

ABSTRACT

Main project :Decentralised Food Delivery with Customisation

The "Enhanced Food Delivery Service" revolutionizes the traditional food ordering and delivery experience with cutting-edge features and personalized options. This comprehensive web and mobile application caters to a diverse range of user roles, including Admins, Normal Users (Customers), Restaurants (Vendors), and now introducing Delivery Personnel. Powered by React for the front-end and Node.js for the back-end , Flutter for mobile app, this platform seamlessly integrates blockchain technology for decentralized payments, ensuring secure and transparent transactions.

Key Features:

1. **Decentralized Blockchain Payment:** Embracing the future of finance, our platform integrates decentralized blockchain payments, offering users a secure, transparent, and efficient payment solution.
2. **Customizable Spice and Salt Percentage:** Elevating user experience, customers can now personalize the spice and salt percentage in their food orders, ensuring each dish meets their unique taste preferences.
3. **Customizable Pizza:** Empowering pizza lovers, users can craft their perfect pie with a selection of toppings and ingredients using an intuitive checkbox interface.
4. **Draggable Layers for Burger Customization:** Unleashing creativity, customers can design their dream burgers by dragging and dropping various layers – from patties to toppings – creating a truly bespoke dining experience.
5. **Voice Search:** Embracing convenience, users can simply speak their orders, leveraging voice search technology to navigate the platform effortlessly.
6. **New User Role: Delivery Personnel:** Introducing a new user role, delivery personnel join the ecosystem, facilitating swift and efficient order delivery, enhancing customer satisfaction.
7. **Feedback System:** Fostering continuous improvement, our platform features a robust feedback system where users can share their dining experiences, enabling restaurants to refine their offerings and services.

8. **PDF Generation for Bills:** Enhancing transparency, users receive detailed PDF bills for their orders, providing clear breakdowns of items and prices.
9. **Mobile Application for Users:** Catering to on-the-go lifestyles, users can access the platform via a dedicated mobile application, enabling seamless ordering and tracking from anywhere, anytime.
10. **Calorie-Based Recommendations:** Promoting health-conscious choices, our platform offers personalized, calorie-based recommendations, helping users make informed decisions aligned with their dietary goals.

Normal Users (Customers):

1. Account Creation Module:
 - Sign up and provide necessary information for access to services.
2. Browsing Module:
 - Browse through available restaurants, view profiles, and explore menus.
3. Customization Module:
 - Personalize spice and salt percentages for food items.
 - Customize pizza toppings and burger layers.
4. Ordering Module:
 - Select desired menu items, add to cart, and place orders seamlessly.
5. Payment Module:
 - Complete payments securely using various methods for flexibility.

Restaurants:

1. Menu Management Module:
 - Add, update, and remove menu items to keep offerings up-to-date.
2. Availability Management Module:
 - Set operating hours and update restaurant details for accurate information.
3. Order History Module:
 - Access and review past orders, customer preferences, and feedback for service improvement.

Delivery Personnel:

1. Order Delivery Module:
 - Receive and fulfill orders efficiently for timely delivery to customers.
2. Route Optimization Module:
 - Optimize delivery routes to ensure timely and efficient order fulfillment.
3. Communication Module:
 - Communicate with customers and restaurants as needed for order coordination.

Admin:

1. User Management Module:
 - Create, update, and delete user accounts.
 - Ensure access control and data security.
2. Restaurant Verification Module:
 - Review and verify restaurant details for authenticity.
 - Maintain trust and credibility among users.

The "Enhanced Food Delivery Service" revolutionizes the food ordering and delivery landscape, offering a seamless and personalized experience for users across various roles. Admins oversee the platform's operations, ensuring smooth functioning and user satisfaction. Normal Users enjoy the convenience of customizable orders, voice search, and calorie-based recommendations, enhancing their dining experience. Restaurants benefit from increased customer engagement, transparent transactions, and actionable feedback to refine their offerings. Introducing Delivery Personnel improves order delivery efficiency, further enhancing user satisfaction.