

# **REQUIREMENT GATHERING**

## **1. PROJECT OVERVIEW:**

The "Smart Grocery Shopping" website is designed to provide an innovative and efficient platform for users to shop for groceries online. It addresses the problem of time-consuming and often stressful grocery shopping by offering a seamless online experience that includes personalized recommendations, meal planning, and real-time order tracking. The main objectives are to enhance convenience, improve customer satisfaction, and streamline the grocery shopping process.

### **Main Objectives:**

- Enhance convenience and efficiency in grocery shopping.
- Provide personalized product recommendations using AI.
- Enable users to track orders in real-time and receive timely notifications.
- Offer a secure and streamlined payment process.
- Integrate modern technologies like voice assistance for a hands-free shopping experience.

## **2. SYSTEM SCOPE:**

The system is intended for full-scale implementation as a commercial e-commerce platform for grocery shopping. It is not limited to research or prototype stages but aims to be a fully functional, market-ready product.

## **3. TARGET AUDIENCE:**

- **General Consumers:** Individuals looking to buy groceries online.
- **Busy Professionals:** People with limited time who need a quick and efficient shopping solution.
- **Health-Conscious Consumers:** Individuals seeking products tailored to their dietary preferences and health goals.

- **Tech-Savvy Users:** Users who prefer modern technology integration like voice-activated shopping.

#### 4. MODULES:

- **User Authentication and Profile Management:** Secure login, registration, and profile management.
- **Product Catalog and Search:** Comprehensive product listings with advanced search and filtering options.
- **Smart Shopping Cart:** Easy addition, removal, and management of cart items.
- **Personalized Recommendations:** AI-driven product recommendations.
- **Secure Payment and Checkout:** Multiple payment options with a streamlined checkout process.
- **Order Tracking and Notifications:** Real-time tracking and status updates for orders.
- **Customer Support and Live Chat:** 24/7 support with live chat and comprehensive help resources.
- **Admin Panel:** User, product, and order management for administrators.
- **Smart Shopping Assistant:** AI recommendations and voice-activated assistance.
- **Recipe Integration:** Suggest recipes and add ingredients to the cart with one click.
- **Dynamic Pricing and Deals:** Offer real-time deals and dynamic pricing.

#### 5. USER ROLES:

- **Customers:** Can browse products, manage their shopping carts, make purchases, and track orders.
- **Admins:** Oversee the platform's operations, manage user accounts, and maintain the product catalog.

- **Suppliers:** Manage inventory and fulfill orders by supplying products to the grocery store.
- **Customer Support Agents:** Assist users with inquiries, issues, and feedback through live chat or other support channels.

## **6. SYSTEM OWNERSHIP:**

- The system is owned by the development organization responsible for creating and maintaining the platform. This could be a tech company specializing in e-commerce solutions or an individual entrepreneur who owns the intellectual property.

## **7. INDUSTRY/DOMAIN:**

- The project is related to the E-commerce industry, specifically within the Retail and Grocery sector.

## **8. DATA COLLECTION CONTACT:**

- **Contact Name:** Kiranjith K S  
**Role:** Grocery Shop Worker  
**Contact Information:** +91 73567 06362

## **9. QUESTIONNAIRE FOR DATA COLLECTION:**

### **1. How do you currently manage inventory in your grocery store?**

**Answer:**

"We manually keep track of inventory using a combination of ledgers and sometimes basic spreadsheet software. The staff does physical checks to

ensure stock levels, especially for fast-moving items like fruits, vegetables, and dairy."

**Solution:**

Implementing an automated inventory management system that tracks stock levels in real-time could significantly reduce the time and human effort involved in manually tracking stock. Integration with sales systems can automatically update stock after each sale.

**2. What challenges do you face in tracking stock levels and reordering products?**

**Answer:**

"Sometimes, we run out of fast-moving items without realizing it, and other times, we end up overstocking slow-moving items. It's difficult to strike the right balance when reordering."

**Solution:**

Adopting an AI-powered inventory management system can help predict stock levels based on sales trends and seasonal demands. It can also set up automatic reordering alerts when stock reaches a certain level.

**3. How do you gather information about customer preferences and shopping habits?**

**Answer:**

"Most of it is based on personal interactions with customers and observation. If someone frequently buys a certain product, we make a note to stock more of it."

**Solution:**

Introducing a customer loyalty program with a digital platform can help

collect valuable data about customer preferences and purchasing patterns. This data can be analyzed to better understand what products to stock and create personalized marketing offers.

**4. Do you offer any form of online shopping, and if so, what challenges do you face?**

**Answer:**

"No, we don't currently offer online shopping. However, we have been considering it, but we're not sure how to handle the logistics, especially with deliveries and maintaining the freshness of produce."

**Solution:**

A hybrid system that integrates both in-store and online shopping could be developed. With online shopping, creating a reliable logistics network, such as partnering with local delivery services, can ensure that fresh items reach customers in a timely manner.

**5. How do you manage deliveries, and what logistical issues do you encounter?**

**Answer:**

"Deliveries are mostly done by our staff when needed, but coordinating the timing with customer availability can be challenging. Plus, delivering perishable items like dairy and vegetables while keeping them fresh is tough."

**Solution:**

A delivery management system with route optimization and real-time tracking could improve logistics. Additionally, investing in refrigerated

transport or temperature-controlled packaging can help maintain the quality of perishable goods.

**6. What payment methods do you currently accept, and how secure are they?**

**Answer:**

"We accept cash, credit cards, and digital wallets like Google Pay and Paytm. Security is handled by our card processor, but we're concerned about fraud."

**Solution:**

Upgrading to a secure point-of-sale (POS) system that supports multi-layered authentication and encryption can enhance payment security. Digital payment gateways should follow PCI DSS (Payment Card Industry Data Security Standard) compliance to ensure secure transactions.

**7. How do you handle customer inquiries and complaints?**

**Answer:**

"Customers usually come to us directly with any problems or complaints. We try to resolve issues on the spot, but sometimes we lose track of which issues are resolved and which are pending."

**Solution:**

Implementing a customer service management system that logs complaints and inquiries can help track the status of each case and ensure resolution. Live chat on an online platform could also assist in handling queries more efficiently.

**8. How often do you update your product catalog, and how do you decide on the products to stock?**

**Answer:**

"We update our product catalog seasonally, based on availability from suppliers and customer demand. Sometimes we introduce new products based on supplier suggestions."

**Solution:**

Using data analytics based on past sales, customer feedback, and market trends, an online platform can provide more precise recommendations for updating and expanding the product catalog.

**9. What marketing strategies do you use to attract and retain customers?**

**Answer:**

"We rely heavily on word-of-mouth, flyers, and occasional discounts. We also try to stock products that customers prefer and provide good service to retain them."

**Solution:**

Digital marketing strategies such as personalized email campaigns, social media promotions, and loyalty rewards programs can be implemented to reach a broader audience and improve customer retention.

**10. Are you open to adopting new technologies to improve your operations, and what concerns might you have?**

**Answer:**

"We are open to the idea, but the main concerns are the cost of implementation and whether it will really be helpful. Also, training staff to use new systems might be a challenge."

**Solution:**

Adopting technology incrementally can minimize disruption. Start with key areas like inventory management and customer data collection, then gradually move to online ordering and advanced analytics. Offering training and ongoing support for staff can help ease the transition.