Project Report 1

Data Management and Database Design

Members:
Kush Salaskar *001091785*
Rohit Chouhan *002191647*
Pooja Dhamne *002922247*
Jharna Doda *002117574*
Apurva Zawar *002920595*
Shreya Gosrani *002924191*

Project Topic: Warehouse Management System

Problem statement:

The most common issue that businesses face is the lack of a standardized system for listing, tracking, and stocking inventory data, which slows down the business process. Since inventory data is only kept manually in the logbook and is not well organized, it is difficult for the administrator to record it quickly and safely, which adds time to the process.
Receiving, putaway, picking, packing, and shipping are all labor-intensive steps in warehouse inventory management control. The goal is to finish all of these tasks as quickly and efficiently as possible.

Objectives:

A project to create an intelligent warehouse management system that optimizes a warehouse, reducing labor costs and wasted space while increasing efficiency and space. Our project keeps track of the shipments that come in and out of the warehouse, the best-selling products, the most recently added products, and which shipment of products to order next.

Following are the features of the warehouse management software:
- Inventory tracking
  The system keeps a track of the location of items in the warehouse and notifies the vacant spots in the warehouse.

- Stock Management
  - The system should keep a record of all the items in the warehouse.
  - The system ensures that the products are in stock; if a product is out of stock, the system will notify the administrator.
  - The system administrator can place purchase orders with the manufacturer to restock inventory.

- Order management
  The system will cross-check the stock availability status in order to accept any new orders.

- Inbound
  The admin/supervisor must be able to source raw materials or ready-to-ship products from the manufacturer. It also entails receiving the products, sorting through inventory, deciding how to store the merchandise.

- Outbound
  To keep track of the order fulfillment process which includes picking, packing, shipping, and delivery of a package.