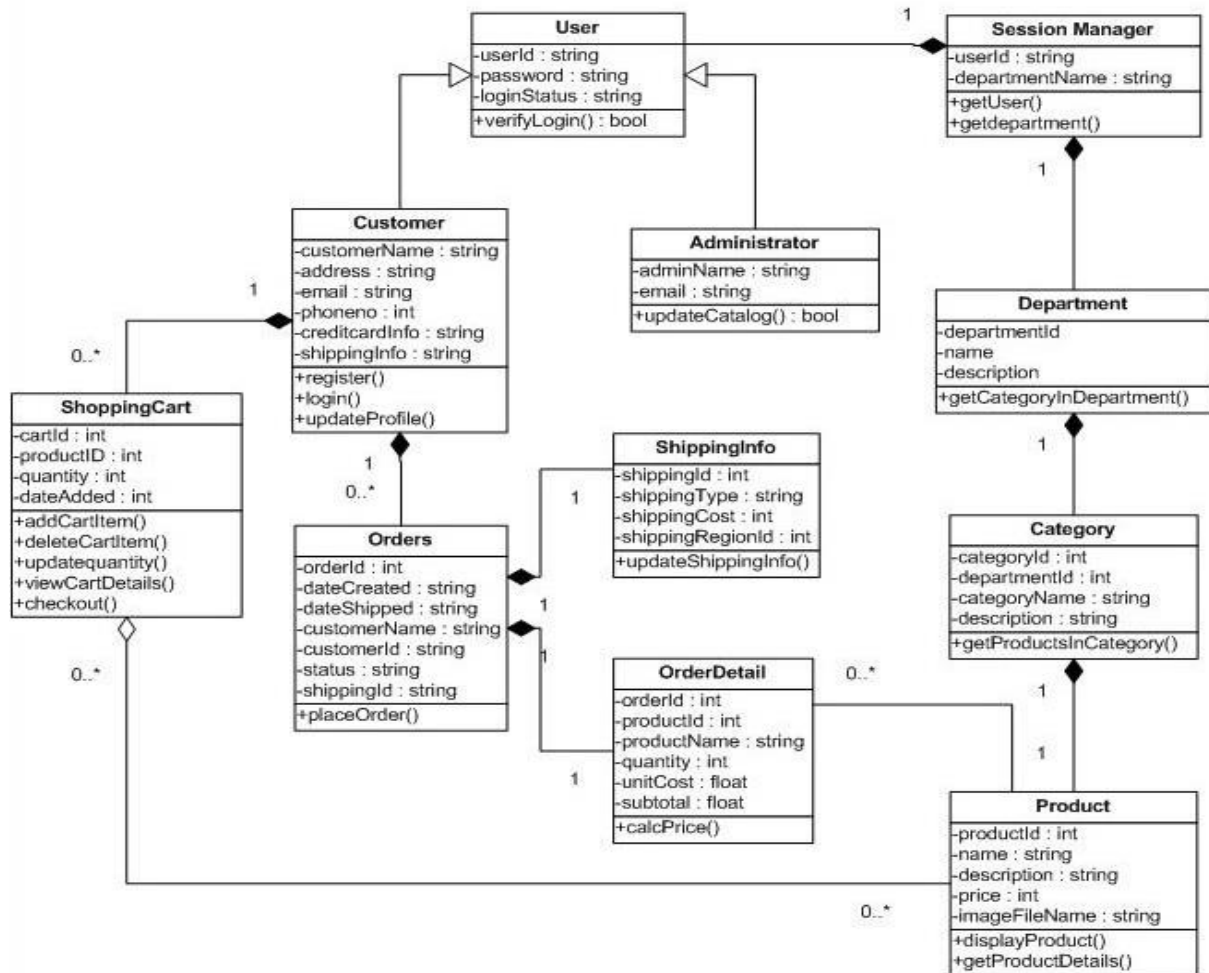
3.0 Data Flow Diagram

4.0 Physical Design

5.0 TEST PLAN

Test Case 001:

Test Title: Easy Booking Icon

Test Objective: To verify that the Easy Booking Icon can be accessed and redirects users to the system home page.

Test Procedures: The user will click on the Easy Booking Icon displayed on the website.

Test Data: Users are expected to click on the icon bar.

Expected Result: The system should redirect the user to the home page, allowing them to access the various features of the system with ease. By successfully redirecting the user to the home page, the system will demonstrate its efficiency and effectiveness in providing a seamless and user-friendly experience to its users.

Test Case 002

Test Title: Customer and Staff Login

Test Objective: To verify that users can successfully login to the system by entering their username and password.

