# Assignment 1

# Business Requirement Document (BRD)

# 1. Project Title:

**Inventory Management and Quick Delivery Software for Ice-cream & Milk Products Company**

# 2. Purpose:

The purpose of this project is to build an integrated system that:

* Efficiently **manages inventory** across manufacturing plants and warehouses.
* Ensures **quickest delivery** of products to customers using intelligent logistics and routing.

# 3. Background:

The client operates multiple manufacturing plants and warehouses across the country. Their business heavily depends on:

* Maintaining **optimal inventory levels** to meet demand without overstocking or wastage.
* Ensuring **timely deliveries** of perishable goods to retain customer satisfaction and brand value.

# 4. Goals and Objectives:

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| **Goals** | Objectives |
| 1. Manage Inventory | Real-time stock monitoring at plants and warehouses. Track batches and expiry dates for perishable goods. Stock alerts for low and overstock. |
| 2. Quickest Delivery | Auto-assign orders to the nearest warehouse. Optimize delivery routes. Track shipments in real-time. Allow customers to track their orders. |

# 5. Scope of Work:

## 5.1 In-Scope:

* Inventory management system with stock tracking, stock movement, reorder alerts.
* Order management system.
* Customer order portal (Web + Mobile responsive).
* Warehouse and logistics management.
* Integration with GPS and map services for delivery routing.
* Admin dashboard and reporting.

## 5.2 Out-of-Scope:

* Manufacturing process automation (e.g., plant production machines).
* Third-party logistics services integration initially (can be phased later).

# 6. Functional Requirements:

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| **Feature** | Description |
| Inventory Module | Stock In/Out, Transfers, Batch Tracking, Expiry Tracking, Reorder Levels |
| Order Management | Customer orders placement, processing, allocation |
| Delivery Routing | Auto-suggest optimal route and warehouse based on customer address |
| Admin Dashboard | KPIs: Stock levels, Order status, Delivery status, Warehouse performance |
| Notifications | Low stock, expired products, new orders, delayed deliveries |
| Customer Portal | Order placing, order tracking, support chat |
| Reports | Inventory reports, Sales reports, Delivery time analysis |

# 7. Non-Functional Requirements:

* **High Availability**: 99.9% uptime
* **Mobile Responsive Design**
* **Data Security**: SSL encryption, role-based access
* **Scalability**: Handle increasing plants, warehouses, customers
* **Performance**: <2 seconds page load time

# 8. Stakeholders:

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| Stakeholder | Role |
| Client Leadership | Approvals, Strategy |
| Warehouse Managers | Daily stock and dispatch operations |
| Logistics Team | Delivery planning and execution |
| IT Team | System maintenance post-launch |
| Customers | End users for order placing |

# 9. Assumptions:

* GPS tracking devices or mobile apps will be available with delivery agents.
* Real-time internet connectivity is available at warehouses and delivery points.

# 10. Timeline and Milestones:

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| **Milestone** |

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| **Timeframe** |

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| Requirement Gathering | Week 1-2 |
| UI/UX Designing | Week 3-4 |
| Core Development (Inventory + Orders) | Week 5-9 |
| Delivery & Routing Module | Week 10-12 |
| Integration and Testing | Week 13-14 |
| User Acceptance Testing (UAT) | Week 15 |
| Deployment and Go Live | Week 16 |

Total Duration: 4 months

Development Plan

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| **Phase** | Activities | Tools/Technologies |
| Planning | BRD Finalization, Tech Stack Selection | Figma (UI), Confluence (documentation) |
| Design | Wireframes, UI/UX | Figma, Adobe XD |
| Development | Backend APIs, Frontend Screens |

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| Backend: Node.js / Python Django Frontend: ReactJS / Angular Database: PostgreSQL/MySQL |

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| Delivery Optimization | GPS Integration, Route Algorithms |

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| Google Maps API, Open Route Service |

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| Testing | Unit Testing, Integration Testing, UAT | Selenium, Postman |
| Deployment | Cloud Hosting, Database Setup | AWS/Azure |

Resource Plan

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| **Role** | **Resource Count** |

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| **Key Responsibilities** |

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| Project Manager | 1 | Project oversight, communication with client |
| Business Analyst | 1 | Requirements gathering, documentation |
| UI/UX Designer | 1 | Design screens and customer portal |
| Backend Developer | 2 | API development, inventory logic, database management |
| Frontend Developer | 2 |

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| Customer portal, Admin portal development |

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| Mobile Developer | 1 | Mobile responsive optimization or light app |
| QA Tester | 1 |

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| Manual + automation testing |

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| DevOps Engineer | 1 |

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| Deployment, server management |

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# Process Flow Diagram

**Start**

**Customer Places Order**

**System Receives Order**

**Check Inventory Levels**

**Stock Available?**

**Assign Nearest Warehouse**

**Generate Pick List**

**Notify Admin / Suggest Alternative**

**Dispatch Team Picks & Packs Items**

**Delivery Routing System Finds Best Route**

**Assign Delivery Agent**

**Update Customer with Tracking Info**

**Real-Time Delivery Tracking**

**Customer Receives Order**

**System Auto-Updates Inventory**

**Send Feedback Request to Customer**

**End**

# Assignment 2

# Introduction letter

Dear [Client's Name],

I hope this message finds you well. My name is Tanisha, and I will be your dedicated Business Analyst working closely with you and your team as we embark on this exciting journey together.

