1.**Introduction:**

* 1.1**: Business Goal:** To Streamline inventory tracking and management to reduce manual errors and save time. Automate routine tasks to enable employees to focus on higher-value activities. To Reduce a delivery time and improve the order accuracy to enhance the overall customer satisfaction. Minimize wastage of products by implementing better inventory control. Decrease costs associated with transportation through optimized delivery routes and schedules.

**Need**: The Essential need of application is simplifying the delivery time and improve the order accuracy.

1.2 **Business Objective:** To Provide high quality ice cream and milk products that met regulatory standards and customer Expectations. To create a user friendly and interactive application that provides customer convenient access to promotions, product information and ordering options.

To provide an IT solution for:

**App Name**: BACO I DAIRY PRODUCTS.

**Description**: BACO I dairy products is your go to mobile application for all your daily needs.

BACO I has something to everyone. with a user-friendly interface and a plenty of features, this app aims to revolutionize your dairy products shopping experience.

**Features**:

* Browse through a diverse range of dairy products from PAN India
* Receive a recommendation based on your reference and past purchase.
* Explore a collection of mouthwatering recipes
* Access a detailed nutritional information of each product, including calorie count fat content and protein level.
* Stay updated on the latest promotions discounts and exclusive deals on your favourite dairy products.
* Place orders for dairy products directly through the app for convenient home delivery or pickup. Enjoy a hassle-free shopping experience with just a few taps on your device.
* Discover seasonal and limited-edition dairy products that celebrate the Flavors of each time of year. From holiday cheeses to summer ice cream varieties, explore the best of each season.
* Read reviews and ratings from fellow dairy enthusiasts to guide your purchasing decisions. Share your own feedback and contribute to the dairy-loving community.

**List what the functionalities are going to develop in software**

* Login Registration
* Login functionality
* Forget password Feature
* Product Search
* Product Filter
* Product Input Form
* Image upload
* Personalized Recommendations
* Online Ordering and Checkout
* Payment Gateway Integration
* Order Tracking
* Delivery Notifications
* Admin dashboard
* Store Locator: Integrate maps and location services to help users find nearby stores, farmers' markets, or specialty shops that offer the desired dairy products.
* Social Sharing
* Customer Reviews and Ratings
* Promotions and Discounts.
* Push Notifications: Send personalized notifications to users about new products, promotions, restocks, or relevant updates to keep them engaged and informed.
* Customer Support

**Mobile application for android and for IOS:**

Version 1.0 is only for Android User

**E LEARNING MANAGEMENT SYSTEM.**

* User registration: Allow users to create an account with a username, password, and email address.
* Login functionality: Enable users to log in to their accounts using their username and password.
* Forgot password feature: Allow users to reset their passwords in case they forget.
* Allow users to rate and review courses
* Allow users to update their profile information (name, email, password, etc.)
* Display user-specific information (enrolled courses, completed courses, etc.)
* Integrate a payment gateway to facilitate course purchases or subscription payments.
* Push notification system: Send push notifications to users about course updates or reminders.
* Offer support for multiple languages.
* Security measures to ensure data protection and encryption
* Integration with third-party services (e.g., Google Drive, Dropbox)
* Support for various file formats (e.g., MP4, MP3)

1.3 **Business Rules**:

* Payments will be processed through a secure payment gateway.
* The app will be compatible with various devices and operating systems.
* The app will be regularly maintained and updated to ensure stability and performance.
* The app will comply with KYC regulations to verify user identities.
* The app will comply with copyright law and respect intellectual property rights.
* The app will comply with data protection laws and regulations.
* The app will comply with tax laws and regulations related to payment processing.

1.4 **Background**:

 The background for a dairy product application involves understanding the growing consumer demand for convenient and efficient ways to access and purchase dairy products.

**Expected Benefits of Implementing the Project/Developing the Product**

* Improved Inventory control
* Improved operational efficiency
* Increased Customer Satisfaction
* Sustainability Initiatives

**Project Proposal:**

BACO I propose to develop and launch a new dairy product that caters to the evolving consumer preferences in the dairy industry. This project aims to introduce a high-quality, innovative dairy product to meet the demands of health-conscious consumers looking for delicious and nutritious dairy options.

