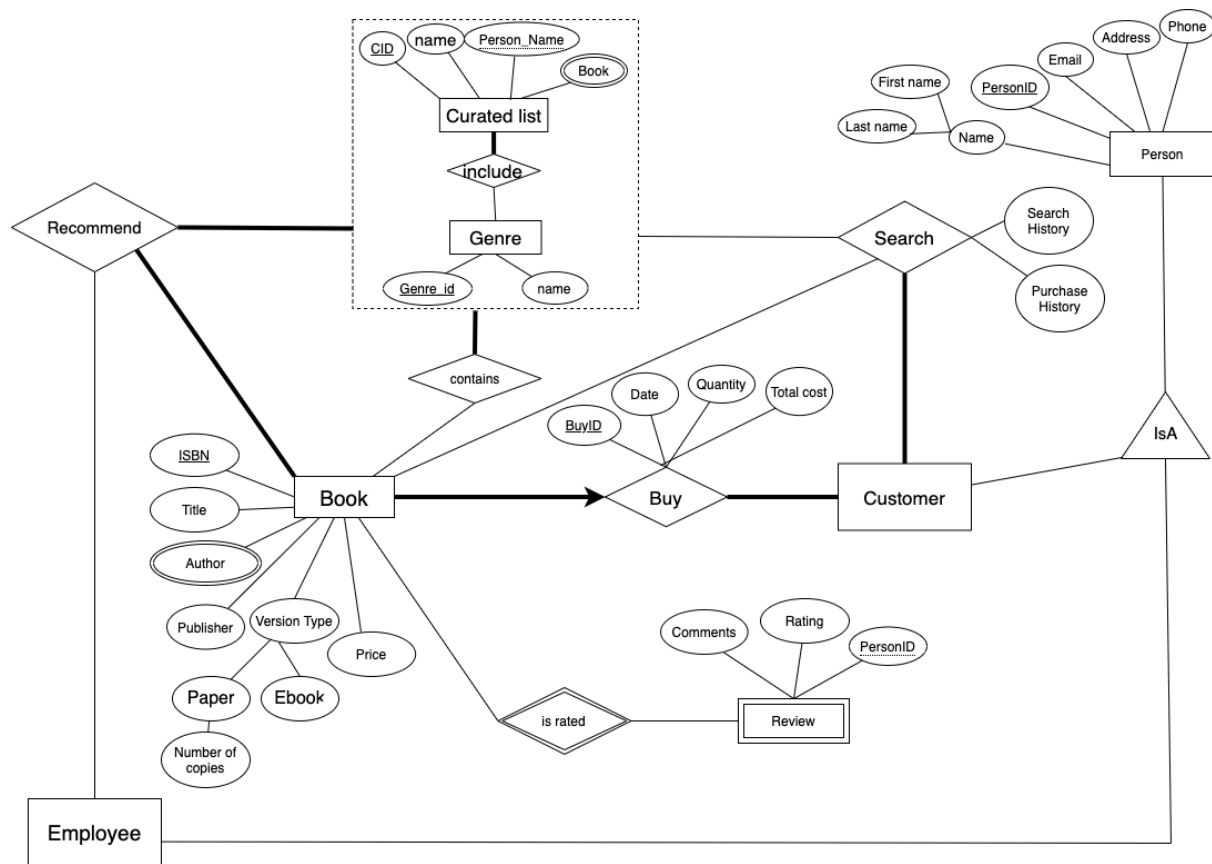


E-R Diagram:



Justification for the E-R Diagram:

- Person is either a Customer or an Employee with its attributes: PersonID, Address, Name (Last name and First name), Phone, Email.
- The Employee may or may not add a curated list for recommendation.
- The Customer can either search for a book or Buy the book.
 - The customer searches for at least 1 book.
 - In each order, the customer has to buy at least 1 book.
 - Each order has an unique BuyID which displays the order date (Date), Quantity and Total cost of this order.
- The search relationship is based on customer search history and purchase history to recommend books.
- The search system recommends books to the customer via the aggregated entity.
 - Aggregate entity contains genre and curated list, which means that users will be able to see a list of recommended/curated books –created by the employee and is correlated with at least one genre– when they search the book.

- Each curated list has an unique id (CID), a list name (name), a creator's name (Person_Name is used as foreign key), and the book attribute uses a double circle that represents that each list can have multiple books.
 - Genre is presented with an unique id (Gerne_id) and a Gerne name(name).
 - Each curated list should include at least one genre; a genre may or may not be included in a curated list.
- If the Customer directly searches for a book then the book is displayed with all its attributes: ISBN, Title, Authors, Version type(Paper/Ebook; if the book is paperback, it will show the number of copies left in inventory), Publisher, Price.
 - The curated list and the genre are presented as an aggregated entity, and this entity contains at least one book(because curated list contains books and genre contains books), also, at least one book is recommended by the aggregated entity(curated list and genre).
 - The customer is also able to view the recommendations and ratings by other customers/employees.
 - After the customer buys a book or multiple books the customer is also able to rate the book and review it, the foreign key PersonID refers to the one who gives the review. Employees are also able to rate and review books.
 - The book can be rated by 0 to many customers/employees.
 - The Review entity is a weak entity with attributes of PersonID, rating, comments; this entity exists when a customer has purchased a book and then leaves a rate or comment, or when an employee leaves a rate and comments.