NEXT GEN EMPLOYABILITY PROGRAM

CREATING A FUTURE-READY WORKFORCE

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CAPSTONE PROJECT SHOWCASE

Project Title

A Service for Delivering Food (Zomato Clone) with MERN Technology

Abstract | Problem Statement | Project Overview | Proposed Solution | Technology Used | Modelling & Results | Conclusion | Q&A

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Abstract

1. A MERN-based food delivery platform connecting users with restaurants for seamless online ordering.
2. Features JWT authentication, real-time order tracking, online payments, and restaurant management.
3. Built with React.js for UI, Node.js & Express.js for backend, and MongoDB for scalable data storage.
4. Aims to provide a user-friendly, efficient, and scalable food delivery experience.

Problem Statement

- With the increasing demand for online food delivery services, users often face issues such as slow order processing, lack of real-time tracking, limited restaurant options, and inefficient payment systems. Many small and medium-sized restaurants struggle to establish an online presence due to high platform fees and complex technical requirements. Additionally, existing solutions lack seamless restaurant management, user engagement, and order tracking features.
- This project aims to develop a scalable, user-friendly, and cost-effective Zomato-like food delivery platform using the MERN stack, addressing these challenges by providing real-time order tracking, secure online payments, efficient restaurant management, and an intuitive user interface for an enhanced food ordering experience.

Project Overview

- The Zomato Clone is a MERN-based food delivery platform that allows users to browse restaurants, order food, and make secure payments. It features JWT authentication, real-time order tracking (WebSockets), online payments (Stripe/Razorpay), and restaurant management. The system includes user, restaurant, and admin modules for efficient order processing. Built with React.js, Node.js, Express.js, and MongoDB, it ensures a scalable, user-friendly, and seamless food ordering experience.

Proposed Solution

- To address the challenges in online food delivery, we propose a MERN-based Zomato Clone that offers a seamless, efficient, and scalable solution.
- User-Friendly Interface: A responsive React.js frontend with easy navigation for browsing restaurants, ordering food, and tracking deliveries in real time.
- Secure & Scalable Backend: Node.js & Express.js handle authentication (JWT), order management, and restaurant interactions efficiently.
- Real-Time Order Tracking: Implement WebSockets for instant order status updates and Razorpay/Stripe for secure online payments.
- Restaurant & Admin Management: Restaurants can manage menus and orders, while admins oversee platform operations, ensuring smooth functionality.

Technology used

- Frontend: React.js – For building a dynamic and responsive user interface.
- Backend: Node.js & Express.js – For handling API requests, authentication, and business logic.
- Database: MongoDB – A NoSQL database for storing user, restaurant, and order data efficiently.
- Authentication: JWT (JSON Web Token) – For secure user login and authorization.
- Real-Time Updates: WebSockets – For live order tracking and status updates.
- Payment Gateway: Stripe/Razorpay – For secure online transactions.
- State Management: Redux – For efficient data handling and user experience optimization.
- Hosting & Deployment: Vercel/Netlify (Frontend) and Heroku/AWS (Backend) for cloud deployment.

