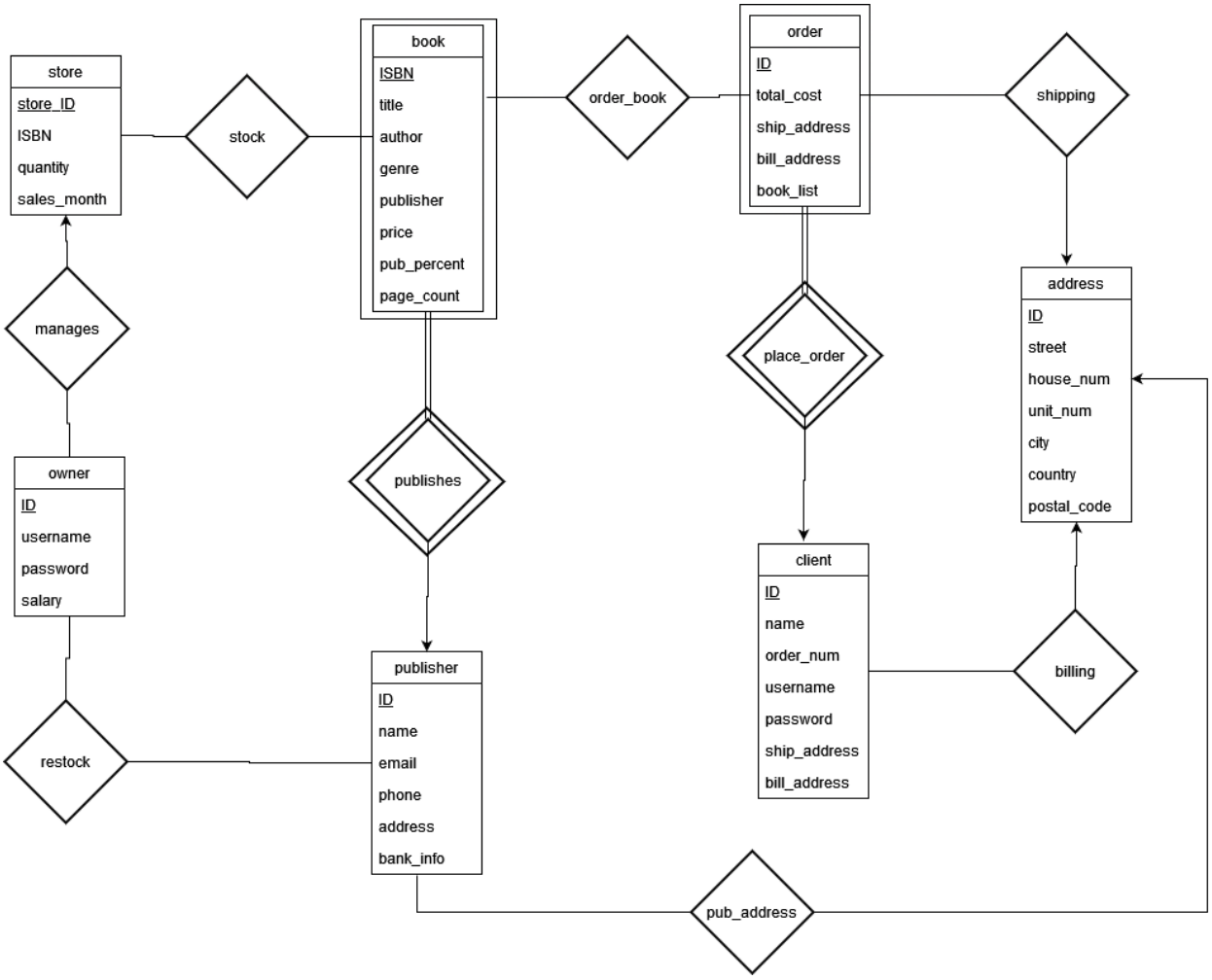
1 Conceptual Design



- store: A store is managed by an owner and keeps track of the current stock of each book as well as the sales made for each month
- owner: An owner can manage the inventory of the store as well as purchase more from the publishers should stock be running low
- book: A book has its stock managed through the store and is published by publishers who also get a percetage of the book's sale. The assumption for a book to exist is that it is first published and provided by the publisher. Books can also be added to orders by the client to be purchased
- publisher: A publisher publishes books and provides them to the store owner for their store. They peovide their banking information to receive their part of their book sale, and they have an address they can be reached at
- order: An order can be made by a client to buy books from the store and have them sent to the provided shipping address. The assumption for an order to exist is that a client must already exist who have placed the order.
- client: A client, who is registered with the store, can place an order of books to be sent to a provided shipping address, paied bia their billing address.
- address: An address specifies the location for either a publisher, a client, or a client's billing info

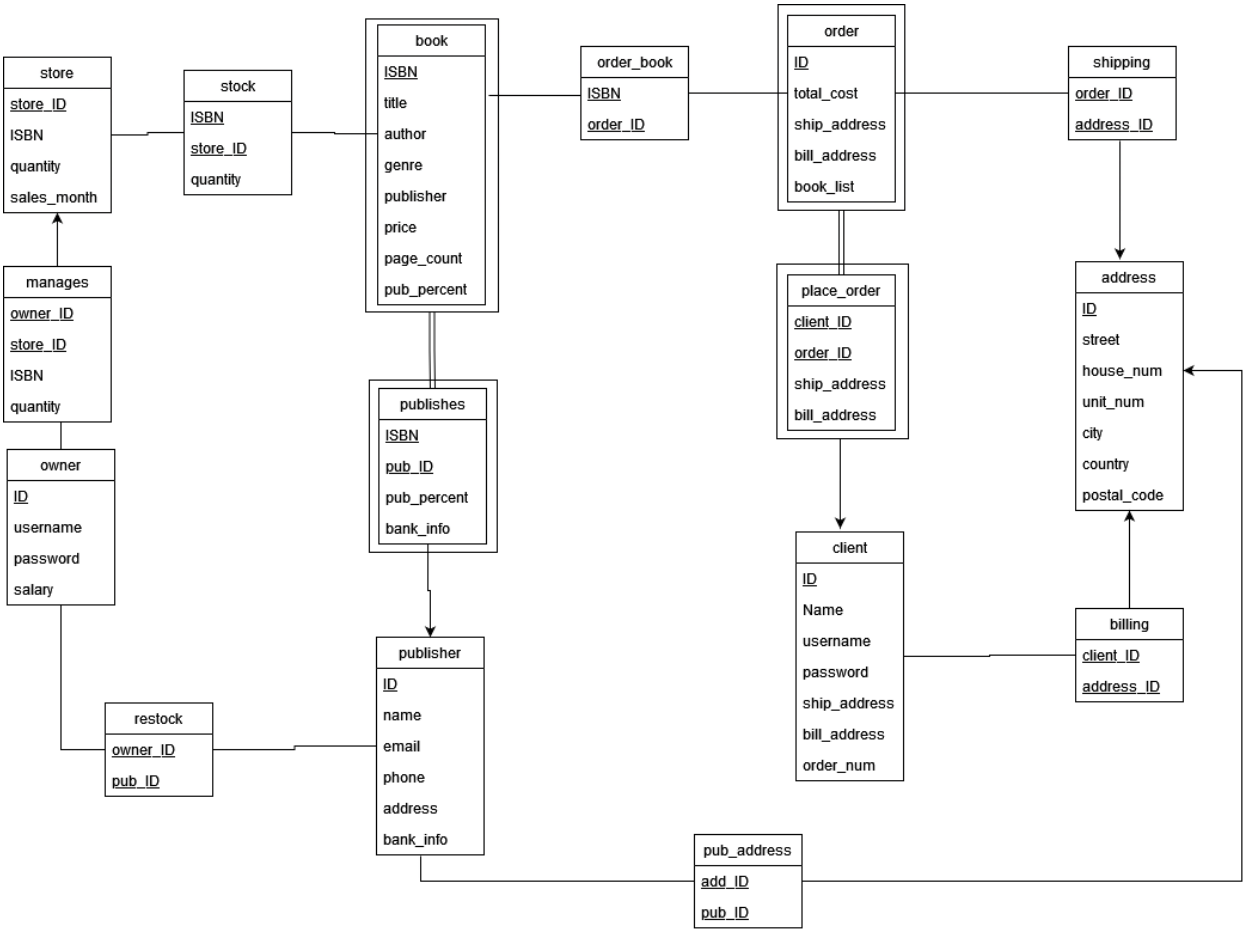
2 Reduction to Relation Schemas

- store: (store_id, ISBN, quantity, sales_month)
- owner: (ID, username, password, salary)
- book: (ISBN, title, author, genre, publisher, price, pub_percent, page_count)
- publisher: (ID, name, email, phone, address, bank_info)
- order: (ID, total_cost, ship_address, bill_address, book_list)
- client: (ID, name, username, password, ship_address, bill_address)
- address: (ID, street, house_num, unit_num, city, country, postal_code)
- stock: (ISBN, store_id)
- manages: (owner_id, store_id, ISBN, quantity)
- restock: (owner_id, pub_id)
- publishes: (ISBN, pub_id, pub_percent, bank_info)
- order_book: (ISBN, order_id)
- place_order: (client_id, order_id, ship_address, bill_address)
- pub_address: (add_id, pub_id)
- shipping: (order_id, address_id)
- billing: (client_id, address_id)

3 Normalization of Relation Schemas

Unsure what to put here at the moment.....

4 Database Schema Design



5 Implementation

Currently incomplete

6 Bonus Features

No bonus features in project currently

7 GitHub Repository

`https://github.com/rayotte/COMP_3005_Project`

8 Appendix I (Availability)

Exempted from demonstrations based on prior conversation with professor Roby