Payment Mangement System

A COURSE PROJECT REPORT

Ву

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Under the guidance of **Dr.P. Visalakshi**

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18CSC303J-Database Management Systems

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BONAFIDE CERTIFICATE

Certified that this project report "PAYMENT MANAGEMENT SYSTEM" is the bonafide work of "M.E.V.S.AKHILVARMA" of III Year/VI Sem B.tech(CSE) who carried out the mini project work under my supervision for the course 18CSC303J — DATABASE MANAGEMENT SYSTEMS in SRM Institute of Science and Technology during the academic year 2023-2024(Even sem).

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Acknowledgement

We would like to express our gratitude to our Professor, **Dr.P.Visalakshi** who gave us the golden opportunity to do this wonderful project on the topic **"Payment Management System"** which also helped us in doing a lot of research and we came to know about so many new things we are really thankful to him.

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Lastly, we would also like to thank our friends who helped us a lot in finishing this project within the limited time. We are making this project not only for marks but to also increase our knowledge.

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<u>1.</u> <u>INTRODUCTION</u>

Our payment management system is designed to streamline the process of managing payments for businesses. By leveraging advanced database management techniques and user-friendly interfaces, our system provides efficient payment management solutions tailored to the unique needs of each business. From tracking payment transactions to generating reports and optimizing financial processes, our system ensures businesses can effectively manage their payments and improve financial efficiency.

For the frontend of our payment management system, we employ modern web development technologies to create an intuitive and user-friendly interface. We utilize HTML, CSS, and JavaScript to build the structure, style, and interactive elements of the system. Additionally, we leverage frameworks such as React.js or Angular.js to enhance responsiveness and provide a dynamic user experience, enabling users to easily navigate through payment data and perform necessary tasks.

Backend Technologies:

In the backend of our system, we utilize a combination of programming languages and database management systems to handle data processing and storage. Codes are written in languages like Python, PHP, or ASP.Net, depending on project requirements and developer expertise.

For the database management system, we use **MySQL**, a reliable and scalable relational database management system known for its performance and versatility. MySQL seamlessly integrates with our backend technologies, providing robust data storage and retrieval capabilities essential for effective payment management.

Advantages of the System:

- ➤ Efficient payment tracking and management tailored to business needs.
- ➤ User-friendly interface for easy navigation and operation.
- Integration with modern web technologies for enhanced user experience.
- > Reliable and scalable database management with MySOL.
- > Improved financial efficiency and payment processing optimization.

2.1 About the Project:

Our payment management system is developed for Super Store, a leading Indian retail chain operating hypermarkets across the country. With over 150 stores in 60 cities and towns, Super Store offers a diverse range of products including groceries, clothing, electronics, furniture, cosmetics, and more.

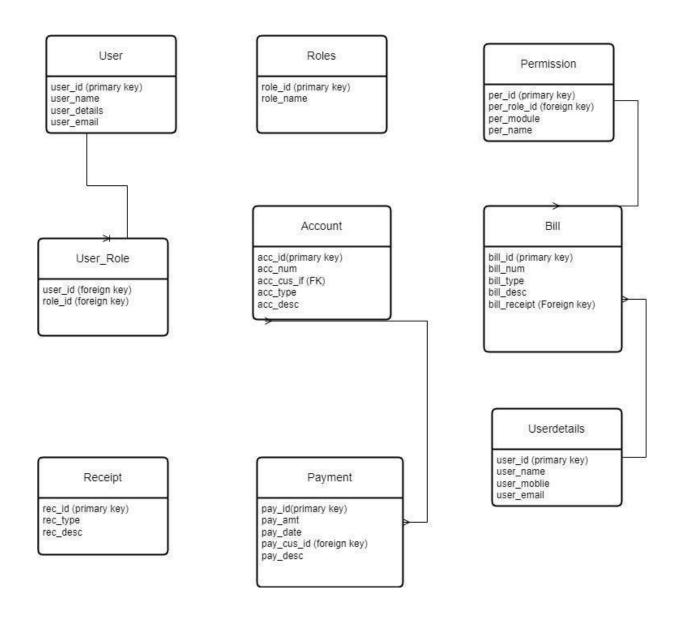
2.2 Project Scope and Features:

