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COLLEGE OF ENGINEERING
(A U T O N O M O U S)

SMART GROCERY

23MCA246 - Main Project

Scrum Master

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ABSTRACT

SMART GROCERY

(SMART GROCERY SHOPPING WEBSITE)

The **Smart Grocery Shopping Platform** is a cutting-edge extension of the mini project, designed to revolutionize the online grocery shopping experience by integrating advanced functionalities and leveraging state-of-the-art technologies. This main project focuses on enhancing user satisfaction, streamlining operations, and optimizing supply chain management through intelligent systems.

Key Features and Functionalities:

1. Custom Meal Planning:

- **Recipe Integration:** Enables users to discover recipes, add all necessary ingredients to their shopping cart with a single click, and simplify meal preparation.

2. Dynamic Pricing and Deals:

- **Dynamic Pricing Module:** Implements AI-driven pricing strategies, adjusting product prices in real-time based on factors like stock levels, demand, and user location to ensure competitive pricing and maximize sales.

3. Enhanced District Operation Manager Panel:

- **Inventory Management:** Provides auto stock order and manual stock order.
- **Payment Module:** Facilitates the DOM to do payments to the supplier for the stock ordered using payment gateway such as Razorpay.
- **Supplier Integration and Management:** Facilitates collaboration with suppliers for efficient order fulfillment and stock replenishment and Management of suppliers.
- **Report Generation:** Allows administrators to generate detailed performance and sales reports for data-driven decision-making.

4. Smart Shopping Assistant:

- **Voice-Activated Assistance:** Offers hands-free shopping by enabling users to search for products, add items to the cart, and manage their orders using voice commands.
- **AI-Driven Product Descriptions:** Automates the generation of detailed, user-friendly product descriptions, improving user experience.
- **Automated Restocking Alerts:** Sends automatic notifications to suppliers when inventory levels fall below predefined thresholds.
- **Group Purchase and Bulk Discounts:** Encourages collective buying by offering discounts for bulk purchases, fostering a cost effective shopping experience.

5. Personalized Recommendations:

- **AI-Powered Recommendation Engine:** Suggests products based on user preferences, purchase history, browsing behavior, and trending items, creating a personalized shopping experience.

6. Supplier Module:

- **Product Management:** Allows suppliers to manage their product listings, update stock levels, and provide accurate product details.
- **Order Fulfillment Management:** Empowers suppliers to process bulk orders from district operations managers, update order statuses, and ensure timely deliveries.
- **Order History :** Enables the supplier to manager past Orders from the District Operation Manager and enables to know whether the payment has been done or not.

This extension aims to create a comprehensive, AI-driven platform that enhances customer satisfaction, optimizes inventory and supplier management, and supports scalability for future growth. By leveraging advanced technologies such as artificial intelligence, machine learning, and real-time analytics, the **Smart Grocery Shopping Platform** positions itself as a benchmark for modern, innovative grocery solutions.