

Home Bakery and Delivery Management System

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Abstract: “Home Bakery and Delivery Management System” is a software solution designed to assist and streamline the operations of a home bakery business. It provides an integrated platform to manage various aspects of the bakery, including inventory, orders, customers, and finances. The Home Bakery and Delivery Management System simplify and automate essential bakery management tasks, optimizing efficiency, and enhancing customer satisfaction. By centralizing operations and providing a user-friendly interface, the system helps bakery owners focus on delivering high-quality products while efficiently managing their business. The website may utilize various technologies and frameworks, such as React, HTML, CSS, JavaScript, and server-side languages, to create a seamless and engaging user experience.

Keywords: HTML, CSS, JavaScript.

I. INTRODUCTION

“Home Bakery and Delivery Management System” aims to streamline and automate various aspects of home bakery management, ultimately enhancing operational efficiency and customer satisfaction. By providing separate modules for administrators, home bakers, and users, the system ensures that each user group has access to the functionalities relevant to their roles. Whether it's managing inventory and production, overseeing the system as an administrator, or providing a user-friendly interface for customers, the system optimizes the overall bakery management process. The Home Bakery and Delivery Management System is a comprehensive software solution designed to streamline and automate the various operations of a home bakery business. This system offers a wide range of features and functionalities that enhance efficiency, improve customer experience, and facilitate business growth. From order management to delivery tracking, inventory control to customer communication, the system covers every aspect of the home bakery business.

There are mainly four modules:

- Admin
- Home baker
- User

In this paper, we have 3 logins such as for admin, user, home baker. The admin has the overall control of the system. Admin can approve/reject home bakers, view products, send reply message to user, view user details, delete user etc. The home baker is another module they can add new product that will be home baked. The user is the other module of the project. The user can view product, buy products, add customization, add feedback. The home baker can login in to the website. It provides a login page for the home baker in the website and after verifying the food safety certificate details of the home baker by the admin and provide permission to login .If the admin not approve the home baker, they cannot login on to the website. It uses reactas front end, PHP (Laravel) as backend and MySql as database. And also, it provides accuracy, reliability, ease of access and data security.

II. METHODOLOGY

Requirement Gathering: Identify specific requirements, considering React.js for the frontend and Laravel for the backend. Understand the features needed for the frontend (user interface, order placement, delivery tracking) and backend (order processing, inventory management, user authentication).

System Design: Design the frontend using React.js, creating components for different user interactions and views.

Design the backend architecture using Laravel, defining API routes for data communication between frontend and backend. Plan the database structure using Laravel

Technology Selection: Choose React.js for building the dynamic user interface with components.

Choose Laravel as the backend framework due to its RESTful API capabilities and ease of database integration.

Development: Development: Implement React components for user interfaces, such as product listing, order placement, and delivery tracking. Develop Laravel controllers and models to handle API requests, process orders, manage inventory, and authenticate users.

III. EXISTING AND PROPOSED SYSTEM

The existing system is manual. The home bakery is part of a large food service chain that provides desired food items to the customers. The manager of a bakery is concerned about delivering on time for customer satisfaction. Currently all the processes are managed by going to the home to get the order. This is the present situation of the Home Bakeries having no special application.

The proposed system “Home Bakery and Delivery Management System ” is a software project to handle the overall process of a home bakery. There are many home bakeries in the area. The system involves receiving orders from customers, and for every new customer, a unique ID is assigned. All the details of the customers along with their unique id are maintained in a database so the customer need not specify all his address details each time he places an order. All details of the customer and his order along with his specifications are received and saved. Price varies according to the customer’s specification.

Limitations of the Existing System

- Time consuming
- Making publicity for the shop is hard
- Less punctuality
- To overcome the drawbacks on the existing system a new system has to be implemented. In the proposed system

Advantages and Features of the Proposed System

- Very fast
- Punctual
- Reliable
- All process are controlled by the software
- Less power

IV. BACKGROUND

Technologies used in this Project:

React.js, more commonly known as React, is a free, open-source JavaScript library. It works best to build user interfaces by combining sections of code (components) into full websites. Originally built by Facebook, Meta and the open-source community now maintain it. One of the good things about React is that you can use it as much or as little as you want!

Laravel is an open-source PHP framework, which is robust and easy to understand. It follows a model-view-controller design pattern. Laravel reuses the existing components of different frameworks which helps in creating a web application. The web application thus designed is more structured and pragmatic. . Laravel has a very rich set of features which will boost the speed of web development.