- 1. Sales Management: The system efficiently manages sales transactions across stores, regions, and states.
- 2. Revenue Analytics: Provides insightful analytics on sales revenue to facilitate strategic decision-making.
- 3. Inventory Management: Tracks and manages product inventory across all stores to ensure optimal stock levels.
- 4. Shipment Management: Facilitates tracking and management of store orders and shipments.
- 5. Category-wise Analytics: Offers analytics based on product categories to identify trends and opportunities.
- 6. Advanced Records Searching: Enables advanced search functionalities for accessing specific transaction records.
- 7. Advanced Reports: Generates detailed reports on sales, revenue, inventory, and shipments for informed decision-making.

2.3 Objectives:

- 1. Maintain Sales Details: Store, region, and state-wise sales data tracking.
- 2. Profit/Sales Analytics: Analyze profits and sales trends for strategic planning.
- 3. Store Details: Manage store information including numbers, regions, and addresses.
- 4. Pending Orders: Identify orders awaiting delivery for prompt action.
- 5. Distributor Payments: Track payments made or pending to distributors.
- 6. Profit Calculation: Calculate profits based on date, month, or season.
- 7. Product Stock Management: Maintain accurate details of product stock across stores.
- 8. Shipment Tracking: Monitor the shipment status of store orders.
- 9. Stock Replenishment: Generate alerts for low stock levels and calculate monthly profits.

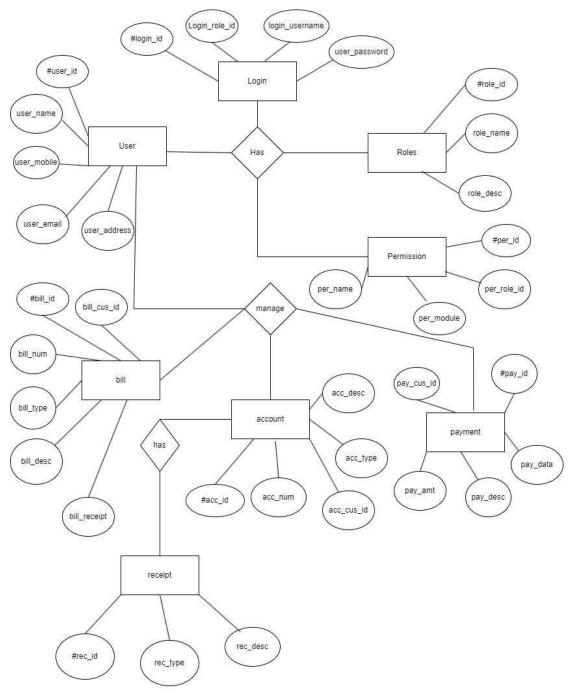
3.1.1 Conceptual Database Design(ER-Diagram)



3.1.2 Logical Database Design(ER Mapping)

- ➤ The entities are represented as tables.
- > The tables contain the attributes.
- The attributes which are underlined are referred as primary keys.

ER DIAGRAM



ER DIAGRAM FOR PAYMENT MANAGEMENT SYSTEM

FRONT-END DESIGN

3.1.3 Front-end web development details

- **HTML** provides the *basic structure* of sites, which is enhanced and modified by other technologies like CSS and JavaScript.
- **CSS** is used to control *presentation*, *formatting*, *and layout*.
- **JavaScript** is used to control the *behavior* of different elements.

HTML

HTML is at the core of every web page, regardless the complexity of a site or number of technologies involved. It's an essential skill for any web professional. It's the starting point for anyone learning how to create content for the web. And, luckily for us, it's surprisingly easy to learn.