In my role, I will serve as the key point of contact for understanding your business needs, aligning our goals, and ensuring smooth communication between all stakeholders. I am here to guide you through the process of identifying requirements, analysing your existing systems and processes, and helping to shape the solutions that will best support your business objectives.

My goal is to facilitate the business understanding process and make sure we’re all aligned from the very start. I look forward to collaborating with you and your team, gathering valuable insights, and providing actionable recommendations to drive success for your business.

Please feel free to reach out if you have any questions or if there is anything you'd like to discuss ahead of our upcoming meetings. I am eager to get started and contribute to our mutual success.

Warm regards,
Tanisha
Business Analyst
[ Contact Information]

# Horoscope BRD AND SRS

Business Requirements Document (BRD) – Horoscope Project

**1. Project Overview**

The Horoscope Project aims to develop a web and/or mobile application that provides users with daily, weekly, monthly, and yearly horoscopes based on their zodiac sign. The application will also offer personalized astrology reports, compatibility analysis, and daily notifications.

**2. Business Objective**

* Enhance user engagement by offering personalized horoscope readings.
* Generate revenue through ads, subscriptions, and premium astrology reports.
* Build a loyal user base interested in astrology-related content.

**3. Scope**

* Display horoscopes for 12 zodiac signs.
* Personalized daily horoscope feed.
* Zodiac compatibility matching.
* Optional: Detailed astrology reports (paid feature).
* Notifications/reminders for daily horoscope updates.
* Admin Panel for horoscope content management.

**4. Key Stakeholders**

* Product Owner
* Development Team
* Marketing Team
* End Users (general public interested in astrology)

**5. Business Requirements**

* Users should be able to select their zodiac sign and view predictions.
* The app should send daily horoscope notifications.
* Users should be able to check zodiac compatibility with others.
* Admins should be able to update horoscope content regularly.
* Paid users should access exclusive, detailed astrology reports.

Software Requirements Specification (SRS) – Horoscope Project

**1. Introduction**

This document defines the functional and non-functional requirements for the Horoscope application.

**2. Functional Requirements**

* **User Registration/Login (Optional):** Allow users to create an account (for premium features).
* **Zodiac Selection:** Users can select their zodiac sign manually or by entering their birthdate.
* **Horoscope Display:** Show daily, weekly, monthly, and yearly horoscopes.
* **Push Notifications:** Send daily horoscope notifications.
* **Compatibility Check:** Allow users to check compatibility between two zodiac signs.
* **Content Management (Admin Panel):** Admin can add, edit, or delete horoscope content.
* **Subscription Management:** Manage subscription plans for detailed reports.

**3. Non-Functional Requirements**

* **Performance:** The app should load horoscope content within 2 seconds.
* **Scalability:** Should handle up to 10,000 concurrent users in phase 1.
* **Security:** Secure user data with encryption and secure authentication.
* **Availability:** 99.5% uptime guarantee.

**4. System Requirements**

* **Frontend:** Web (ReactJS) / Mobile (Flutter/React Native)
* **Backend:** Node.js/Python (Django/Flask) with RESTful APIs
* **Database:** MySQL or MongoDB
* **Hosting:** AWS, Azure, or GCP

**5. Constraints**

* Horoscope content must be updated daily without fail.
* Push notifications should respect user time zone preferences.
* Premium reports require payment gateway integration (e.g., Stripe, Razorpay).

# ERD -Support Ticket /Ticketing Life cycle



# User story -Shopping from E commerce

**Title:** Shopping on E-commerce Platform

**As a** customer,
**I want** to browse products, add them to my cart, apply discounts, and complete my purchase,
**so that** I can buy the items I need in a simple, convenient, and secure manner.

**Acceptance Criteria:**

1. **Product Browsing:**
	* I can search for products by category, brand, or keyword.
	* I can filter search results based on price, ratings, or other product attributes.
2. **Product Details:**
	* I can view detailed information about a product, including price, description, images, and customer reviews.
	* I can check the product's availability and shipping options.
3. **Shopping Cart:**
	* I can add multiple products to my cart.
	* I can view the cart and update the quantities or remove items.
	* I can see the total price of my cart, including taxes and shipping fees.
4. **Discounts and Offers:**
	* I can apply discount codes or promotional offers to my order.
	* I can see the updated price after the discount is applied.
5. **Checkout Process:**
	* I can review my order before proceeding to payment.
	* I can provide shipping details and select a payment method (credit card, PayPal, etc.).
	* I can review my payment details and complete the purchase.
6. **Order Confirmation:**
	* I receive an order confirmation email or notification.
	* I can track my order status (processing, shipped, delivered) from the platform.
7. **Security:**
	* My personal and payment information is encrypted and securely stored.