1.**5 Project Objective**:

 To Provide high quality ice cream and milk products that met regulatory standards and customer Expectations. To create a user friendly and interactive application that provides customer convenient access to promotions, product information and ordering options.

**High-Level Description**

**Provide a User-Friendly Interface**: Offer a simple and intuitive user interface that allows users to input relevant vehicle information and receive a valuation report.

**Alignment with Business Objectives**

The BACO I application aligns with the following business objectives:

**Increase Customer Satisfaction**: By providing an accurate and convenient experience, we can increase customer satisfaction and loyalty.

**Reduce Costs**: By streamlining the Purchasing process and to visit dealerships or third-party providers, we can reduce costs associated with labour and travel.

**1.6 Project Scope**:

Developing a mobile application dedicated to dairy products to enhance consumer experience, provide valuable information, and promote brand engagement.

**1.6.1 In scope functionality:**

* Product catalogue.
* User profile management
* Search functionality
* Recipes Section
* Nutrition Tracker
* Promotions & Offers

**1.6.2 Out Scope Functionality**:

* E-commerce Functionality Multi language support
* Integration with Social Media Platforms
* Handling disputes and resolving issues between users and dealerships is outside the scope of this project.
* Payment gateway integration
* Accessing app features without an internet connection.

**1.6.3 BUSINESS REQUIREMENT FOR DAIRY PRODUCT**

|  |  |
| --- | --- |
| **S.NO** | **Business Requirement Description** |
| BR001 | The application should allow customers to register for an account, providing basic information such as name, email, and password. |
| BR002 | The application should allow customers to manage their profiles, including updating contact information and order history. |
| BR003 | The application should provide customers with access to customer support, including FAQs, email support, and phone support. |
| BR004 | The application should have an intuitive and user-friendly interface for customers to easily navigate and purchase dairy product |
| BR005 | The application should be accessible on various devices, including desktops, laptops, tablets, and mobile phones. |
| BR006 | The application should be able to handle a large volume of users and transactions. |
| BR007 | The application should provide administrators with sales reports, including total sales, sales by product, and sales by region. |
| BR008 | The application should provide administrators with customer reports, including customer demographics, purchase history, and behaviour. |
| BR009 | The application should provide administrators with inventory reports, including product availability, stock levels, and reorder points. |
| BR010 | The application should have a comprehensive product catalogue that includes various dairy products, such as milk, cheese, yogurt, and butter. |
| BR011 | The application should provide detailed product information, including product descriptions, prices, and images. |
| BR012 | The application should have a robust search function that allows customers to easily find specific dairy products. |
| BR013 | The application should allow customers to place orders for dairy products, including selecting products, specifying quantities, and providing payment information. |
| BR014 | The application should send customers an order confirmation email, including order details and expected delivery time. |
| BR015 | The application should provide customers with the ability to track the status of their orders. |
| BR016 | The application should integrate with a secure payment gateway to process transactions. |
| BR017 | The application should support various payment methods, including credit cards, debit cards, and online banking. |
| BR018 | The application should ensure the security and integrity of customer payment information. |
| BR019 | The application should provide customers with various delivery options, including home delivery, in-store pickup, and curb side pickup. |
| BR020 | The application should allow customers to schedule delivery times and dates. |
| BR021 | The application should provide customers with the ability to track the status of their deliveries. |
| BR022 |  The application should encrypt sensitive customer data, including payment information. |
| BR023 | The application should comply with PCI-DSS standards for payment card security. |
| BR024 |  The application should comply with GDPR regulations for customer data protection. |

**2.PROCESS Flow Diagram for Dairy Products**



**ASSIGNMENT 2**

1.Here's a sample introduction letter:

R. RAJKUMAR

Business Analyst

XYZ Company

24.02.2025

JAI ANANTH

CHAIR PERSON

J and J Vehicle mall Pvt LTD

Chennai

Dear Jai Ananth,

I am writing to introduce myself as the Business Analyst who will be working closely with you and your team to initiate the business understanding process for our upcoming project. My role is to ensure that we thoroughly comprehend your business requirements, goals, and challenges, and that our solutions align with your strategic objectives.

As we begin this engagement, I want to assure you that I am committed to delivering exceptional service and support throughout our collaboration. My expertise in business analysis will enable me to facilitate effective communication, identify areas of improvement, and provide actionable insights to inform our project decisions.

