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FeastFinder: Your Friendly Guide to Tasty Bites!

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Abstract: *Feastfinder exists in one of the fastest growing segments in the Indian online trade scenario. Food orders online - be it with the site or mobile app of a quick-service restaurant - has emerged as one of the most transparent and amicable ways for consumers. or a web site or app that has more possibilities for food to be delivered from different eateries. The portals provide types of cuisines such as fast food, Indian, Chinese, Italian, and so forth. In today's times, the dining out culture gets substituted with the eat-in culture. Because of this, it is observed that more and more Indian families Offers digital dining platforms, with top services, including the largest India Zomato ,Swiggy, Food Panda, and many more. This work is conceptual in nature and primarily concerned with the Notion of OFD Apps, Role of OFD Apps in today's Scenario, some technologies embraced by online food ordering apps, Copious Zomato business models and streams of revenue, SWOT analysis and future of Online food apps and how they can be innovative. It helps to deal with customer behavior, understand consumer balance, and analyze their perceptions. Share your experiences with others in the form of reviews, whether it's a service or a product you purchased, has never been easier thanks to these platform.*

Main Terms: *Ask digital meals, smartphone-based platforms, food enthusiasts, user content Cuisines, Online Food Delivery Apps, Potential Innovations, Revenue Streams .*

I. INTRODUCTION

This idea is now used by the food sector to reach a mass audience due to the order of meals online. Online food ordering means a process through which the dishes are distributed from the neighborhoods in the neighborhood and food providers by mobile websites or platforms. This new way of supplying food is rapidly approaching the facility, particularly among the youngest individuals, based on growing pocket control applications - revolutionizing conventional service customs and delivery . Users endorse these meal platforms because they enable them to order clearly, without verbal communication and easily benefit from the door delivery.

Digital payment is more rationalized, thus it is faster and more realistic. Good examples of significant food distribution platforms are "Swiggy" and "Zomato."

Choice Tree and other well-known machine learning algorithms were linked across a dataset of thousands of entries. This program displays nutritional information for the client, including category, title, image, price, and depiction. This application provides a set of functions for the director of any particular restaurant.

Maintain and alter information regarding food, customer tastes, bookings, and representative information by inserting new records, editing existing ones, deleting old data, and retrieving particular records for further evaluation. The normal procedure for food delivery is that the customer will use a food delivery app to select a restaurant, view the menu, pick the items desired, and make payment to finalize the order.

More marketing efforts by encouraging players also impact the market. The stage incentives, such as rebates and participation, that are attracting more customers to these web-based conveyance stages are effectively pushing the division.

The sector's growth is indeed being facilitated by the industry's higher subsidies and growth in the big companies' own transportation armouries.

The Indian online food sector is expanding with increasing numbers of women joining the workforce and more households possessing two or more earning sources, resulting in increased demand for eating out.

India's Web nutrition display remains on an expansion trajectory. Financial advancement and increasing family incomes garnered from their utilization in the near future are likely to drive growth.

Food, home construction, transportation and communication are areas where consumers spend money. Young people are becoming more and more common as they can develop their dietary habits and spend more money.

