CSE 111 Fall 2024: Project Checkpoint 3

“Bookstore Management”

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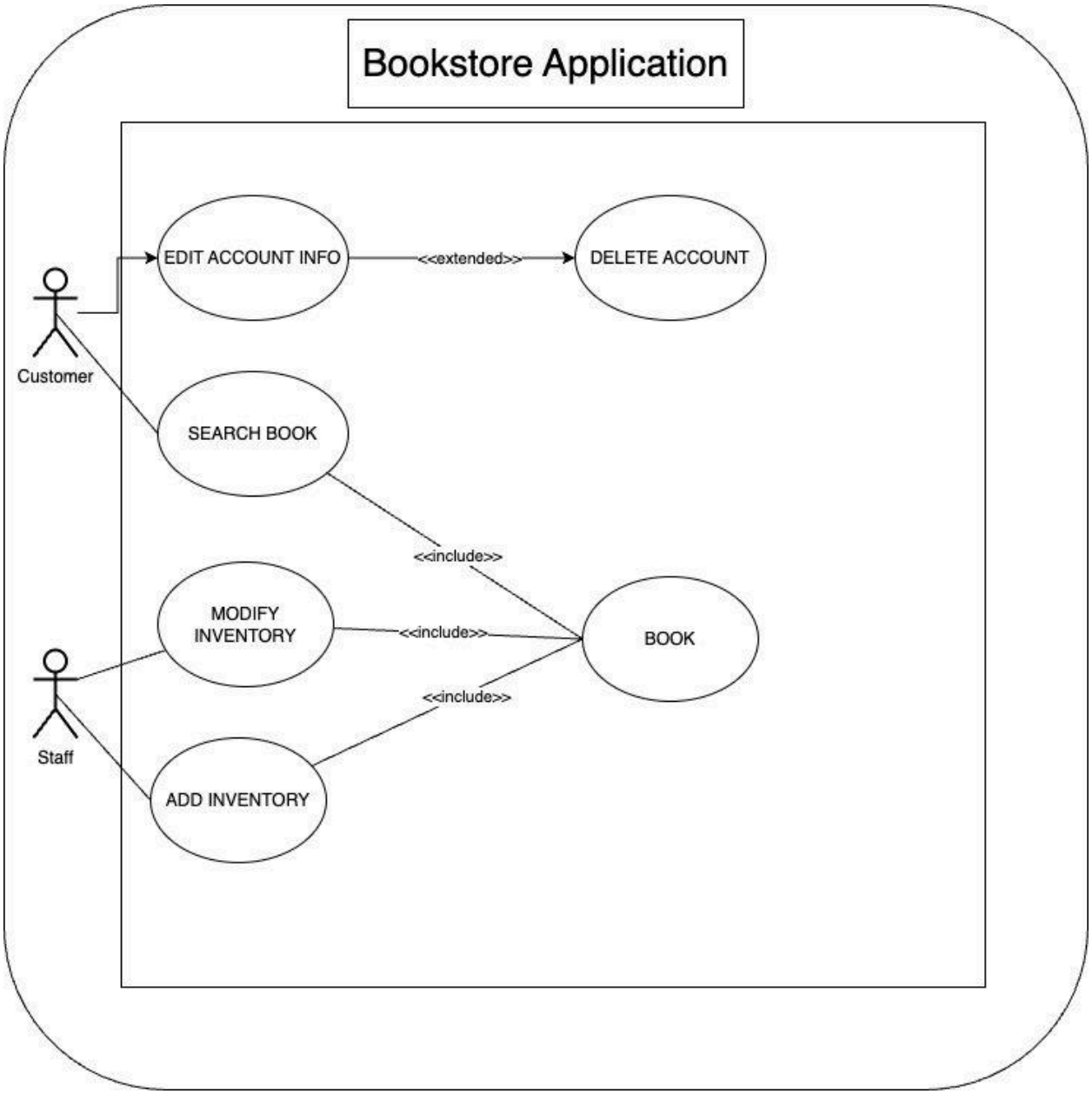
Synopsis