V. CONCLUSION

At last we can say that Home Bakery and Delivery Management System is on trend and it is important for the homemakers who earn and become financially independent. Home bakers should be encouraged. In this system we

study about the rise of home bakers, their growth and the opportunities available for them in starting their business and promoting them. Website greatly help the home bakers in the business. The study concludes that the recent trend aims to attract more customers to the business. Since the business has not yet started providing any facilities for business account holders, the growing business will eventually make facilities available for these holders. After conducting multiple studies through this system, the conclusion is that Entrepreneurs who are home bakers have started playing an active role in the growing industry. They may be small but the increasing demand for home-baked goods will change things entirely shortly. The study helps us in understanding the huge scope of home baking. As a budding entrepreneur, individuals can explore a wide variety of strategies and innovative ideas that will help them grow their business.. As commercial bakers, home bakers also produce results that are in par with them. The restriction faced by commercial bakers is not faced by home bakers since they are the owner of the business. Home bakers have positive growth in becoming an experienced Entrepreneur and a professional baker. So, budding chefs who love baking can take home baking business and become Entrepreneurs

VI. FUTURE ENHANCEMENT

In future, using this website we can sell/buy the raw materials needed for baking.

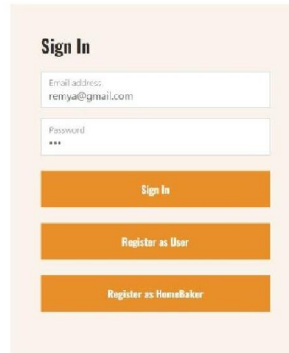
- The Bakery and Delivery Management System, the production of the baked items and managing the semi-produced and the final baked items, and also tracking of objects using the Inventory Management System.
- Personalized customer profiles: Implementing a robust customer management system that captures individual preferences, dietary restrictions, and order history can enable personalized recommendations, promotions, and special offers. This can enhance customer satisfaction and loyalty.
- Virtual reality (VR) and augmented reality (AR) integration: Integrating VR and AR technology can provide an immersive online shopping experience for customers. They can virtually browse through bakery products, visualize customizations, and even "try on" different cake designs or decorations before making a purchase.
- Chat bots and virtual assistants: Enhancing the online bakery management system with intelligent chat bots or virtual assistants can handle customer inquiries, take orders, provide real-time updates, and answer frequently asked questions. This can improve response times and provide 24/7 customer support.
- Integrated delivery management: Streamlining the delivery process by integrating the online bakery management system with third-party delivery platforms or implementing an in-house delivery fleet management system can improve order tracking, reduce delivery times, and enhance overall customer satisfaction.
- Social media integration: Integrating the online bakery management system with social media platforms can allow customers to share their orders, reviews, and experiences directly on social media. This can help generate organic publicity, attract new customers, and build a strong online presence.

VII. RESULTS AND DISCUSSIONS



Figure 1. Home page

TASTEZONE



Sign In

Email address:
renya@gmail.com

Password:

Sign In


Register as User

Register as HomeBaker

Figure 2. Login page

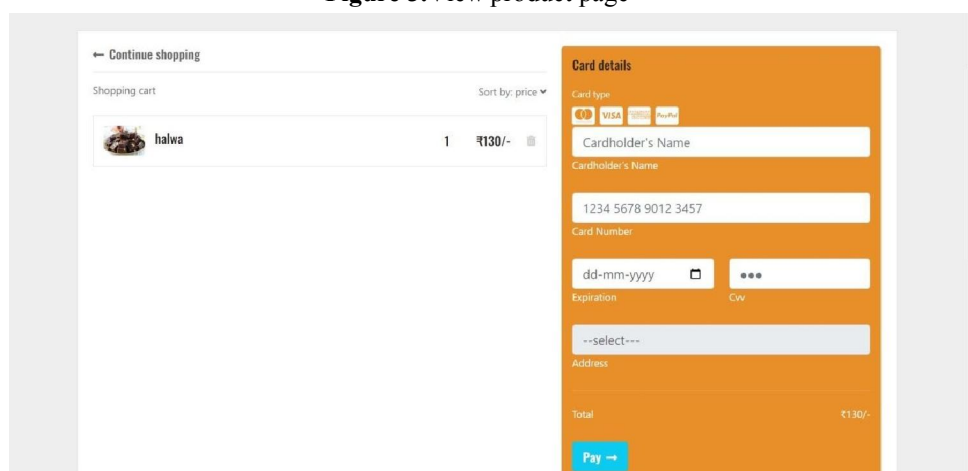
View Product

EXPLORE OUR PRODUCTS




Product	Price	Action
cupcake	100	View
halwa	130	View
Laddu	10	View

Figure 3. View product page



← Continue shopping

Shopping cart Sort by: price

	halwa	1	₹130/-
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Card details

Card type: VISA, MASTERCARD, AMEX

Cardholder's Name: _____

Cardholder's Name: _____

Card Number: 1234 5678 9012 3457

Card Number: dd-mm-yyyy Expiration Cvv: ...

Address: --select--

Total: ₹130/-

Pay →

Figure 4. Add to cart page

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