Please make a BRD which can be presented to the client along with complete development and resource plan.

1. **Document Revisions**

|  |  |  |
| --- | --- | --- |
| Date Version  | Number | Document Changes |
| 1/6/2024 | 0.2 |  |

1. **Approvals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Role | Name  | Title  | Signature  | Date |
| Project Sponsor  | Kalyani | Senior Executive  | Kalyani | 1/6/2024 |
| Business Owner | Praful | Head of Loan Division | Praful | 11/6/2024 |
| System Architect | Jovial |

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| Project Manager |

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 | Jovial | 13/6/2024 |
| Development Lead | Snehal |

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| System Architect |

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 | Snehal | 14/6/2024 |
| Lead User  | Sanchita |

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| Lead Developer |

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 | Sanchita | 16/6/2024 |
| User Experience Lead  | Punam | UX Designer  | Punam | 17/6/2024 |
| Quality Lead  | Satish | QA Manager  | Satish | 18/6/2024 |
| Content Lead | Vaishali | Content Specialist  | Vaishali | 19/6/2024 |

1. **3. RACI Chart for This Document**

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| --- | --- | --- | --- | --- | --- |
| Name | Position | R | A | C | I |
| Kalyani |

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| --- |
| Project Sponsor |

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| Praful |

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| Business Owner |

 |  | ✓ | ✓ | ✓ |
| Jovial |

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| Project Manager |

 | ✓ |  | ✓ | ✓ |
| Snehal | System Architect | ✓ |  | ✓ | ✓ |
| Sanchita |

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| Development Lead |

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| Punam |

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| UX/UI Lead |

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 | ✓ |  |  |  |
| Satish | QQA | ✓ |  | ✓ |  |
| Vaishali |

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| IT  |

Integration team

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 | ✓ |  | ✓ | ✓ |
| Suresh | Marketing Team |  |  | ✓ | ✓ |
| Ramesh | Support Team |  |  | ✓ | ✓ |

**4. Introduction**

 **4.1. Business Goals**

* **Efficient Inventory Management:** Ensure real-time stock tracking across multiple manufacturing plants and warehouses.
* **Optimized Delivery System:** Minimize delivery time and maximize order fulfillment efficiency.

**4.2. Business Objectives**

* Enhance customer satisfaction by offering faster loan approvals and improved service Automate inventory tracking and reduce stock discrepancies.
* Enable seamless communication between manufacturing plants, warehouses, and delivery teams.
* Implement AI-driven delivery route optimization for quicker customer deliveries.
* Provide real-time reporting and analytics for inventory and logistics management.

**4.3. Business Rules**

#### **Organization Policies and Procedures**

* Orders must be processed within **30 min** of placement.
* Warehouse stock updates must occur in **real-time**.
* Delivery must occur within **24 hours** for local orders and **48 hours** for national orders.
* Inventory levels should trigger automated restocking when reaching the **minimum threshold**.

####  **Rules & Regulations**

* Compliance with **FSSAI (Food Safety and Standards Authority of India)** for food storage & transportation.
* Follow **temperature-controlled** storage regulations for dairy and ice-cream products.
* Adherence to **taxation and billing laws** based on region.

 **4.4. Background**

The company operates multiple **manufacturing plants and warehouses** across the country and supplies **ice cream and milk products** to customers. Current operations involve **manual inventory tracking and delivery management**, leading to inefficiencies. A new software solution is required to streamline operations and improve efficiency.

 **4.5. Project Objective**

To develop an **automated inventory and delivery management system** that integrates with warehouses and delivery channels to reduce errors, optimize stock levels, and improve order fulfillment speed.

 **4.6. Project Scope**

**4.6.1. In Scope Functionality**

Inventory tracking and automated stock updates.

✅ AI-driven **delivery route optimization**.

 ✅ Order management system with real-time status updates.

✅ Customer notifications via email/SMS for order tracking.

 ✅ Analytics dashboard for inventory and delivery performance.

**4.6.2. Out Scope Functionality**

❌ Payment gateway integration.