In the coming days, I will be scheduling a series of meetings and workshops with your team to gather information, discuss business processes, and outline the project scope. These interactive sessions will provide a valuable opportunity for us to share knowledge, clarify expectations, and establish a strong foundation for our project.

Please feel free to reach out to me directly if you have any questions, concerns, or suggestions. I am eager to work collaboratively with you and your team to ensure the success of our project.

Thank you for the opportunity to work with you. I look forward to our upcoming meetings and to a productive and successful engagement.

Best regards,

R. RAJKUMAR

Business Analyst

Congnatio Tech Solution

**2.BRD document for Ticketing System**

|  |  |
| --- | --- |
| **REQ ID** | **Requirement Description** |
| BR001 | User should able to login the application by using valid Email ID |
| BR002 | User should able to update their personal Information |
| BR003 | The system should allow the user to purchase tickets online through user friendly interface |
| BR004 | The system should be accessible on multiple device |
| BR005 | The system should be able to handle large volume of ticket sales and user traffic |
| BR006 | The system should support various ticket types which includes General booking, bulk booking and VIP bookings |
| BR007 | The system shall able to search result by based on event name/movie name/Transport name |
| BR008 | The user shall able to access to their past and present booking including previous invoice |
| BR009 | The user should receive the information for booking the tickets, and remainders and promotional offers based on the regular usage |
| BR010 | The user shall bale to leave the review and ratings based on their ratings |
| BR011 | The system should display the real time ticket availability including tickets availability and seat selection |
| BR012 | The application should support multiple Payment methods |
| BR013 | The application should integrate with secure payment gateway to process smooth transaction |
| BR014 | The system should send an order confirmation PDF format to registered email and Phone number |
| BR015 | The system should allow the customer to transfer their tickets in case of an emergency |
| BR016 | Admin shall have a separate dashboard to monitor the user activity |
| BR017 | Admin shall be able to view and respond to user feedback and review |
| BR018 | The system shall support the multiple language to increase the user base |
| BR019 | Admin shall have the access to create and manage promotional campaigns including discount and special offers |
| BR020 | The app has to send a notification to all the registered user about special offers on auspicious day |
| BR021 | Admin can able to provide the detailed report from the administrative CRM |
| BR022 | The system shall comply with the data protection and industry standard to ensure data security |

Functional and Non-Functional requirement for Ticketing System

|  |  |
| --- | --- |
| **REQ ID** | **FUNCTIONAL REQUIREMENT** |
| FR001 | User should register the application |
| FR002 | The application has to provide secure authentication |
| FR003 | The application shall display the dashboard with user profile information |
| FR004 | The system shall enable the uses to delete their accounts, removing all associated data |
| FR005 | Admin shall have the access to manage the user accounts including suspending and deleting their accounts for Violation |
| FR006 | The system shall allow the administrators to create new events date and time |
| FR007 | The system shall enable administrators to manage event status, including, upcoming, in progress and completed |
| FR008 | The system shall allow the administrators to create new tickets |
| FR009 | The system shall enable administrators to edit existing ticket |
| FR010 | The system shall enable administrators to manage ticket availability and tracking sales |
| FR011 | The system shall allow the user to place the orders, including selecting tickets, providing payment information and confirming the order |
| FR012 | The administrator has to download the MIS option to  |
| FR013 | End user can view their MIS |
| NFR001 | The system shall respond to user request within 2 sec |
| NFR002 | The system shall able to process at least 100 concurrent user requests |
| NFR003 | The system shall be available99.9% of the time |
| NFR004 | the system shall authorize users to perform specific action based on their role |
| NFR005 | The system shall encrypt sensitive customer data which includes payment gateway |
| NFR006 | The system shall be able to recover from hardware and software failures |
| NFR007 | The system shall handle errors in user friendly manner. |
| NFR008 | The system shall compatible with major web browsers |
| NFR009 | The system shall compatible with major device  |
| NFR010 | The system shall compatible with major operating system |