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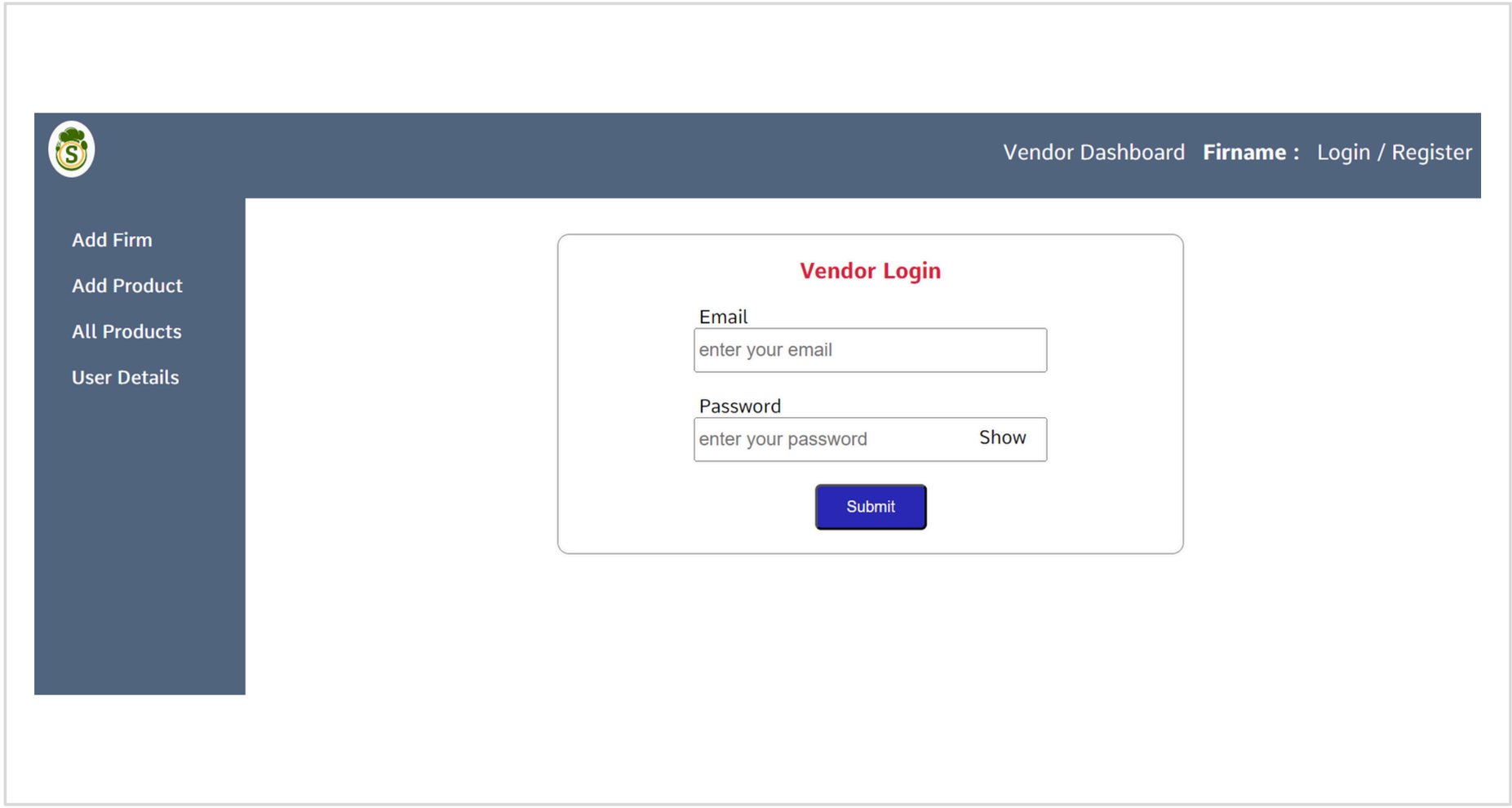
Modelling & Result



