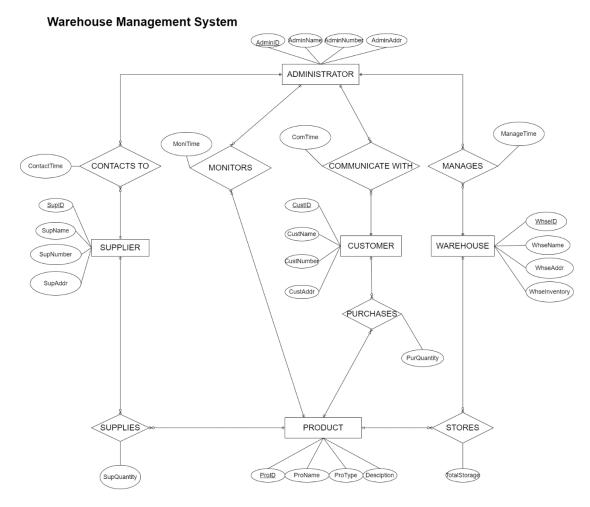
E-R Diagram:



Objectives:

- 1.To provide a fast retrieval, convenient search, high reliability, large storage capacity and good confidentiality
- 2. Easily add, delete, modify, or delete data within the WMS.
- 3.Offer efficient, safe, and trustworthy information displaying and monitoring
- 4. Prevent redundant duplication or loss of paper-based documents

Key Database Design Decisions:

- 1. ADMINISTRATOR (AdminID, AdminName, AdminNumber, AdminAddr)
- 2. **SUPPLIER** (SupID, SupName, SupNumber, SupAddr)
- 3. CUSTOMER (CustID, CustName, CustNumber, CustAddr)
- 4. WAREHOUSE (Whseld), WhseName, WhseAddr, WhseInventory)
- 5. PRODUCT (ProID, ProName, ProType, Description)

- 6. **CONTACTS TO** (*AdminID*, *SupID*, ContactTime)
- 7. **MONITORS** (<u>AdminID</u>, <u>ProID</u>, Monitime)
- 8. **COMMUNICATES TO** (*AdminID*, *CustID*, ComTime)
- 9. MANAGES (<u>AdminID</u>, <u>WhseID</u>, ManageTime)
- 10. **PURCHASES** (*CustID*, *ProID*, PurQuantity)
- 11. **SUPPLIES** (*SupID*, *ProID*, SupQuantity)
- 12. **STORES** (*WhseID*, *ProID*, TotalStorage)

1. ADMINISTRATOR:

Contacts to suppliers, monitors the products, communicates with customers, and manages the warehouse.

Contains suppliers' information: ID, Name, Number, Address.

2. **SUPPLIER:**

Supplies products.

Contains suppliers' information: ID, Name, Number, Address.

3. CUSTOMER:

Purchases products.

Contains customers' information: ID, Name, Number, Address.

4. WAREHOUSE:

Stores products.

Contains warehouses' information: ID, Name, Address, Inventory.

5. **PRODUCT:**

Contains products' information: ID, Name, Type, Description.

6. **CONTACTS TO:**

An associative entity: keep the contact date as record.

7. **MONITORS:**

An associative entity: keep the monitor date as record.

8. **COMMUNICATES TO:**

An associative entity: keep the communicate date as record.

9. MANAGES:

An associative entity: keep the manage date as record.

10. PURCHASES:

An associative entity: keep the quantity of products that a customer buys.

11. SUPPLIES:

An associative entity: keep the quantity of products that a supplier supplies.

12. **STORES**:

An associative entity: keep the total storage of products that a warehouse has.