❌ Integration with external **third-party logistics providers**.

❌ Mobile app development (limited to web-based system for Phase 1).

**5. Assumptions**

* The company will provide all existing **inventory and logistics data** for migration.
* Internet connectivity will be available at all warehouses and manufacturing plants.
* Users will be trained to use the new system effectively.
1. **Constraints**
* **Budget Limitation:** The project must be developed within the allocated budget.
* **Timeframe:** The system must be operational within **X months**.
* **Regulatory Compliance:** The system must comply with food safety and transport regulations.
1. **Risks**
* **Data Migration Challenges:** Risk of errors while transferring existing inventory records.
* **User Adoption Issues:** Resistance from employees to new technology.
* **System Downtime:** Any failure in the software could disrupt order processing.
* **Scalability Issues:** Future expansion may require additional infrastructure.

**8 Business Process Overview**

**8.1. Legacy System (AS-IS)**

* **Manual** inventory tracking leads to stock discrepancies.
* Orders are processed via **phone and emails**, causing delays.
* Delivery routes are **not optimized**, resulting in higher fuel costs and longer delivery times.

 **8.2. Proposed Recommendations (to be)**

* **Automated inventory tracking** to reduce stock mismatches.
* **Centralized order processing system** for faster handling.
* **AI-based delivery route optimization** to reduce delivery time.
* **Automated customer notifications** for better order tracking.

 **9. Business Requirements**

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| Requirement ID |

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| **Requirement Description** |

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| **System Functionality** |

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 | Priority |
| FR1 |

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| Easy Loan Application Process |

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| The system shall provide real-time inventory updates across all locations. |

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 | High |
| FR2 | Real-time Loan Application Status |

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| The system shall support automated restocking alerts when stock levels drop.. |

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 | High |
| FR3 | Fast Processing and Approval | The system shall allow customers to track orders in real-time. | High |
| FR4 | Mobile-First Experience | The system shall optimize delivery routes based on traffic and distance. | Medium |
| FR5 | Clear Communication | The system shall generate performance reports for business analytics. | High |
| FR6 |  |  | High |
| FR7 |  |  | High |
| FR8 |  |  | Medium |
| FR9 |  |  | Medium |
| FR10 |  |  | Medium |

**10. Appendices**

**10.1. List of Acronyms**

* **AI** – Artificial Intelligence
* **ERP** – Enterprise Resource Planning
* **FSSAI** – Food Safety and Standards Authority of India

 **10.3 Glossary of Terms**

* **Inventory Management:** Tracking and maintaining stock levels across multiple locations.
* **Route Optimization:** AI-driven process to find the fastest delivery path.
* **Stock Replenishment:** Automated system to order more stock when inventory is low.

**10.3. Related Documents**

* Process Flow Diagram
* System Architecture Diagram
* Use Case Documentation

2. Prepare process flow diagram using your imagination.

Raw Material Procurement
(Suppliers send ingredients milk, sugar, flavors to manufacturing plants.)

**Manufacturing (**Ice cream and milk products are produced.)

**Quality Check & Storage** (Products are checked and stored in warehouses.)

**Customer Order** (Customers place orders via an app/website.)

Stock Availability Check (If available → Proceed to order fulfillment. If unavailable → Trigger restocking.)

Order Processing (Warehouse staff picks & packs the order.)

Delivery Optimization (AI selects the fastest delivery route..)

**Order Dispatched** (Orders are sent via delivery trucks.)

**Order Delivered** (Inventory updates & customer confirmation received.)

Assignment 2:
1. Write an introduction letter to a client introducing yourself as a business analyst in charge of working with the client and his team to start the business understanding process.

**Subject:** Introduction as Business Analyst for Project Collaboration

Dear Pradeep,

I hope this email finds you well. My name is Kalyani Shelke, and I am pleased to introduce myself as the **Business Analyst** assigned to collaborate with you and your team on this exciting project. I look forward to working closely with you to ensure a thorough understanding of your business needs and objectives.

Our primary goal at this stage is to establish a clear **business understanding**, identify key requirements, and define a roadmap that aligns with vision. Through structured discussions, requirement-gathering sessions, and process analysis, I aim to help bridge the gap between business needs and technical implementation, ensuring a smooth and efficient development process.

To get started, I would love to schedule an **initial discussion** at your convenience to discuss your expectations, challenges, and desired outcomes for the project. Please let me know a time that works best for you.

I look forward to collaborating with you and contributing to the success of this initiative. Feel free to reach out if you have any immediate questions.

Best Regards,
kalyani shelke
Business Analyst
7448795678
Jocayta

2. Prepare a brief BRD and SRS for a project- Horoscope or Ticketing system or online store.

Online store

**1 Document Revisions**

|  |  |  |
| --- | --- | --- |
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**2 Approvals**

|  |  |  |  |  |
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| Project Sponsor  | Kalyani | Senior Executive  | Kalyani | 1/6/2024 |
| Business Owner | Praful | Head of Loan Division | Praful | 11/6/2024 |
| System Architect | Jovial |

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 | Sanchita | 16/6/2024 |
| User Experience Lead  | Punam | UX Designer  | Punam | 17/6/2024 |
| Quality Lead  | Satish | QA Manager  | Satish | 18/6/2024 |
| Content Lead | Vaishali | Content Specialist  | Vaishali | 19/6/2024 |

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| --- |
| Project Sponsor |

 |  | ✓ | ✓ | ✓ |
| Praful |

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| Business Owner |

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| Jovial |

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| Project Manager |

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| Snehal | System Architect | ✓ |  | ✓ | ✓ |
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Integration team

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| Suresh | Marketing Team |  |  | ✓ | ✓ |
| Ramesh | Support Team |  |  | ✓ | ✓ |

**4. Introduction**

 **4.1. Business Goals**

* Develop an online platform for seamless product browsing and purchasing.
* Ensure secure and efficient payment processing.
* Optimize inventory and order management.
* Enhance customer experience with fast delivery and support services.

**4.2. Business Objectives**

* Enable farmers to purchase agricultural products (seeds, fertilizers, pesticides) easily.
* Integrate a secure and user-friendly payment gateway.
* Implement real-time inventory tracking.
* Provide a robust order management system with tracking and notifications.
* Offer customer support through chat and call assistance.

**4.3. Business Rules**

#### **Organization Policies and Procedures**

* Customers must register to place orders.
* Payments should be processed securely via the integrated payment gateway.
* Orders can be canceled within a stipulated time before shipment.
* Inventory updates should be real-time to prevent stockout issues.
* Delivery times should be based on location and product availability.

####  **Rules & Regulations**

* Compliance with **e-commerce laws** and **consumer protection policies**.
* Secure handling of user data in accordance with **GDPR** and **data privacy laws**.
* Compliance with **agricultural product regulations** and **chemical safety standards**.
* Adherence to **taxation laws** based on the region of operation

 **4.4. Background**

The current market lacks a **dedicated online platform** for farmers to purchase essential agricultural products directly from manufacturers. The business aims to bridge this gap by providing an **easy-to-use e-commerce platform** with efficient logistics and order fulfillment.

 **4.5. Project Objective**

To build an **end-to-end online store** that enables customers to browse, purchase, and receive agricultural products efficiently while ensuring seamless inventory and order management.

 **4.6. Project Scope**

**4.6.1. In Scope Functionality**

User registration and authentication. ✅ Product catalog with detailed descriptions and pricing. ✅ Secure online payment integration. ✅ Order tracking and notifications. ✅ Admin dashboard for inventory and order management. ✅ Customer support system. ✅ Reports and analytics for business insights.

.

**4.6.2. Out Scope Functionality**

Integration with third-party logistics providers (Phase 2 feature). ❌ International shipping (Limited to domestic operations in Phase 1). ❌ Mobile app development (Web-based system for initial release).

**5. Assumptions**

* The company will provide product data, pricing, and supplier details.
* Internet access is available for all users.
* Payment gateway integration will comply with financial regulations.
* Sufficient storage and server capacity for peak traffic handling.
1. **Constraints**
* **Budget Limitations:** Development must be completed within allocated funds.
* **Time Constraints:** The project must be delivered within **X months**.
* **Regulatory Compliance:** Must adhere to **agricultural, taxation, and data protection laws**.
* **Technical Limitations:** Initial version will be web-based only.
1. **Risks**
* **Cybersecurity Threats:** Risk of data breaches and fraud.
* **Operational Challenges:** Difficulty in integrating real-time inventory updates.
* **Scalability Issues:** Increased demand may require server upgrades.
* **Logistics Dependencies:** Delivery delays due to transportation challenges.
* **User Adoption Issues:** Farmers may face difficulties in transitioning to online purchasing.

**8 Business Process Overview**

**8.1. Legacy System (AS-IS)**

* Farmers rely on **physical stores** for purchases.
* Orders are manually managed through **phone calls and paperwork**.
* Payments are typically **cash-based**, leading to accounting inefficiencies.
* **Delivery is unstructured**, relying on local distributors.

 **8.2. Proposed Recommendations (to be)**

* **Fully automated e-commerce platform** with online product selection and ordering.
* **Secure online payment system** with multiple payment options.
* **Integrated order tracking** and customer notifications.
* **AI-driven inventory management** to prevent stockouts.
* **Data analytics for demand forecasting** and business growth insights.

 **9. Business Requirements**

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| Requirement ID |

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| **Requirement Description** |

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| **System Functionality** |

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 | Priority |
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| Easy Loan Application Process |

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| The system shall support secure user registration and authentication. |

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| FR2 | Real-time Loan Application Status |

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| The platform shall allow customers to browse and search for products. |

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 | High |
| FR3 | Fast Processing and Approval | The system shall provide real-time stock availability updates. | High |
| FR4 | Mobile-First Experience | The payment gateway shall support multiple modes (Credit/Debit Cards, UPI, Net Banking). | Medium |
| FR5 | Clear Communication | The system shall generate performance reports for business analytics. | High |
| FR6 |  | The system shall enable order tracking and delivery status updates | High |
| FR7 |  | Admin users shall have access to sales reports and analytics. | High |
| FR8 |  |  | Medium |
| FR9 |  |  | Medium |
| FR10 |  |  | Medium |

**10. Appendices**

**10.1. List of Acronyms**

* **ERP** – Enterprise Resource Planning
* **UPI** – Unified Payments Interface
* **GDPR** – General Data Protection Regulation

 **10.3 Glossary of Terms**

* **Inventory Management:** Tracking and maintaining stock levels efficiently.
* **Order Fulfillment:** The process of receiving, processing, and delivering customer orders.
* **Payment Gateway:** A service that processes online payments securely.
* **User Authentication:** Verifying the identity of users accessing the system.

**10.3. Related Documents**

* System Architecture Diagram
* Use Case Documentation
* Process Flow Diagrams

## **SRS for a projecton online store.**

## **1. Introduction**

### **1.1 Purpose**

The purpose of this document is to define the software requirements for an online store facilitating the purchase of agricultural products. This document serves as a foundation for system development, testing, and deployment.

### **1.2 Scope**

The online store will enable users to browse, select, and purchase agricultural products. The system will support secure payments, real-time inventory management, order tracking, and customer support features.

### **1.4 Assumptions and Dependencies**

* Users will have internet access to access the platform.
* A payment gateway will be integrated for online transactions.
* Inventory data will be managed via an internal system or ERP.

## **3. Functional Requirements**

### **3.1 User Registration and Authentication**

* Users must register with valid credentials (email/phone verification).
* Passwords should be securely stored and encrypted.

### **3.2 Product Catalog and Search**

* Users should be able to search and filter products.
* Product descriptions, pricing, and availability should be displayed.

### **3.3 Shopping Cart and Checkout**

* Users can add/remove products from the cart.
* Checkout process should support multiple payment options.

### **3.4 Order Management**

* Users should receive order confirmation and tracking details.
* Admins should be able to update order status.