2.**User story**:

|  |  |  |
| --- | --- | --- |
| User Story No:1 | Task: 1 | Priority: High |
| As a customer, |   |
| I want to easily search for the products |
| so that I can find what I need easily |
|
| **BV value**: 500 | **CP** :2 |
| **Acceptance criteria** |   |
| Users must be able to search for products using keywords. |
| **Business Rule:** |
| Generate the invoice on schedule time |

|  |  |  |
| --- | --- | --- |
| User Story No:2 | Task: 3 | Priority: LOW |
| As a customer, |   |
| I want to be compared similar products side by side |
| so that I can choose best products |
|
| **BV value**: 200 | **CP** :3 |
| **Acceptance criteria** |   |
| Each product should display an image, name, price, and a brief description. |
| **Business Rule:** |
| Need Proper client mail ID |

|  |  |  |
| --- | --- | --- |
| User Story No: 3 | Task: 3 | Priority: LOW |
| As a user |   |
| I want to be filter products by category, price and ratings |
| so that I can narrow down by option. |
|
| **BV value**: 200 | **CP** :3 |
| **Acceptance criteria** |   |
| Users must be able to filter products by categories, price range, and ratings. |
| **Business Rule:** |
| Customer need to login to view the online invoice |

|  |  |  |
| --- | --- | --- |
| User Story No: 4 | Task: 3 | Priority: LOW |
| As a User, |   |
| I want to be seen my customer ratings and review |
| So that I can understand the product quality |
|
| **BV value**: 200 | **CP** :3 |
| **Acceptance criteria** |   |
| * App Allow us to send the Feedback and ratings
 |
| The feedback and Rating given in the app are stored securely |   |   |
| App allows restaurant to respond to their feedback |  |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 5 | Task: 3 | Priority: LOW |
| As a Shopper, |   |
| I want to view product detail and specification |
| So that I can make purchasing decision |
|
| **BV value**: 200 | **CP** :3 |
| **Acceptance criteria** |   |
| Each product should display an image, name, price, and a brief description. |
| Users must be able to filter products by categories, price range, and ratings. |   |   |
|  |  |   |
|  |   |   |

