**Comments:**

**1. The topic is closer to one of the class examples databases, so make sure that you differentiate your work.**

**2. Some of the relationships are not correct. Employee to Customer should be many-to-many, Order to Product is also many-to-many, and product to vendor is also many-to-many.**

**3. Remove the ordering process from Vendors to simplify your model. You should have the following main entities: Employee, Customer, Order, Product, and Vendor. Focus only on Customer Order and forget about the Vendor Order, only indicate which products come which vendor.**

**4. Revise your model accordingly.**

**Topics:**

* **Foodbank**
* **Restaurants Reservation service**
* **University Registration**
* **pet adoption**
* **Hotel cleaning service**

**Examples already used: Authors, airplanes, Teacher/student/classrooms,**

Main Entities: Pet Adoption

* Pet Profile
* Breed
* Shelter
* Shelter location
* Volunteers
* Adoptors/Potential Adoptors
* Pet Care (Feeding, Playtime)
* Meeting Times
* Adoption Process
* Donations

**Thrift Store Database**

INFO 330 Group 18:

Yixiang ‘Eric’ Fang

Yana Xu

Michaelangelo Labrador

***Preliminaries:***

1. Description:

The focus of our project is the operation of a thrift store, offering customers the options to buy and resale a wide array of clothing and accessories. This addresses the need for an inventory management system to handle the diverse range of items efficiently. Our project’s key entities include customers, employees, and a diverse inventory that spans shirts, jeans, shoes, bags, and jewelry. Essential operations include purchasing items, selling them to customers, and efficiently managing vendor orders. Additionally, we are considering the potential inclusion of online orders to broaden our market outreach and the convenience of customers. For this project, the main idea is to explore gender-fluid options, aligning with evolving customer preferences and trends. We aim to improve accessibility and serve a broader range of customers while addressing the modern demand for flexible, inclusive fashion solutions.

1. Information Needs:

By constructing a database for our thrift store, business owners can keep track of incoming inventory of various items e.g., clothes. The constructed database will also be keeping records of employee transactions that include customer purchases and sales. This consists of the date of purchase, the employee that made the transaction along with the type of transaction. By keeping track of these records, business owners can refer to the stored data to ensure inventory is up to date and transactions are completed correctly. Without a database to store data, it would be hard to make sure everything is accounted for, so we intend to make the process of recording data less arduous and more efficient. Our store will also be holding vendor relationships. By recording orders from vendors it will create reliable data on merchandise purchases while giving the ability to readjust prices based on the possibility of unit price changes in the future. Overall, access to these data types will provide data analysis for better business decisions, including deciding what to sell, what to purchase, and when to execute these business decisions.

1. Entities Identified List:

* Customers: Store customers' information, including names, contact information, and preferences.
* Employee: Store employee information, including names, contact information, and role.
* Items: To store the inventory of clothes and accessories, including item names, descriptions, categories, gender, size, quantity, and price.
* Vendors: Store the vendors' relationship information, including vendor names, contact information, and offers.
* Vendor orders: To store the order information placed from vendors, including ordered items, order dates, order quantity, and total amount of order costs.
* Transaction: To store the transaction history of customer sales, including purchase date, buy-in date, purchased items, or buy-in items, the quantity of the items, and the total amount of the items.

1. Business Rules:

* A customer can make multiple transactions, but each transaction is associated with a single customer.
* A customer can make multiple online orders, but each online order is associated with a single customer.
* An employee can authorize multiple transactions, but each transaction is associated with a single employee.
* Each transaction involves one or more items.
* Each online order involves one or more items.
* Vendors can supply multiple items to the thrift store.
* Each vendor can place multiple vendor orders, each specific to a vendor.
* Vendor orders can include multiple items, each being part of numerous vendor orders.

