# IE6700 19106 Data Management for Analytics SEC 04 Fall 2022

## Project Group 28

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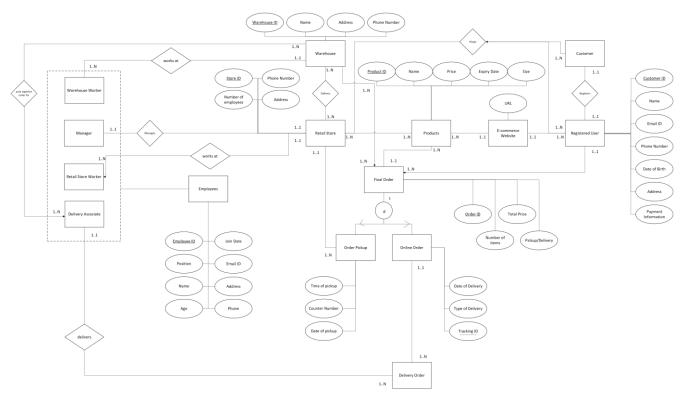
### Problem Definition:

The business problem that is being implemented here is for a database system of a retail and e-commerce store. The database will include information about the Warehouse, Retail Store, the employees that are part of the entire operation. This database will also contain information about the e-commerce website, the products that are available at the retail and the e-commerce website, the final order and will contain information regarding the type of order the customer has, whether it is an online order or an in person pick up of their order. The aim of this project is to have a functional database that can maintain information regarding the products being offered by the Retail store and the e-commerce website, it can also keep track of the order, have information regarding the different employees involved in the operation and contain the information about the registered users who use the services of the company.

#### Entities:

- 1. Warehouse: This contains information regarding the details about the warehouse, its ID, name address and phone number.
- 2. Retail store: This contains information regarding the number of employees working at the store, and the details of the store such as address, its name and number.
- 3. Products: This entity will have all the information related to the products that are being offered by the retail store and the e-commerce website, such as the product ID, the name, price, size, and expiry date of the products.
- 4. Registered User: This entity will hold all the information related to the customer who orders products online through the ecommerce website, such as their customer ID, name, age, email ID, phone number, Date of Birth, their address, and their Payment Information.
- 5. Employees: This is another major entity in this database, this will contain all the details regarding the employees who are working on the entire operation. These details include their employee ID, the position they work at, their date along with all their personal information.
- 6. Final Order: This entity contains all the information regarding a registered user's final order. This includes, order ID, total price, number of items and whether the customer wants to opt for pickup or delivery.

### Conceptual data model using EER diagram:



For a detailed view of the EER diagram please use the link below:

https://drive.google.com/file/d/1atO1I3f73XtX--5F9soTDm3yPp0x\_hF5/view?usp=sharing

(Please note this EER diagram has been made using Microsoft Visio. Since Visio is not supporting arcs currently, we have indicated specialization using arrows for the entity – Final Order and its subclasses Order pickup and Online order)

Thank You