|  |  |  |
| --- | --- | --- |
| User Story No: 6 | Task: 3 | Priority: LOW |
| As a Registered User, |   |
| I want to save my favourite products to a Wishlist so that I can easily find them later |
| so that I can easily find them later |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria:** Users should be able to add products to their shopping cart from the product detail page. |   |  |
|   |  |
|   |  |
| Business Rule: Administrator will get the notification in hour basis |   |   |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 7 | Task: 3 | Priority: LOW |
| As a customer, |   |
| I want to track my order history |
| so that I can easily reorder items I frequently buy |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
| App needs to send notification about order |  |
| App provides Track order button that allow us to view the exact location. |   |   |  |
| App stores the History of each data for further reference |  |  |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 8 | Task: 3 | Priority: LOW |
| As a customer, |   |
| I want to receive personalized recommendations based on my browsing and purchase history |
| so that I can discover new products |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  User have to receive push up notification based on their search items and regular keywords. |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 9 | Task: 3 | Priority: LOW |
| As a Shopper, |   |
|  I want to update my shipping and billing information easily |
| so that my checkout process is smooth |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  User profile needs to show billing and shipping information clearly for their future reference |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 10 | Task: 3 | Priority: LOW |
| As a customer, |   |
| I want to receive notifications about special offers and discounts |
| so that I can save money |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  User has to receive push up notification about their offers |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 11 | Task: 3 | Priority: LOW |
| As a Shopper, |   |
| I want to add multiple items to my shopping cart |
|  so that I can purchase everything I need in one go |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  Users should be able to add products to their shopping cart from the product detail page. |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 12 | Task: 3 | Priority: LOW |
| As a User, |   |
|  I want to edit the quantity of items in my cart |
| so that I can adjust my order before checkout. |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  Users should be able to update quantities or remove items from the cart. |  |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| User Story No: 13 | Task: 3 | Priority: LOW |
| As a customer, |   |
|  I want to see the estimated total cost, including taxes and shipping |
|  So that I will finalizing my purchase |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  The total price should be updated automatically when items are added or removed. |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 14 | Task: 3 | Priority: LOW |
| As a User, |   |
|  I want to easily apply discount codes during the checkout process  |
| so that I can save money |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  User need special parameter to plac the Discount codesby detecting the code automatically to stayed valuable or not |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 15 | Task: 3 | Priority: LOW |
| As a shopper, |   |
| I want to choose between multiple payment options |
| So that I make my payment for my convenience |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  The site must support multiple payment methods (credit card, PayPal, etc.). |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 16 | Task: 3 | Priority: LOW |
| As a customer, |   |
|  I want to select my preferred shipping method |
| so that I can choose the speed and cost of delivery |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  Aplication has to display multiple logistics option to receive the product.Final price of the product will be change based on the Shipping method |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 17 | Task: 3 | Priority: LOW |
| As a customer, |   |
| I want to receive notifications when my order has shipped |
| So that I come to know the status of my product |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  User has to receive the Notification till each stage of the shipping |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 18 | Task: 3 | Priority: LOW |
| As a user, |   |
| I want to receive real-time tracking information for my orders |
| so that I can know when to expect delivery |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  The app has to display the tracking system of the consumer product which helps the customer to make availability of their time |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 19 | Task: 3 | Priority: LOW |
| As a Shopper, |   |
|  I want to schedule delivery for a specific date and time that works for me |
| so that I am there to get the product |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  The user dashboard of every user has to display the special parameter in which they select the particular date and day for disposal |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 20 | Task: 3 | Priority: LOW |
| As a User, |   |
|  I want to have the option for in-store pickup  |
| So that I can avoid shipping costs |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  A service which allows the customer to place an order in online and pick up their purchase in physical store |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 21 | Task: 3 | Priority: LOW |
| As a customer, |   |
|  I want to easily contact customer support |
| So that I have question or issue with my order |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  The App needs to 24\*7 customer support availability,throufh whats app,FAQ questions etc.. |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 22 | Task: 3 | Priority: LOW |
| As a shopper, |   |
|  I want to initiate a return process online |
| so that I can easily return items I no longer want |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  The application has to display the return option policy for the customer to return the product in fixed durable time incase of any product damage |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 23 | Task: 3 | Priority: LOW |
| As a user, |   |
|  I want to access a knowledge base or FAQ section to find answers to common questions |
| so that I can easily find answer for basic things |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  The app has to support the user by chat box and FAQ questions  |  |
|  |  |  |
| User Story No: 24 | Task: 3 | Priority: LOW |
| As a customer, |   |
| I want to receive a prompt response to my inquiries  |
| So that I can resolve issues quickly |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  The app shall provide web chat option to gice prompt answer for doubt calrification. |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 25 | Task: 3 | Priority: LOW |
| As a shopper, |   |
|  I want to track the status of my return |
|  so that I know when to expect my refund. |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  The app shall provide the regular update for the money return for the product return till the money reached the customer account. |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 26 | Task: 3 | Priority: LOW |
| As a mobile user, |   |
| I want to have a seamless shopping experience on my smartphone |
| so that I can shop on the go |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  The app will work on multiple platforms |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 27 | Task: 3 | Priority: LOW |
| As a customer, |   |
| I want to easily scan barcodes or QR codes to find products quickly |
| so that I can shop too easily |
|  |
| **BV value**: 200 | **CP** :5 |  |
| **Acceptance criteria** |   |  |
|  The app need the option QR code to scan the product which fasten the serach product parameter |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 28 | Task: 3 | Priority: LOW |
| As a shopper, |   |
| I want to receive push notifications about sales and promotions directly on my mobile device. |
| so that I can shop at any time |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  User has to receive the push notification on the auspicious day ,special offers and more users |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 29 | Task: 3 | Priority: LOW |
| As a user, |   |
| I want to use mobile payment options like Apple Pay or Google Pay for faster checkout |
| so that I can Pay easily |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  The site must support multiple payment methods (credit card, PayPal, etc.) |  |

|  |  |  |
| --- | --- | --- |
| User Story No: 30 | Task: 3 | Priority: LOW |
| As a customer, |   |
|  I want to access my account and view my order history from my mobile device |
| so that application can work on multiple device |
|  |
| **BV value**: 200 | **CP** :3 |  |
| **Acceptance criteria** |   |  |
|  The user Credential need to integrate with multile devce(min 3) so they can use easily. |  |

**2.An ER diagram for ticketing system**



2.process flow diagram:

