

# USER REQUIREMENT SPECIFICATION

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## 1. Introduction

### Purpose of the Project

The purpose of the APMC Trader System is to provide a comprehensive software solution for Agricultural Produce Market Committee (APMC) traders to manage their trading operations efficiently. The system aims to streamline transactions, inventory management, and financial tracking, enhancing the trading experience for both traders and their stakeholders.

### Scope of the Project

The scope of the APMC Trader System includes the following aspects:

- Managing trader profiles and employee details.
- Tracking transactions with suppliers and buyers.
- Recording item/commodity information and inventory.
- Handling payment methods and transaction status.
- Ensuring data security and user access control.

## 2. Project Description

### Project Overview

The APMC Trader System is a web-based application designed to facilitate trading activities within APMC markets. It acts as a centralized platform for traders to conduct transactions, manage inventory, and monitor financial data. The system enables traders to efficiently handle various aspects of their business operations, including buying from suppliers and selling to buyers.

## **Major Project Functionalities**

The major functionalities of the APMC Trader System include:

- **User Management:** Users can register and log in with appropriate roles (trader, clerk, etc.).
- **Trader Profile:** Traders can create and update their profiles, including contact information.
- **Employee Management:** Traders can manage employee details, including salary and roles.
- **Transaction Management:** Traders can record transactions, specifying items, quantities, prices, payment methods, and status.
- **Inventory Tracking:** The system allows traders to manage their inventory of items and commodities.
- **Data Security:** The system ensures data security through user access control and authentication mechanisms.

## **3. System Features and Function Requirements**

### **System Feature 1: User Authentication and Registration**

Functional Requirement: Users must be able to register for an account with role-based access (trader, clerk, etc.). Registered users should be able to log in securely.

### **System Feature 2: Trader Profile Management**

Functional Requirement: Traders should be able to create and update their profiles, providing essential contact information.

### **System Feature 3: Employee Management**

Functional Requirement: Traders must have the ability to manage employee details, including adding employees, specifying roles, and tracking salaries.

### **System Feature 4: Transaction Recording**

Functional Requirement: Traders should be able to record transactions, including items, quantities, prices, payment methods, and transaction status.

### **System Feature 5: Inventory Management**

Functional Requirement: Traders need to manage their inventory of items and commodities, including quantity tracking.

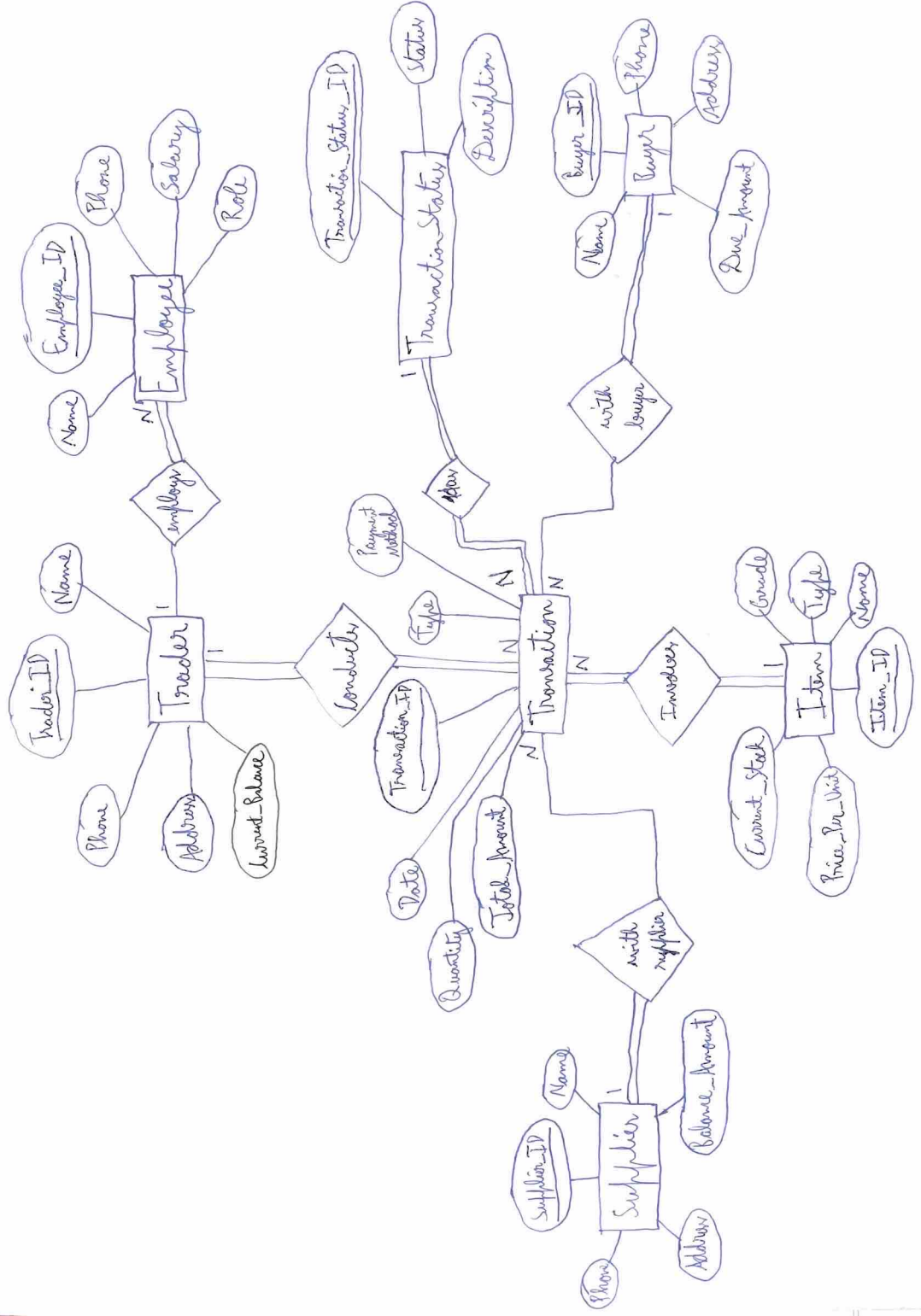
### **System Feature 6: Data Security**

Functional Requirement: Data security measures, including user access control and authentication, must be in place to safeguard sensitive information.



# APMC Trader Management System - ER Diagram

Name: NISCHAL H.S.  
SRN: PESU0621CS393



## APMC Trader Management System - Relational Schema

Name : Nishal H. V  
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Trader:

Trader_ID	Name	Address	Phone	Current_Balance

Employee :

<u>Employee_ID</u>	Name	Phone	Salary	Role	Trailer_ID
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Transition:

Transaction ID	Type	Date	Quantity	Total Amount	Payment Method
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Trader_ID	Transaction_Status_ID	Item_ID
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Transaction - Status :

<u>Transition - Status - ID</u>	Status	Description
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Supplier :

Supplier-ID	Name	Address	Phone	Balance-Amount
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Buyer :

Buyer-ID	Name	Address	Phone	Due - Amount
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Item :

<u>Item_ID</u>	Name	Type	Grade	Price_per_Unit	Current_Stock
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Seller Transaction:

<u>Transaction-ID</u>	<u>Supplier-ID</u>
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Buyer - Transaction :

Transaction ID	Buyer ID
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