II. LITERATURE SURVEY

- 1) The shift of nutrition delivery phases has been completely influenced by mechanical progress and client-focused design. Initial adoption, like the MERN-based "Cooked with Care," demonstrated how adaptable full-stack frameworks can support skilled computerized sustenance requesting arrangements. Introduced an intelligent task bundling strategy that enhances conveyance efficiency through dynamic collection and astutely course management, leading to reduced waiting time.
- 2) Attempts to develop the client excursion have pushed to the development of platforms such as Healfit, developed with Respond Local and Firebase, and recommendation-based platforms by Reddy et al., which highlight personalization. The implementation of trade insights tools in HORECA applications has further led to significantly better benefit delivery and operation processes.
- 3) Additional advances include Dalal's question regarding manual supervision within decentralized conveyance administrations, and Vijjali's Foodnet platform, that rearranges asking for through personally adapted dinner parcels. Simoni and Winkenbach devised a plan aggregation calculation tailored specifically for gig-based coordinations, advance optimizing forms of conveyance.
- 4) Thoughts on client tendencies have identified center factors affecting satisfaction and brand loyalty. Rizvi studied cloud framework expenses for full-stack platforms, emphasizing the importance of backend expertise. Joshi's "Parhit" highlighted the advantages of real-time steering optimization, while Pillai et al. studied purchasing behavior. Adithya et al. suggested a measured engineering for online requesting frameworks, while Li et al. monitored the environmental impact of such services.
- 5) Availability and human-centric plan are also gaining traction, as noted in the articles of Keeble et al. on computerized outlet reach and Goffe et al. on interface convenience. Belief instruments, researched by Su et al., and blockchain-based conveyance models by Zhang and Kim, further outline the emerging nature of secure and decentralized conveyance systems.
- 6) Subsequent consumer considers, including those by Annaraud and Berezina (2020), indicate ease of use and quality of benefits as important factors. Chakraborty et al. (2022) noted the importance of energized satisfaction and ease, while Mohanty et al. (2024) stressed rapid benefit recovery and e-word-of-mouth as determinants of client retention.

III. PROBLEM STATEMENT

Traditional techniques of nourishment requesting have several shortcomings that influence the client and eatery equally. For the client, the technique is poorly structured and time-consuming. The client spends a long time waiting for their order, finds it difficult to locate the right eateries, and has limited visibility into the order status. All these factors go towards lowering the overall level of satisfaction from the experience. Otherwise, restaurants struggle to obtain unused customers without spending huge entireties of advertisement or installing their claim conveyance services, which are resource- and time-intense. Since city lifestyle becomes increasingly bustling and the demand for speedy and uncomplicated sustenance increases, there is little doubt that a better streamlined structure has to be placed. An assortment of sustenance conveyance webpage site provides a arrangement by acquainting the approaching prepare with individuals, providing consumers with a broader selection of restaurants, allowing plan following in actual time, and promoting various repayment methods. Besides improving client knowledge, this brings more extensive client access to area restaurants without the large investments of infrastructure.

IV. PROPOSED METHODOLOGY

The demand for effective and efficient control systems has resulted in the creation of robust digital platforms that target both restaurant administrators and customers. The food distribution platform online is designed through contemporary technology batteries consisting of the reaction for the front, Node.js and Express for supplementary, MongoDB Atlas for databases and secure payment processing range. The system ensures a transparent and friendly experience for customers while providing effective tools for administrators to manage orders and stocks.

The front is divided into two main modules:

A. User feature:

- 1) Register / connect: Users are able to register or join a simple and secure dosage sample. Identification information is verified at the customer and securely transmitted to auxiliary auxiliary via API to check by utilizing authentication based on JWT.
- 2) Food browsing: Following connection, customers can ride different food items. These are factors retrieved from backup database and are presented in a reaction order and visual appeal. Filtering research and features enhance user experience.

- 3) Add to basket and control : Users can simply add products to their basket. Quantity stroller system and total price calculation. At the checkout, users can validate their orders and make payments. After successful payment, the order details are sent to the auxiliary part and are stored in the database.
- 4) Trip command: Real-time monitoring of orders enables users to track their delivery status, ranging from confirmation to food ready for sending and delivering. This feature improves transparency and customer satisfaction.
- 5) Administration connection: An independent connection port reserved for administrators with restrictions to only accepting employees for authorization to use auxiliary management tools. The JWT notification code is applied to store safety sessions.
- 6) Food Management: Admins can add new foods, update the outdated menu options or delete options. All changes are instantly reflected in the front, so that users see the most valuable menu.
- 7) View and update orders: Administrators can show all the orders, their status can be updated (for instance, "Preparation", "out for delivery", "Delivery") and distribution logistics management. This makes rationalization of all the process of orders.

