

BREWSUITE: A FOOD PORTAL PROCESSING

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Abstract - BrewSuite: A Food Portal is a smart system designed to modernize coffee shops, especially in rural and semi-urban areas. It automates daily tasks like billing, inventory, customer data, and payments through a centralized platform. This reduces manual work, minimizes errors, and improves communication between staff and customers. BrewSuite is easy to use, cost-effective, and helps small businesses stay organized. Future plans include adding digital screens at tables for faster ordering and a better customer experience.

Key Words: digital ordering, food portal, table-mounted screens, automation, order management, customer experience, rural digitization, smart cafe, transaction tracking, self-service system.

1.INTRODUCTION

BrewSuite: A Food Portal is a digital platform designed to automate and streamline the daily operations of coffee shops, especially in rural and semi-urban areas. It helps local businesses manage orders, transactions, and customer data more efficiently through a centralized, user-friendly system. BrewSuite reduces manual workload, improves service speed, and includes a touchless table-ordering feature in development to enhance the customer experience. It aims to bring smart, scalable, and affordable technology to small food businesses, helping them stay competitive in a fast-evolving market.

2. LITERATURE REVIEW

Automation has improved efficiency in the food and beverage industry through tools like POS systems and inventory management, helping reduce errors and streamline operations (Kumar et al., 2021). Digital self-service technologies such as kiosks and mobile apps enhance order accuracy and reduce wait times (Pantano & Gandini, 2017). However, rural and semiurban areas face adoption challenges due to limited infrastructure and digital literacy. BrewSuite addresses this gap by offering an affordable, user-friendly platform with features like digital table screens for touchless ordering, inspired by systems like Ziosk and Presto (Forbes, 2020). It combines front-end convenience with backend efficiency, making it ideal for local coffee shops.

3. METHODOLOGY

BrewSuite is a digital solution designed to automate and simplify the daily operations of coffee shops, especially in rural and semi-urban areas. It streamlines order processing, transaction tracking, inventory management, and customer data handling through an easy-to-use interface, reducing manual work, improving accuracy, and speeding up service. A key upcoming feature is the integration of digital screens at customer tables for touchless, self-service ordering enhancing both efficiency and the customer experience. Developed using Java, Angular, and Spring Boot, BrewSuite follows an agile methodology with a responsive frontend, secure backend APIs, and structured data management via MySQL. This project represents a step forward in bringing smart, scalable solutions to local food businesses.

4. RESULT

BrewSuite was tested on core features like login, menu access, cart operations, and order placement. The system performed reliably, with all key functions working as expected. Tests confirmed that basic operations are stable and function correctly under normal usage.

Table -1:	Test	Cases	&	Test	Results
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User Action	System Response			
User logs in with valid credentials.	Dashboard is displayed with welcome message.			
User clicks "View Menu".	List of food items with prices is displayed.			
User adds an item to cart & Cart icon updates and item appears with price.	Cart icon updates and item appears with price.			
User places order & Confirmation message is displayed with order summary.	Confirmation message is displayed with order summary.			



WORKING FLOW



5. DISCUSSION

The development of BrewSuite highlights the practical use of modern web technologies in addressing real-world challenges faced by small food businesses, especially in semi-urban and rural areas. By combining Angular and Spring Boot, the project achieved a responsive, functional platform capable of managing orders, menus, and user interactions efficiently. The system's simplicity makes it accessible to users with limited technical knowledge, while its structure allows for future scalability and feature enhancements. Challenges during development included ensuring smooth frontend-backend integration and maintaining data consistency, which were addressed through iterative testing and refinement. Overall, BrewSuite demonstrates the potential of affordable digital tools in improving service quality and operational efficiency in local food outlets.

6. CONCLUSION

This project successfully developed **BrewSuite:** A Food **Portal**, a simple and effective web-based application aimed at streamlining food ordering in small cafes and semi-urban eateries. Built using Angular and Spring Boot, the system enables users to view menus, manage cart items, and place orders with ease. The project demonstrated the practical application of full-stack development tools in creating a functional, user-friendly platform. Key achievements include a working login system, dynamic menu display, smooth cart operations, and successful testing of core features, proving the system's reliability and stability for real-world use.

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