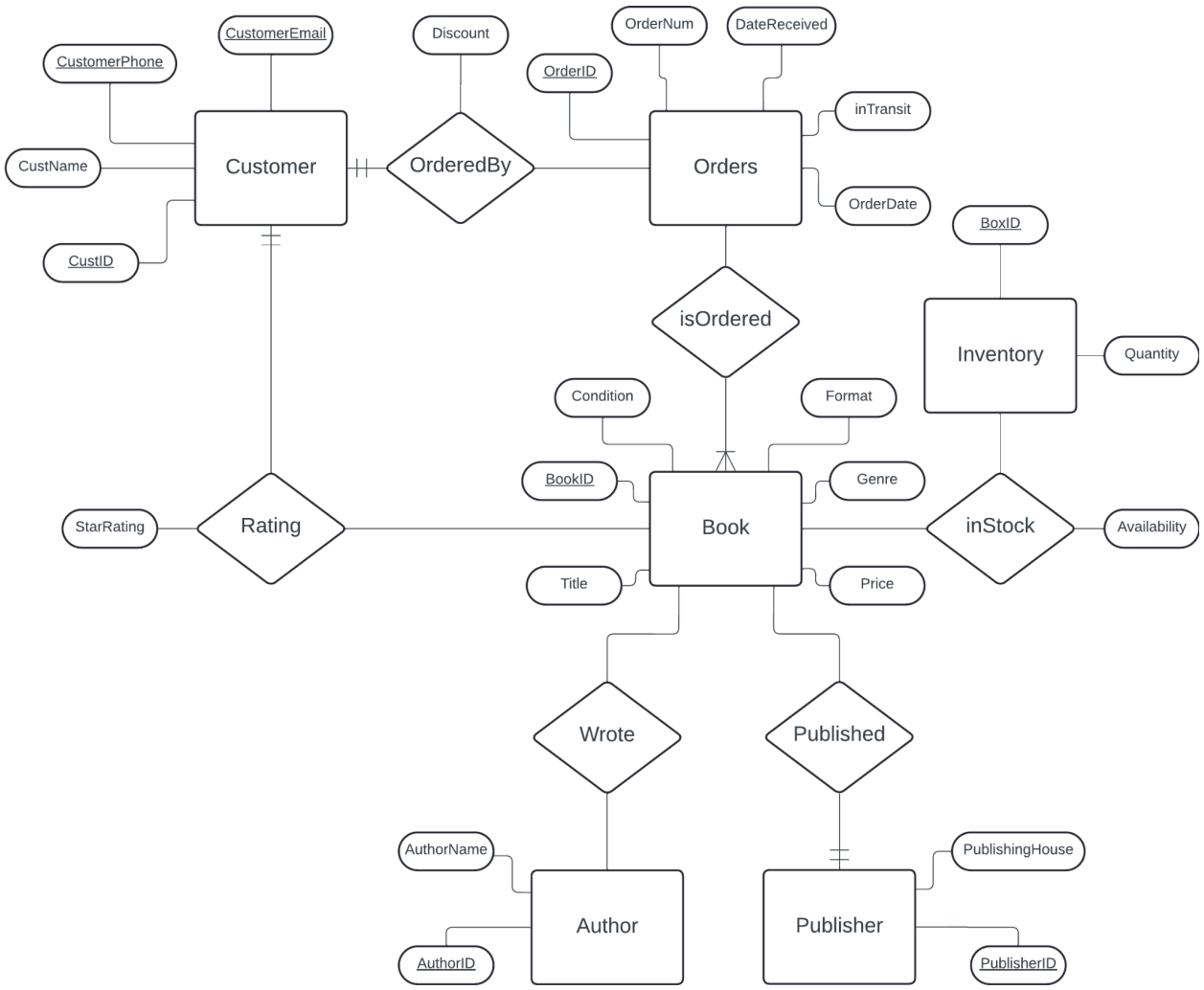
The project will create a database and interface for a bookstore. The intended users for this application will be for workers in bookstores and customers. Customers can search books by author name, genre, and book title. They can also check their orders, check best rated, and view all books in the bookstore, and modify their account info. For employees, we plan on letting them be able to add new books, view all books, update book prices, and update the inventory. Both the customers and employees can login to their respective accounts.

UML Case Diagram

The main use cases for this UML is for staff and customers. The paths of the use case show what the customer can do on this online website such as searching a book, ordering, and rating the purchased item(s). For staff they can add, modify, or delete inventory of the books.



E/R Diagram



Relational Schema

Entities:

1. Book(<u>BookID</u>, Title, <u>AuthorID</u>, <u>PublisherID</u>, Genre, Price, Condition, Format)
2. Author(<u>AuthorID</u>, AuthorName)
3. Publisher(<u>PublisherID</u>, PublishingHouse)
4. Customer(<u>CustID</u>, CustomerName, <u>CustomerPhone</u>, <u>CustomerEmail</u>)
5. Inventory(<u>BoxID</u>, <u>BookID</u>, Quantity)
6. Orders(<u>OrderID</u>, OrderNum, CustID, BookID, OrderDate, DateReceived, inTransit)

Relationships:

1. Wrote(AuthorID, BookID)
2. Published(BookID, PublisherID)
3. inStock(BookID, BoxID, Availability)
4. Rating(BookID, CustID, StarRating)
5. isOrdered(OrderID, BookID)
6. OrderedBy(OrderID, CustID, Discount)

GitHub Access Link:

https://github.com/UrielMJ7/CSE-111-Database-Project