B. Backend:

- 1) Node.js and Express: Helper segments are constructed utilizing Node.js and Express to expedite logic and routing routers quickly and efficiently in the server.
- 2) API Gance Requirements: All API needs of Frontend, such as user recording, connection, restoration of menus, command and command update control, are processed by Auxiliary. Auxiliary acts as the central power drive of the platform, which drives liquid interaction of customers and databases.
- 3) Authentic: JWT (web notification code JSON) is utilized to authenticate non -state and safety. Administrator and user roles are supported, with access controls to restrict the functional features.
- 4) Orders and Payment management: Auxiliary parts take care of the whole life cycle of the order, i.e., ordering, status and payment confirmation. The Stripe integration offers secure and trusted payment processing.
- 5) CRUD Operating: Auxiliary parts providing creativity, reading, updating and deleting features to manage food records and control. The point termination of API Restful is designed for the -lunge and maintenance capacity.

C. Collection:

- 1) User: User identification information stores, contact details and session notification codes. The password is chopped by using for security.
- 2) Restaurant: Holds information about partner restaurants such as names, addresses, notes and menus.
- 3) Menu elements: Saves all the foods that are available with their contact information like name, description, price, category and usability.
- 4) Orders: Each order document with user ID, food order, total price, payment status and present order status. This program is designed for rapid requirements, indexing and growth capacity to accommodate the number of users and the restaurant is growing. The relationship among the collections handled by object reference materials (object id) is efficient and clean.
- 5) Integrated payment portal: Stripe in order to provide management of safe and liquid transactions, the platform is appropriate for Stripe, leading payment gateway provider.
- 6) Safe payment: When customers intend to order, it is redirected to stripes or integrated samples' safety payment. The card information is measured and processed directly through Stripe, which maintains PCI compliance.
- 7) Confirmation: Upon successful payment, a Stripe website alerts the auxiliary part, updating the order status in the database. Users get instant confirmation and administration control panel shows new orders.
- 8) Replaced and failed: API Stripe also deals with payment and repayment failures, which can be handled directly from the administrative control panel if need be.