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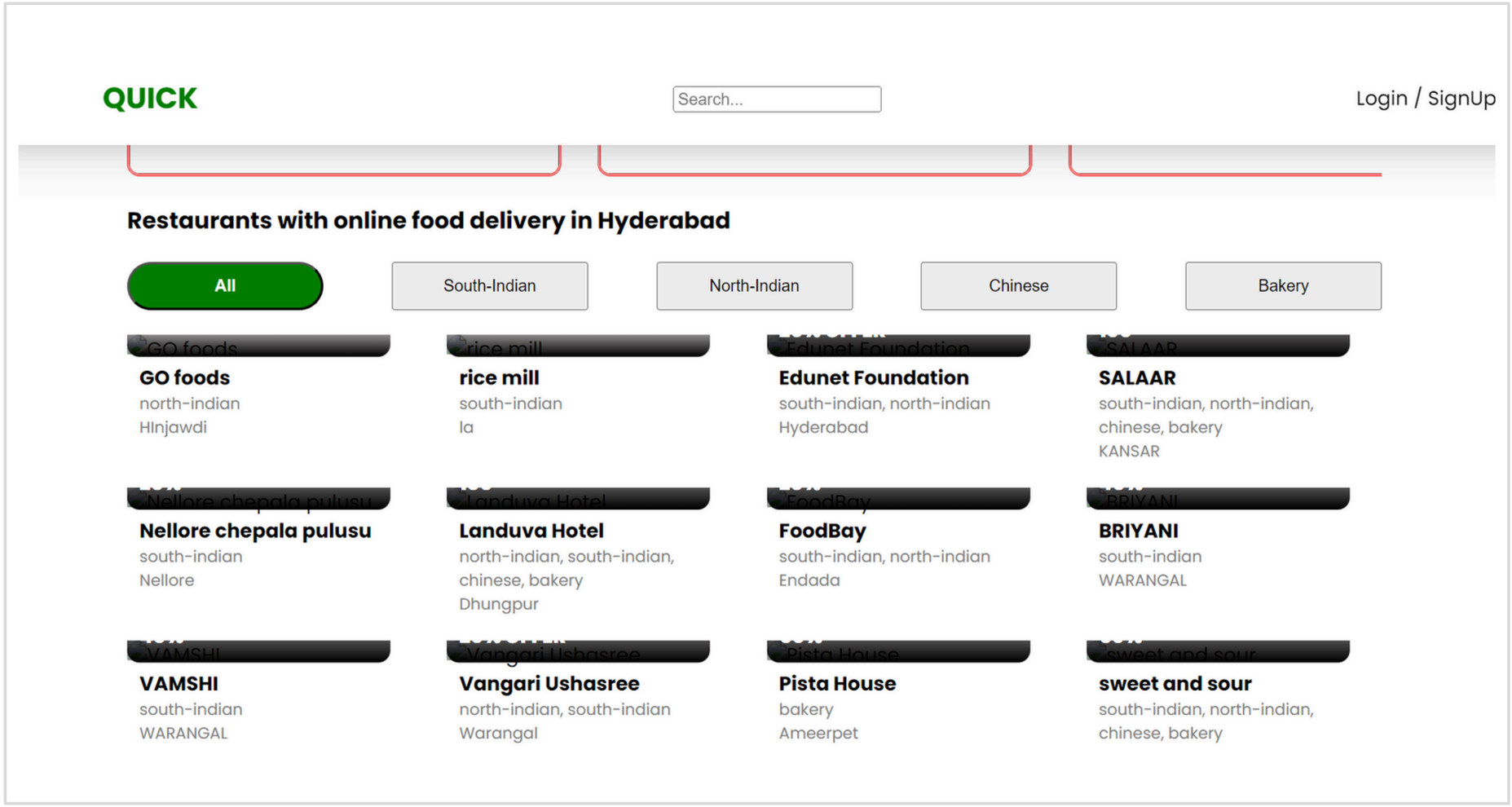
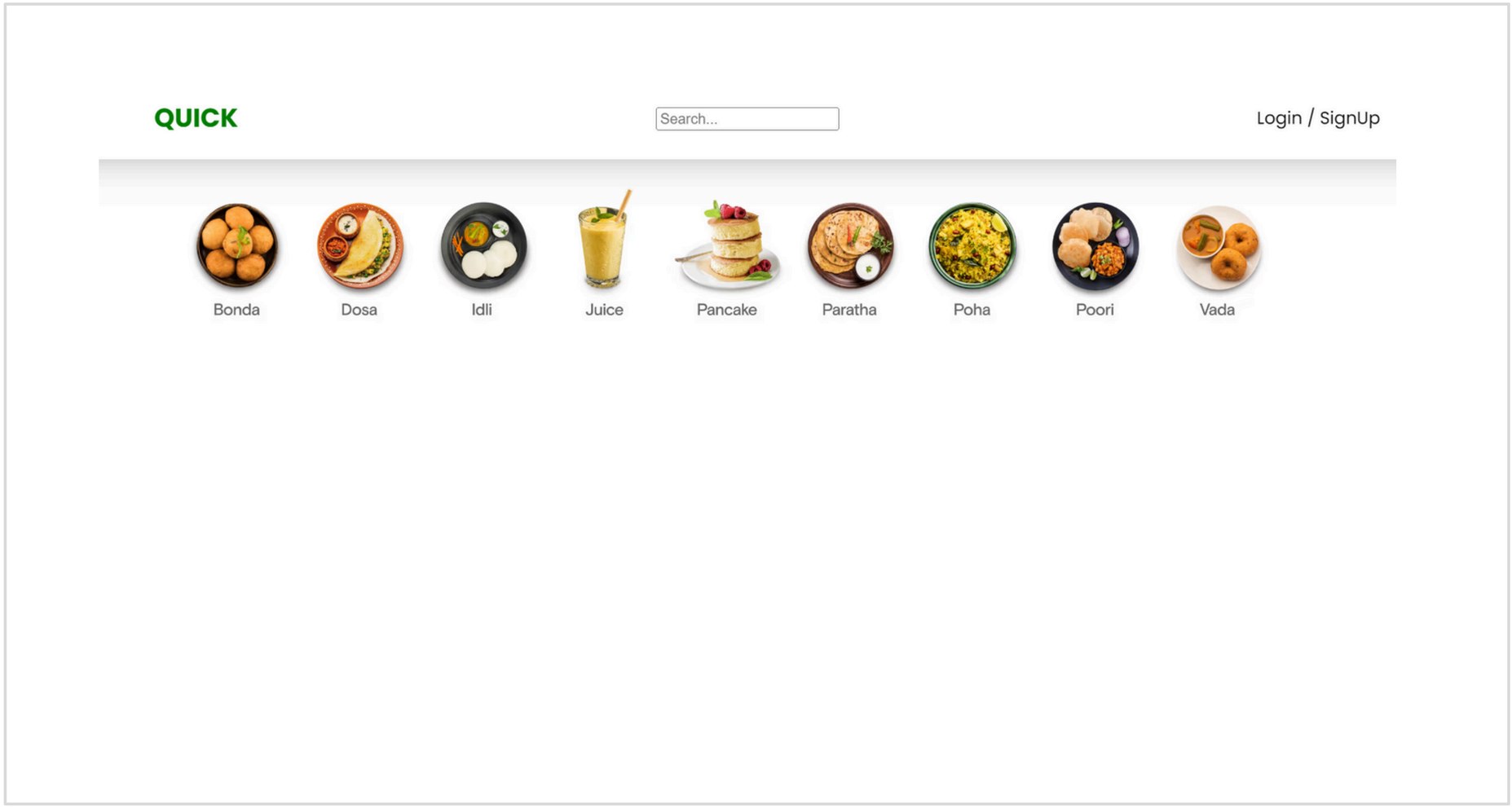
Modelling & Result

