A Synopsis on

Apparel Store Management System

submitted in partial fulfillment of the requirements for completion of DBMS LAB

of

TY in Computer Engineering

by

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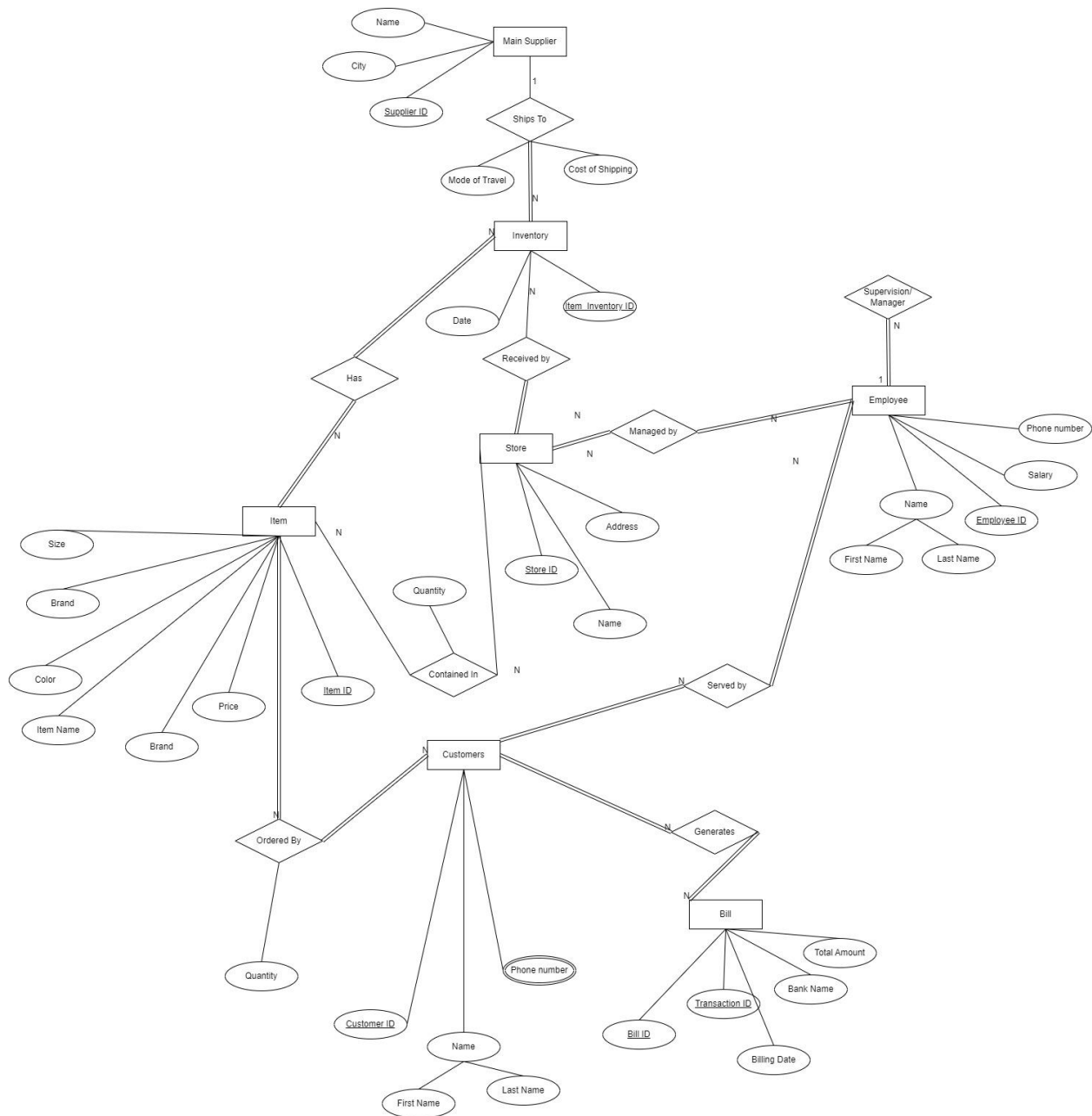
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1. Problem statement

This is a mini project on the Apparel Store Management System, where a complete database consists of the stores(branches), items in each store, customer records, employees present and their respective managers too. In addition, we also have a large number of items with varieties of categories and collections. Also, we have a mapping of customers buying the respective products and stores with the stock of particular items. We also have the record of how the items come to the store from the suppliers, the mode of traveling and tracking the order with the date. A couple of triggers, functions, procedures and cursors are implemented in order to make the database smooth and sophisticated.