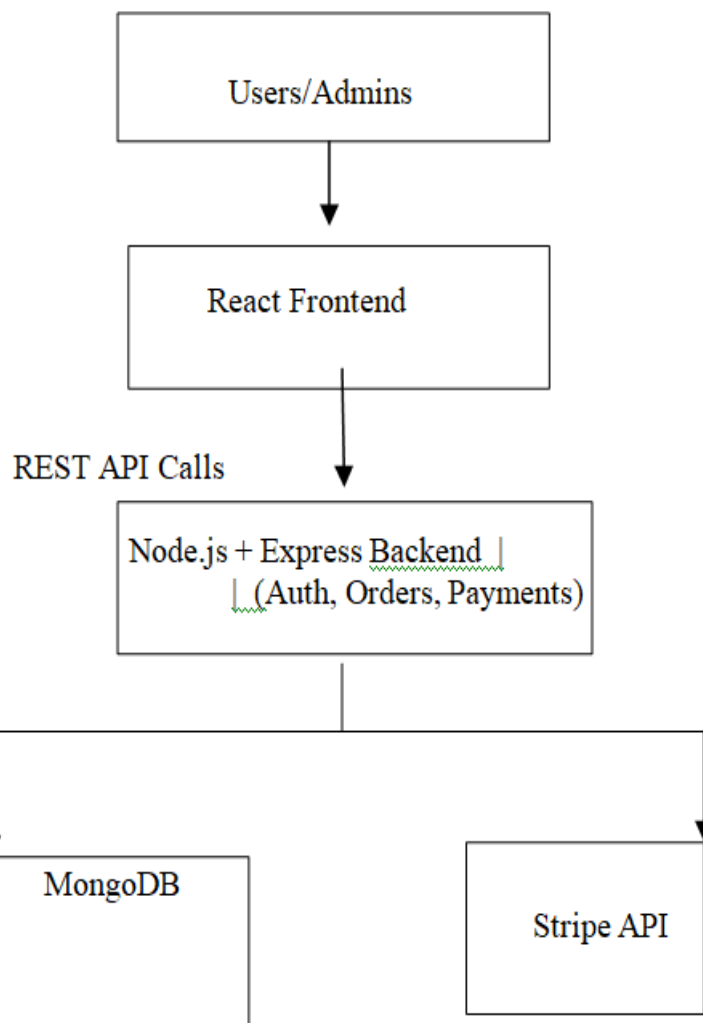


Fig .1: Mechanism

V. CUSTOMER SATISFACTION

Activation of Covid-19 brought unprecedented adjustments to the mode in which humans are living and interact, particularly to the hotel and food business. As governments initiate locks and social responsibilities, meal services at eateries have ground to a halt, causing fast reduction in worldwide income from eating places and unsettling conventional meal services . Yet, the expansion of Online meal delivery platform plays a significant role in facilitating the food sector nowadays by offering customers ready to consume meals that are delivered to their doorstep. This not only guarantees the sustenance of business for food vendors, but also satisfies consumers in terms of safety, convenience, and access to food without touching.

conversion to digital food order has established the conversion in consumer diet behaviors and decision-making models [5]. He gave birth to a new culture of the digital dining room, which is convenient to order an order that has become as essential as food itself. Among this context of evolution, every person comes with the sole expectations to the table - some list a few quick delivery priorities, others prioritize safe payment avenues, hygiene, freshness of the food or even customer service capability.

Most vital considerations influencing customers' decisions to patronize online food services such as minimum waiting time, user-friendly interface, 2-hour available, payment flexibility (such as UPI, Debit Card / Debit Card, Investment Category) and Promotional Preferential or attractive reduction .

These utilities have high demand for food services and also promote the platforms for continuous innovation. In order to assess the overall success of these services, we propose the idea of Delight users (UDQ) - a figure not only draws user satisfaction, but all emotional states and interaction functions with the site. This encompasses ease of use, response, accuracy of accomplishments, package quality, real-time tracking and customer service effectiveness. A high UDQ suggests the users will engage more on the platform and make others use the platform as well, thereby expanding the brand's loyalty and long-term profit.

Briefly, the pandemic is a conversion driver of digitization for the food supply and platforms working to refine their users' services are the most rebound and customers' favorite service among the competitive markets.

VI. OBJECTIVE

This report primarily focuses on conceptualizing and building a dependable and intelligent web-based system distribution program named "Feastfinder" that not only serves the purposes of traditional food control but also provides enhanced features to serve urban consumers better. In contrast to conventional platforms, Feastfinder has an independent feature to enable users to order from certain restaurants within the defined geographical area (5 to 6 km or along the same delivery route). This capability is intended to give customers greater freedom, flexibility and satisfaction by enabling the selection of varied foods from various sales points in a transaction.

In order to enhance the safety of the platform and users' authenticity, the app integrates the user verification on the basis of Aadhar to make just one safe recording. This not only minimizes the fraud, but also facilitates the integration of the user. Encrypted transactions and safe connection procedures make the platform safe for both customers and businesses.

Platforms also have booking functions, enabling users to reserve in their favorite restaurants with little efforts. This function is particularly useful to shorten the waiting time and enhance the convenience of dinner customers, particularly in high-demand areas or peak hours. From stakeholders' perspective, Feastfinder aims to generate profits by enhancing the user experience, raising the order volume due to the multi-restaurant order and encouraging customer retention through response and timely delivery. The system supports customer satisfaction as a key commercial tool. Due to the positive tests and employment of training sessions in close association with the quality of service, this application has mechanisms for gathering opinions, assessing delivery efficacy and maintaining food quality.

Another crucial goal of the platform is to address the constraints by the application provider in the model order by implementing a multi-localized control system. This technology enables customers to avoid the constraints of being confined in a restaurant-type restaurant and therefore to incorporate a more personal and adjustable dining experience.