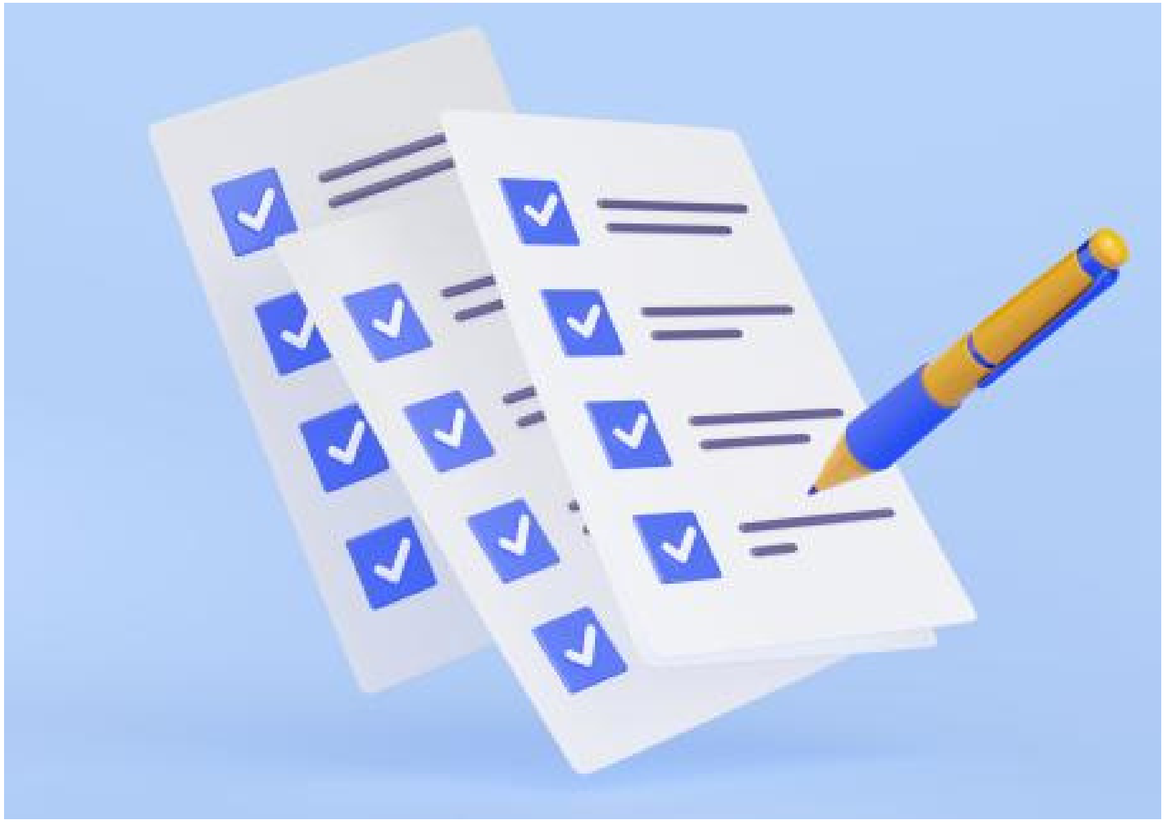


Modelling & Result



Conclusion

- The Zomato Clone using MERN stack provides a scalable, efficient, and user-friendly food delivery platform that enhances the online ordering experience. With React.js for UI, Node.js & Express.js for backend, and MongoDB for data management, the system ensures secure transactions, real-time order tracking, and seamless restaurant management. This solution benefits both users and restaurant owners by offering a smooth ordering process, secure payments, and operational efficiency. In the future, features like AI-based recommendations and delivery partner tracking can be added to further improve the platform.



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