Views are also implemented to show the dynamic changes that occur in the database as a whole. This database handles 4 branches of the Apparel Store and this essence is completely felt, when we perform some of join, aggregate and set operations. Overall, we get to see a miniature of real – time Apparel store management.

2. Objectives

This mini project aims to deliver the real – time essence of Store Management, which is prevalent and widely developed by many software enthusiasts all over the world. The relational database is quite deeply modeled and revealed in a very schematic way. The output of this DBMS is put out in a technical sense to bring out the effectiveness and usefulness of such a model and system. Also, a front end for this project is made using streamlit in order to access and perform CRUD operations in a simple way. This also creates a high reachability for the software. Though the challenges to build the queries are high, MySQL rather supports all these in a sophisticated way with the help of the reserved keywords and clauses provided by them.

3. ER Diagram

4. Relational Schemas

customer_backuplog
- C_ID INT
- First_Name VARCHAR(50)
- Last_Name VARCHAR(50)
- Qualification VARCHAR(20)
- ADDRESS VARCHAR(50)
- Locality VARCHAR(20)
- CITY VARCHAR(20)
- Email VARCHAR(50)
- Phone_NO VARCHAR(10)
- DOP DATE
- E_ID INT
- Store_ID INT
- Item_ID INT
- Quantity INT
- O_Amount FLOAT

items
- ITEM_ID INT
- Item_Name VARCHAR(30)
- PRICE FLOAT
- Indexes

total_orders

store
- STORE_ID INT
- NAME VARCHAR(50)
- ADDRESS VARCHAR(50)
- MGR_ID INT
- Indexes

bills

shipment
- SHIP_ID INT
- DATE_OF_SHIPMENT DATE
- STORE_ID INT
- Indexes

orders
- C_ID INT
- ITEM_ID INT
- Price FLOAT
- QUANTITY INT
- O_Date DATE
- O_Amount FLOAT
- Indexes

employee
- E_ID INT
- First_Name VARCHAR(30)
- Last_Name VARCHAR(30)
- MGR_ID INT
- GENDER VARCHAR(1)
- SALARY FLOAT
- DOB DATE
- Address VARCHAR(50)
- Phone_no VARCHAR(10)
- Indexes

bill
- B_ID INT
- BANK VARCHAR(20)
- DATE_OF_BILL DATE
- TRANSACTION_ID VARCHAR(20)
- AMOUNT FLOAT
- C_ID INT
- Indexes

customers
- C_ID INT
- First_Name VARCHAR(50)
- Last_Name VARCHAR(50)
- Qualification VARCHAR(20)
- ADDRESS VARCHAR(50)
- Locality VARCHAR(20)
- CITY VARCHAR(20)
- Email VARCHAR(50)
- Phone_NO VARCHAR(10)
- DOP DATE
- E_ID INT
- Indexes
- Triggers

suppliers
- SUPP_ID INT
- NAME VARCHAR(50)
- ADDRESS VARCHAR(50)
- Indexes

item_category
- ITEM_ID INT
- Item_Name VARCHAR(30)
- Gender VARCHAR(1)
- BRAND VARCHAR(20)
- COLOUR VARCHAR(20)
- SIZE VARCHAR(10)
- Indexes

ships
- COST_OF_SHIPPING FLOAT
- MODE_OF_TRAVELLING VARCHAR(255)
- SUPP_ID INT
- SHIP_ID INT
- Indexes

contains
- STORE_ID INT
- ITEM_ID INT
- Quantity INT
- Indexes
- Triggers