CSS

CSS stands for Cascading Style Sheets. This programming language dictates how the HTML elements of a website should actually appear on the frontend of the page.

JavaScript

JavaScript is a more complicated language than HTML or CSS, and it wasn't released in beta form until 1995. Nowadays, JavaScript is supported by all modern web browsers and is used on almost every site on the web for more powerful and complex functionality.

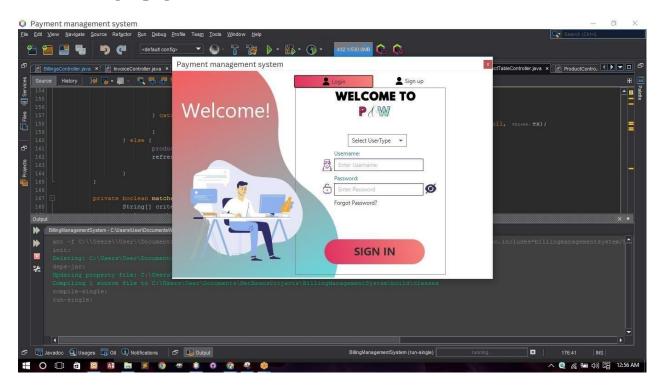
3.1.4 Connectivity (front end and Back end):

PHP is an amazing and popular language!

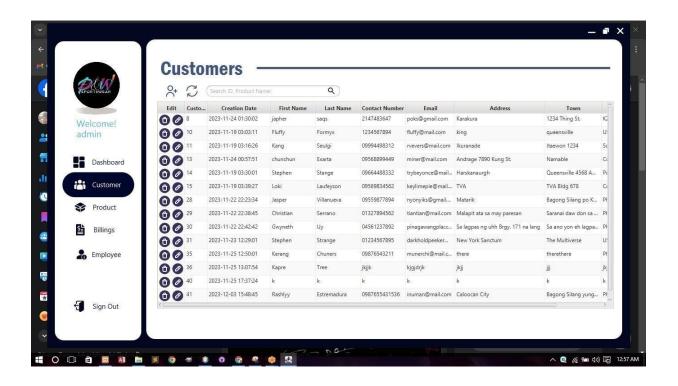
It is powerful enough to be at the core of the biggest blogging system on the web (WordPress), It is deep enough to run the largest social network (Facebook)!, It is also easy enough to be a beginner's first server side language!

- PHP is an acronym for "PHP: Hypertext Preprocessor"
- PHP is a widely-used, open source scripting language
- PHP scripts are executed on the server
- PHP is free to download and use
- PHP files can contain text, HTML, CSS, JavaScript, and PHP code
- PHP code are executed on the server, and the result is returned to the browser as plain HTML
- With PHP you are not limited to output HTML. You can output images, PDF files, and even Flash movies. You can also output any text, such as XHTML and XML.

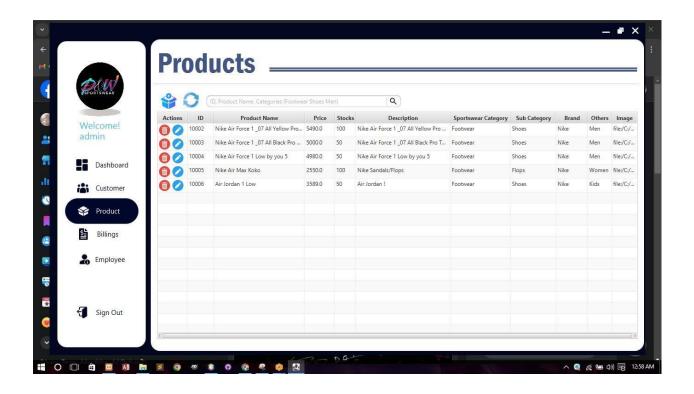
4.1 OUTPUT 4.1.1 Login page:



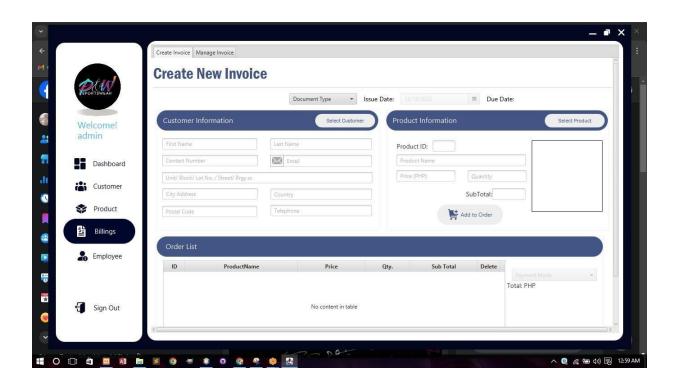
4.1.2 Customers Page:



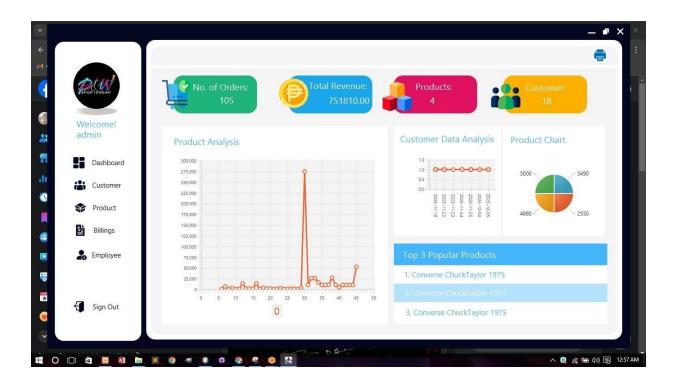
4.1.3 Products Page:



4.1.4 Create New Invoice:



4.1.5 Dashboard of ADMIN:



MODULES

User Roles in the Payment Management System:

- **Administrators:** Responsible for overseeing and managing all aspects of the payment system, including user accounts, permissions, and system configurations.
- **Users/Clients**: Individuals or entities making payments through the system for various services or products.
- **Finance Managers:** Responsible for monitoring and analyzing payment data, generating reports, and ensuring financial compliance within the system.
- **Customer Support Representatives**: Handle inquiries, issues, and support requests related to payments from users and clients.

Applications

- **E-commerce Platforms:** Facilitate secure and efficient online payments for purchases made on e-commerce websites.
- **Subscription Services**: Manage recurring payments for subscription-based services such as streaming platforms, software licenses, and membership programs.
- **Utility Bill Payments:** Enable users to pay their utility bills, including electricity, water, gas, and internet bills, through the system.
- **Financial Institutions:** Provide a platform for banks and financial institutions to process transactions, manage accounts, and facilitate fund transfers.
- **Government Agencies:** Implement a system for citizens to make various government-related payments, such as taxes, fines, and fees.
- **Healthcare Providers:** Offer a solution for patients to pay medical bills, insurance premiums, and healthcare-related expenses securely.
- Education Sector: Manage tuition fees, student loan repayments, and other educational expenses for students and educational institutions.
- **Retail Stores:** Allow customers to make payments for purchases made in physical retail stores, integrating with point-of-sale (POS) systems for seamless transactions.

7.CONCLUSION

While developing this project we have learnt a lot about HTML/CSS/JS/PHP/MySQL and working with database management, we have also learnt how to make the application user-friendly (easy to use and handle) by hiding the complicated parts of it from the users.

During the development process, we studied carefully and understood the criteria for making a software more demanding, we also realized the importance of maintaining a minimal margin for errors.

BIBLIOGRAPHY

It has been a matter of immense pleasure, honor and challenge to have this opportunity to take up this project and complete it successfully.

We have obtained information from various resources to design and implement our project. We have acquired most of the knowledge from the Internet.

The following are some of the resources:

- > www.w3schools.com
- > www.tutorialspoint.com
- > www.projectsidea.com
- ➤ Google and Youtube Tutorials.