Test Procedures: Users will enter their username and password into the appropriate fields on the login page.

Test Data: The username and password must be alphanumeric. If non-alphanumeric characters are entered, the system should display an error message such as "Please enter valid alphanumeric data."

Expected Result: Upon entering valid username and password data, the system should redirect the user to the appropriate login page. This test will ensure that the login functionality of the system is working as intended, allowing users to securely access the various features of the system. By successfully logging in, users can take advantage of the system's capabilities, ensuring a seamless and user-friendly experience.

Test Case 003

Test Title: Customer Sign-Up

Test Objective: To verify that the system can successfully register new customers who sign up for the service.

Test Procedures: The user will click on the "Sign Up" page and enter their personal information in the appropriate

fields. After entering the required information, they will click on the "SIGN UP" button to register.

Test Data: The customer's personal information such as name, address, contact details, and other relevant information must be entered correctly in the appropriate fields. The system should prompt the user to enter any missing or invalid data before proceeding to sign up.

Expected Result: Upon successful registration, the system should display a confirmation message to the customer, indicating that their account has been created. This test will ensure that the sign-up process is functioning correctly, allowing new customers to register and access the system's features with ease. By providing a seamless and user-friendly registration process, the system can attract and retain customers, ensuring long-term success.

Test Case 004

Test Title: Username and Password Validation

Test Objective: To verify that the system can correctly validate the username and password entered by customers and staff.

Test Procedures: The user will enter a valid username (combining uppercase and lowercase letters) and a valid alphanumeric password into the appropriate fields on the login page.

Test Data: If the user enters an invalid password, such as one containing non-alphanumeric characters, the system should display a warning message such as "Please Enter Valid Password."

Expected Result: Upon entering valid username and password data, the system should verify and authenticate the user, allowing them to access the appropriate features of the system. By providing accurate validation and authentication, the system can ensure the security of user data and safeguard against unauthorized access. This test will demonstrate the system's effectiveness in validating user credentials, ensuring a seamless and secure user experience.

6.0 IMPLEMENTATION

The implementation stage is one of the most crucial steps in finalizing a web-based system, as it determines whether the system will function effectively and meet the expectations of its users. To ensure the successful implementation of the system, it is essential to justify the basic software

and hardware requirements necessary to support its functionality.

In order for the system to operate efficiently, it must meet certain software and hardware requirements. These include software components such as operating systems, web servers, and database management systems, as well as hardware components such as servers, routers, and switches. By ensuring that these requirements are met, we can guarantee that the system will function optimally, avoiding any potential issues that may cause dissatisfaction among users.

Implementing a web-based system requires careful planning and execution to ensure that it meets the needs of its users. By taking the necessary steps to identify and address the system's software and hardware requirements, we can ensure that the system operates seamlessly and provides an optimal user experience. This will ensure that customers remain satisfied and engaged, helping to ensure the long-term success of the system.

Software Requirement:

To ensure the successful implementation and operation of the web-based system, certain software and hardware requirements must be met. These requirements include an operating system, a web browser, tools and technology, and a database management system.

The system can be supported by Windows operating systems such as Windows XP, 7, 8, or 8.1, or Mac OSX operating systems such as Tiger, Leopard, Snow Leopard, Lion, or Yosemite. Additionally, users can access the system through web browsers such as Google Chrome, Internet Explorer (version 8 or later), Mozilla Firefox, or Safari (for Mac users).

The system is designed using popular web development tools and technologies such as HTML, CSS, and JavaScript. These tools are used to create an engaging and user-friendly interface, ensuring that the system is easy to navigate and operate.

To store and manage user data, the system requires a reliable database management system such as MySQL, SQL Server, Microsoft Access, or Oracle. These database management systems are used to store and manage data securely, ensuring the safety and privacy of user information.

By ensuring that these software and hardware requirements are met, the web-based system can function optimally, providing users with a seamless and user-friendly experience. This will help to ensure user satisfaction and long-term success for the system.

Hardware Requirement:

RAM: Minimum 2GB or higher.

HDD: Minimum 500 GB.

Processor: Intel Pentium 3 or AMD.

LAN: Version 1.6.6.406(For fixing up client disconnection)

7.0 CONCLUSION

The E-Booking System is an effective solution for local stores to enhance the customer experience and build customer loyalty. The system provides customers with a convenient and efficient shopping experience, which contributes to customer satisfaction and loyalty. The study found that E-Booking System has a significant positive impact on customer loyalty and that local stores can use this system to attract and retain customers. Local stores should consider implementing E-Booking System as part of their customer engagement strategy to stay competitive and meet the evolving needs of their customers.

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