### **3.5 Inventory Management**

* System should auto-update stock levels after purchases.
* Admin should receive alerts for low stock items.

## **4. Non-Functional Requirements**

### **4.1 Performance Requirements**

* The system should handle 500 transactions per minute.
* Response time should not exceed 2 seconds.

### **4.2 Security Requirements**

* Data encryption for user-sensitive information.
* Role-based access control for different user types.

### **4.3 Availability Requirements**

* System uptime should be 99.9%.
* Daily backups should be maintained.

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| UserStoryNo:1 | Tasks:01 | Priority: High |
| **As a** new customer,**I want** to create an account on the online store,**So that** I can save my details, track orders, and make future purchases easily. |
| BV: 300 | CP:03 |
| Acceptance Criteria :1. The user must enter a valid email and phone number.
2. A verification link is sent to confirm registration.
3. Upon successful verification, the user can log in.
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| UserStoryNo:2 | Tasks:02 | Priority: Medium |
| **As a** customer,**I want** to search and filter products by category, price, and rating,**So that** I can quickly find the items I need. |
| **BV:** 250 | **CP:** 04 |
| Acceptance Criteria :1. The system should allow keyword-based searches.
2. Filtering options should include price range, brand, and customer ratings.
3. The search results should display relevant product details.
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| --- | --- | --- |
| UserStoryNo:3 | Tasks:03 | Priority: High |
| **As a** customer,**I want** to add products to my shopping cart and proceed to checkout,**So that** I can purchase my selected items conveniently. |
| **BV:** 400 | **CP:** 05 |
| Acceptance Criteria :1. The cart should store selected products until checkout.
2. Users should be able to modify quantities or remove items.
3. Secure payment options should be available (credit card, UPI, net banking).
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| --- | --- | --- |
| UserStoryNo:4 | Tasks:04 | Priority: Medium |
| **As a** customer,**I want** to track my order status after purchase,**So that** I know when to expect my delivery. |
| BV:250 | CP:03  |
| Acceptance Criteria :1. Users should be able to check their order history.
2. The system should update order statuses (Processing, Shipped, Delivered).
3. Notifications should be sent for status updates.
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| --- | --- | --- |
| UserStoryNo:5 | Tasks:04 | Priority: low |
| **As an** admin,**I want** to manage stock levels efficiently,**So that** products do not go out of stock unexpectedly. |
| **BV:** 150 | **CP:** 02 |
|  Acceptance Criteria :1. The system should notify the admin when stock is low.
2. Admins should be able to update stock levels.
3. The online store should automatically reflect updated stock availability.
 |

|  |  |
| --- | --- |
| USE Case ID | DC 001 |
| Use case name | User Registration |
| Created By | suman | Last update Date | 11-11-2024 |
| Date created | 1-11-2024 | Last Revision Date | 11-10-2024 |
| Actor | Farmer, Manufacturer, System |
| Description | This use case describes the process by which farmers and manufacturers register on the platform by creating their individual profiles. |
| Pre-Condition | The platform must be online and accessible. |
| Post Condition | The user profile is successfully created, and the user receives confirmation. |
| Normal flow of event | 1. User accesses the registration page on the platform.2. The system prompts the user to input(name, contact details, passwords)3.User submit the form4. ****The System validates the input.******5. System store user details in database.**6. The system sends a confirmation email or SMS with a verification link/code.7. The user verifies their account by clicking the link or entering the code.8. The system confirms the registration and allows the user to log in. |
| Alternate Flow | 1. If the user submits incomplete or invalid details, the system highlights the errors and prompts the user to correct them.2. If the email or phone number is already in use, the system notifies the user and suggests using a different one.3. If the user does not complete verification, their profile remains inactive.4. If The user can request a new verification link or code. |
| Expectation | If the system is unavailable or encounters an error during registration, the user is notified to try again later. |
| Frequency of use | High |
| Assumption | 1. Users have internet access to register on the platform.
2. The system has email/SMS integration for sending verification links or codes.
 |

3. Make an ERD of creating a support ticket/Ticketing life cycle.