THE LNM INSTITUTE OF INFORMATION TECHNOLOGY

IDBMS PROJECT

Shop Management System

Submitted to
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Submitted by
Group 2

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The LNM Institute Of Information Technology

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INTRODUCTION

This Project demonstrates the working of a Shop Management System with multiple employees and branches. It has two types of system users – Employee and Administrator.

SYSTEM REQUIREMENTS

1. This project is a web application which is made using HTML/CSS and Bootstrap as frontend.
2. The Flask library in Python is used to develop the backend.
3. It is developed on Python 3.10 using PyCharm IDE.

BASIC FUNCTIONALITIES

1. Without verification no employee can check out.
2. Customers can view the products availability and its details like Manufacturing Date, Expiry Date, Price and product stock availability.
3. Administrators can add or restock products.
4. Administrator can also add branches and hire employees
5. Administrator can see the logs generated.

KEY NOTES

1. **Remote Database Credentials**

   - Username: lwJskOUFdk
   - Database name/Default Schema: lwJskOUFdk
   - Password: mpK8xPst6r
   - Server/Hostname: remotemysql.com
   - Port: 3306

2. **Admin Credentials**

   - Username – n3group2
   - Password – n3group2

3. **Employee Credentials**

   - Password is the first name of an employee in lowercase.

RELATIONS

1. brands(brandID, brandName)

   Primary key – brandID

   Constraints:

   - UNIQUE(brandName)
   - AUTO_INCREMENT(brandID)
   - chk_brandID: CHECK(brandID >= 100 AND brandID <= 999)

2. products(productID, productName, brandID)

   Primary key – productID

   Foreign key – brandID(references brands(brandID))

   Constraints:

   - chk_productID: CHECK(productID >= 100 AND productID <= 999)
   - AUTO_INCREMENT(productID)

3. types(typeID, typeName, price, mandate, expDate, productAvailable, chk_typeID, chk_price)

   Primary key – typeID

   Foreign key – productID(references products(productID))

   Constraints:

   - chk_typeID: CHECK(typeID >= 100 AND typeID <= 999)
   - chk_price: CHECK(price > 0)
   - chk_productAvailable: CHECK(productAvailable >= 0)
   - AUTO_INCREMENT(typeID)

4. shops(shopID, shopName, shopAddress)

   Primary key – shopID

   Constraints:

   - UNIQUE(shopAddress)
   - AUTO_INCREMENT(shopID)
   - chk_shopID: CHECK(shopID >= 100 AND shopID <= 999)

5. employees(empID, employeeName, password, phoneNumber, address)

   Primary key – empID

   Constraints:

   - chk_empID: CHECK(empID >= 100 AND empID <= 999)
   - AUTO_INCREMENT(empID)

6. billbook(shopID, employeeID, dateOfPurchase, billID, totalCost)

   Primary key – billID

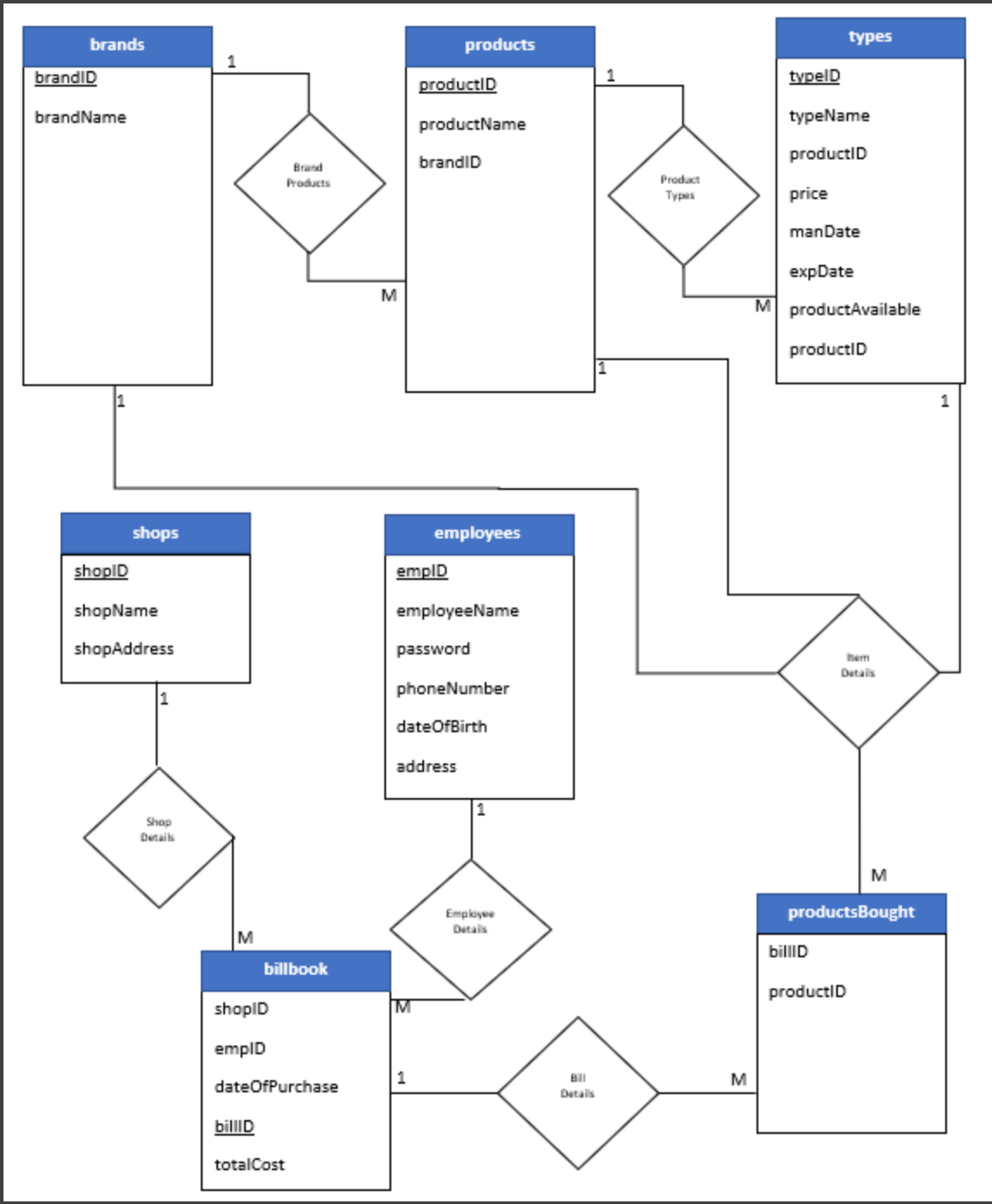
   Constraints:

   - chk_ID: CHECK(empID >= 100 AND empID <= 999 AND shopID >= 100 AND shopID <= 999)

7. productsBought(billID, productID)

   Foreign key – billID(references billbook(billID))

ER DIAGRAM


brands
brandID
brandName
products
productID
productName
brandID
types
typeID
typeName
productID
price
manDate
expDate
productAvailable
productID
Brand Products
Product Types
shops
shopID
shopName
shopAddress
employees
empID
employeeName
password
phoneNumber
dateOfBirth
address
Item Details
Shop Details
Employee Details
billbook
shopID
empID
dateOfPurchase
billID
totalCost
Bill Details
productsBought
billID
productID
1
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