VII. TECHNOLOGY USED

Feastfinder is a contemporary finishing web application -developed using MERN technology stack, consisting of MongoDB, Express.js, React.js and Node. With this Online meal delivery platform plays a significant role in facilitating the food sector nowadays by offering customers ready to consume meals that are delivered to their doorstep. MongoDB, a NoSQL document-oriented database, is employed to house all the fundamental information like restaurant information, user accounts, menus, and reviews. Its schema flexibility enables the application to store varied food-related information effectively. Express.js is a light-weight Node.js web framework that performs backend functions like routing, user authentication, and API creation, enabling seamless communication between the frontend and database. React.js is employed to create the dynamic user interface, allowing users to filter, search, and browse food items in real-time with responsive design and quick loading times across devices. It applies component-based architecture and state management to provide a dynamic experience. Node.js is an enforcement context in which JavaScript can be made to run server-side, handling asynchronous requests, and combining Express with MongoDB for a fully operational backend. The entire flow consists of React making requests to Express APIs, which are handled by Node.js and retrieve or update data in MongoDB as appropriate. This cohesive JavaScript-based system makes development easier, enhances performance, and provides efficient management of real-time data interactions. With the strengths of each part in the MERN stack, FeastFinder provides a fast, intuitive, and scalable solution for restaurant exploration and food discovery.

VIII. CONCLUSION

In the realm of food service and distribution evolution, where consumers anticipate to keep growing continuously, leveraging MERN offers a robust and out-of-the-box solution to build a rich, mature and efficient food control system. This technology pack is not only ideal for the existing trends in building sufficient JavaScript, but also facilitates open development and implementation, providing both productivity and user satisfaction.

it revolves around MongoDB in this system, unstructured nature and unfortunate scaling provided by Noquery database. Dynamically with regularly not structure like food controlling data, as like fast menu evolving, individuals orders, orders and customer desire actual status - MongoDB is best suited adjustment. It is able to serve each other's data structures conveniently, maintain extremely available with its distributed architecture and grow horizontally in order to handle traffic and gain controls without deteriorating performance. Its design sans diagram enabling programmers to create applications rapidly, such facilitates update and enhance functions earlier and fewer times to generate an error.

clear frame. It handles routing, combining intermediate software and business logic in an efficient manner so that the application can process user requirements, session management and authentication in a gentle and secure manner. Express module and all avenues of intermediate software supports integration of third-party services like payment gateway, SMS / E-mail notification.

Customer side, React.js gives dynamic reaction and user interface. Dynamic user interface and reaction are one of the key features of the successful food control system.

customers want to pass through intuitive real-time updates, visual appealing menu screens and quicker interaction. React.js excels in these as it has its architecture on a component-based basis, virtual domures to further optimize its humongous performance and ecosystem. Real-time updates, direct personal orders are trivial to implement as per React hooks and state management techniques. Overhauling the components also alleviates development effort and assists to keep user interfaces in better health.

Node.js, as an enforcement environment for the entire Express and auxiliary, efficient for the table with its unblocked architecture and event-driven promotion. This is to ensure auxiliary can handle thousands of requests at the same time, which is ideal for common high traffic situations at times of peak control or with special promotions. Node.js also supports the use of JavaScript simultaneously and in the background, which encourages code consistency and makes the learning curve easier for development teams.

Further to enhance user experience and platform capabilities, the incorporation of base web technologies like HTML, CSS and vanilla Javascript brings effective control of presentation and behavior. Reaction design methodologies ensure that the app happens seamlessly on desktops, tablets and mobile phones - a key component that a majority of users use in accessing food control services using mobile platforms. Furthermore, the incorporation of features like the dark mode, food images and visual animations can really boost participation and average.

Besides, incorporation of third-party plugins like payment gateway (Razorpay, Stripe, Paypal), Geographic navigation service and another analysis platform. These integrations enable user safe transactions, behavior monitoring, estimated distribution by location and deep data that can improve trade decisions.

concluded that Mern Stack offers a comprehensive and complete development environment, particularly well-suited for the building and development of modern food control systems. The synergy of expansion, performance, modules and developers' attractions guarantees that companies are able to build not only a working application, but also to feel user competition and tasty. Even though the digital transition keeps remodeling hotel and food businesses, a powerful battery of technologies is no longer a plus point - one needs to move ahead in a fast-paced market and concentrate on consumers.

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