CPSC 332 Spring 2022

Both parts of the project are to be done in groups of 1-3 and submitted through canvas.

Part 1: 100 Points

Part 2: 150 Points

Project Part 1 Due Sunday April 10 at 11:59pm

For the following description of a stores inventory system create an ER diagram and a relational schema:

- Item have a upc, department, restock amount, price, an interim price(price for when it is on sale), a wholesale price, and a current stock
- Items have an expiration date. There can be multiple expiration dates for a single item in stock at one time
- Items have a location which consist of an aisle number, something denoting which side of the aisle, section number, shelf number, and how many items down from the start of the section it is. Each item can be in multiple locations.
- Some items are provided by suppliers
- Suppliers have a unique id, a representative, and the reps phone number
- Departments have a name, supervisor, and a section
- Employees have an id number, name consisting of first and last, permission level which is either 0 or 1,and department they work for
- There are orders for a particular item. Orders have the amount of the item ordered, the date the order is placed, and whether the order has been added to a delivery or not yet(yes or no). If an order has been added to a delivery then it is going to be associated with a delivery.
- A delivery has a delivery id, the date it is to arrive, the amount of pallets it includes, and the truck number it is on.
- There are Customers who have a name, a 10 digit unique id(often a phone number), and a list of products bought
- Customers have transactions associated with them. These transactions consist of the date and time the transaction occurred, the items bought during the transaction, the number of each item bought,

and the price paid for each item of the transaction. They also have a transaction id which is unique to the customer but not unique for all transactions.
- There are coupons which are for a specific item and only a single item(a single item can have more than one coupon for it). These coupons have a unique identifier, an amount off the purchase price of the item, and the number of the items that needs to be purchased for the coupon to be valid. Coupons can be downloaded by customers.

After that implement your schema in SQL. You should also include SQL statements to insert data into the tables. The data should have no table be empty and should include at least:

- 5 items
- 5 customers
- 2 expiration dates for a single item
- 3 employees
- 3 departments
- 2 orders

Also please include SELECT * FROM xTable; for each table in your database.

Part 1 What is expected(**Point Value**):

- README file including the group members name, csuf email and contributions (**10**)
- An ER Diagram (**20**)
- A Relational Database Schema (**20**)
- A sql file titled tables.sql which contains the sql code to create the tables (**20**)
- A sql file titled insert.sql which will insert values in the tables (**20**)
- A sql file titled view_tables.sql which will contain the SELECT * statements for each tables (**10**)

These should all be submitted to canvas before April 10 at 11:59pm in a single zip file.

It is highly recommended that you show the professor your ER diagram and relational schema to check it it is correct before doing the SQL or turning the project

Part 2 Due Sunday May 8 at 11:59 pm

The following methods should be created using php to modify the database created in part 1. Each method should be its own page that can be reached from links on an index page that serves as a homepage. The first three methods are required to be completed. The others are each worth some point value. You should complete enough of the methods that you earn XX points total from the non required methods. Partial points will be given for any attempted solution so it is recommended to try more that is required in case some other method is not completed to satisfaction.

Required:

- Homepage **(10 points)**
- Add new item to inventory **(10 points)**
    - Add a new inventory item to the and all its necessary information to the database
- Create list of items to check for past date **(20 points)**
    - Should take a department number
    - Should return a list of items associated with that department that are to expire within the next 2 days(today's date +2)
- Create list of items to order **(20 points)**
    - Should take a department number
    - Should print a list of items that are associated with that department, that the stock is less than or equal to the restock amount
    - Should also include any orders that were placed for each item in returned information
- Buy item **(30 points)**
    - Should take an item id, customer id, and transaction id and add the item to the transaction.
    - If no transaction id is given then a new transaction is started for the customer.

    - After a transaction is started the transaction id should be printed out so that the transaction can be continued.

Need at least 50 points total:

- Apply Coupons to Transactions **(25 points)**
    - Takes Customer ID and transaction id
    - If the customer has coupons downloaded the coupons will be applied so only the modified item price shows up on the transaction assuming the condition of the individual coupons were met.
- Total transaction **(25 points)**
    - Takes a transaction and a customer id
    - Should calculate the total for the transaction given
    - Returns 0 if the transaction does not exist
- Receive Delivery **(25 points)**
    - Takes a Delivery ID
    - Should remove The delivery and any orders associated with it from the database
    - Should add the number of each item received to the stock of that item
- Place order by an employee **(25 points)**
    - Should take an employee id, item id, and amount of the item to order
    - If the employee's permission level is 0 return a message saying they do not have permission and reject the order
    - If the employee does have permission then add the order to the database with the order not having been added to a delivery yet

Also **required is a ReadME** page with the group members names and cal state fullerton emails. Should also include contributions, and any problems or errors the methods are having. Finally include the url for the homepage.

Part 2 what is expected to be submitted to canvas:

- All required .php files for the required pages (**90 points**)
- At least two of the optional pages (**50 points**)
- README (**10 points**)

These should all be submitted to canvas before May 8 at 11:59pm in a single zip file.