

ARCHITECTURE DESIGN

Book Store

GARACO

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		Project Number	12345
Project Name	Book Store		
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- **List of Actors:**

- Owner.
- General Manager.
- Assistant Manager.
- Seller.

- **List of Entities:**

- User.
- Employee.
- Book.
- Author.
- Customer.
- Shopping Cart.
- Order.

- **Business Model:**

- Saving data.
- Restrict user functionality by position (Ex: Sellers cannot edit book data).
- Add, modify, delete data.
- Searching data
- Create order.
- Handling order return.
- Collecting sale reports.

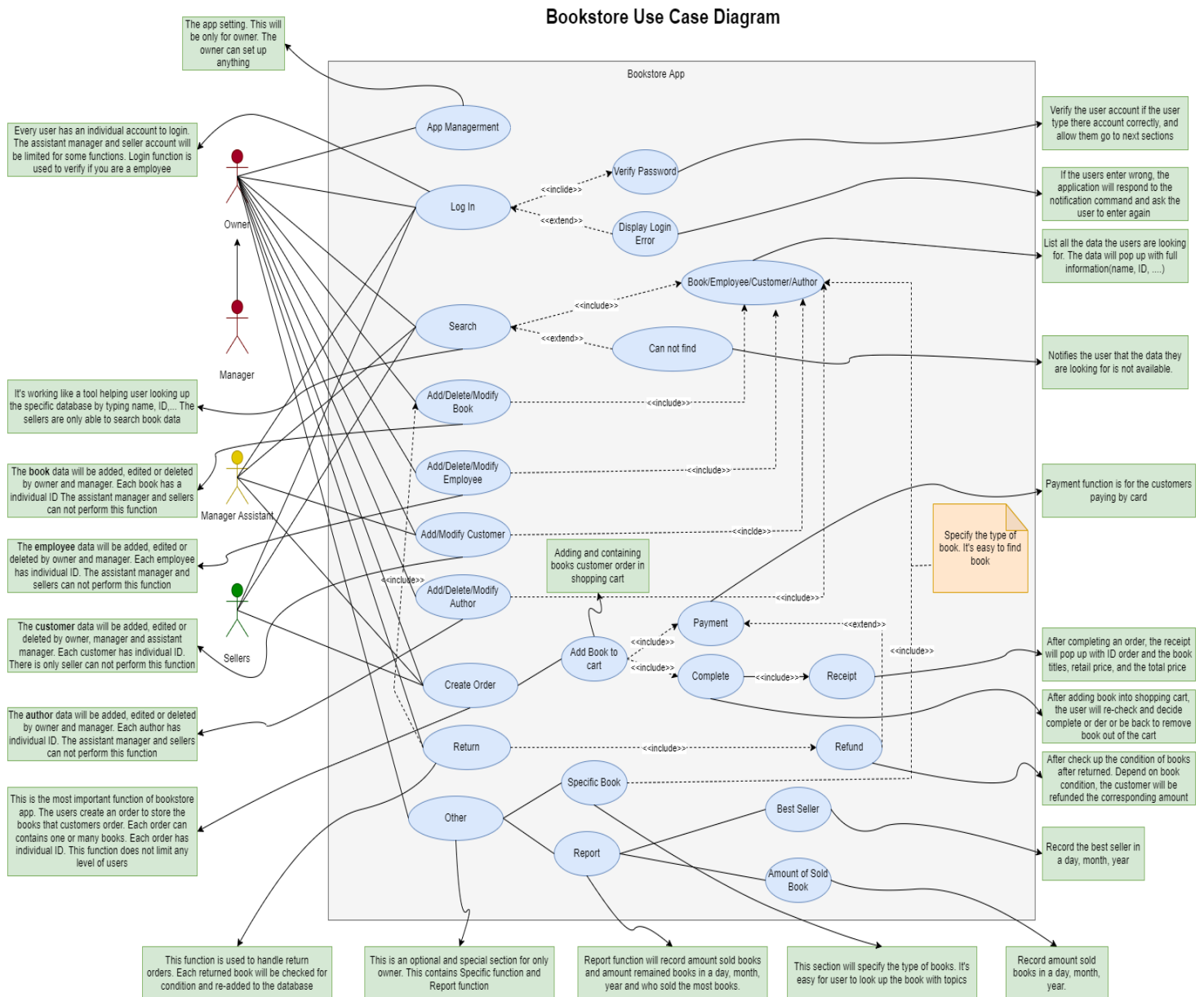
Every user has an individual account with a username and password provided and accounts are divided into many levels. Owner and manager accounts can access all functions of the bookstore app, otherwise, some functions are limited for assistant manager and seller accounts. All user needs to log in account before using functions. On the main screen of the app, there are five functions represented by five buttons: **Search and Create Order, Edit Data, Order Return, Create Account, and Report**. For the **Search and Create Order**, the books are searched by title, ID, author, publisher, category, condition, and year. The books that are searched will be pop up in the listing box and added to the shopping cart below. Opposite the books can be removed out of the shopping cart by the remove button. After completing

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adding books to the shopping cart, there will be a sub-window containing all book information customers order and the total price. The next section is payment for customers who would like to pay by card. After completing an order, the app automatically gets a report and comes back to the main screen for the next orders or functions. For the **Edit data**, there are different databases: Book, Customer. Employee, Author. After choosing the type of data the user would like to edit, all the data will be shown up in the window. To be easy for searching data, there will be a search bar at the top with many topics. At this function, users can view, modify information, add new data, and remove data. After just clicking a save button, the data will be saved in the databases. For **Order Return**, each order has an individual ID, therefore, the order can be searched by ID with a searching bar at the top of the window. After checking the condition of returned books, the books will be re-added to the database with modified condition status, and depending on returned book condition the customer will get a refund with the corresponding amount. Another function is **Create Account**. This function is exclusive to the owner because the owner is a person who creates a username and password to provide the accounts for the employees. The final function is **the Report** function. At this function, the user can get reports containing the amount of sold books, amount of stored books, and total income in a day, month, and year.

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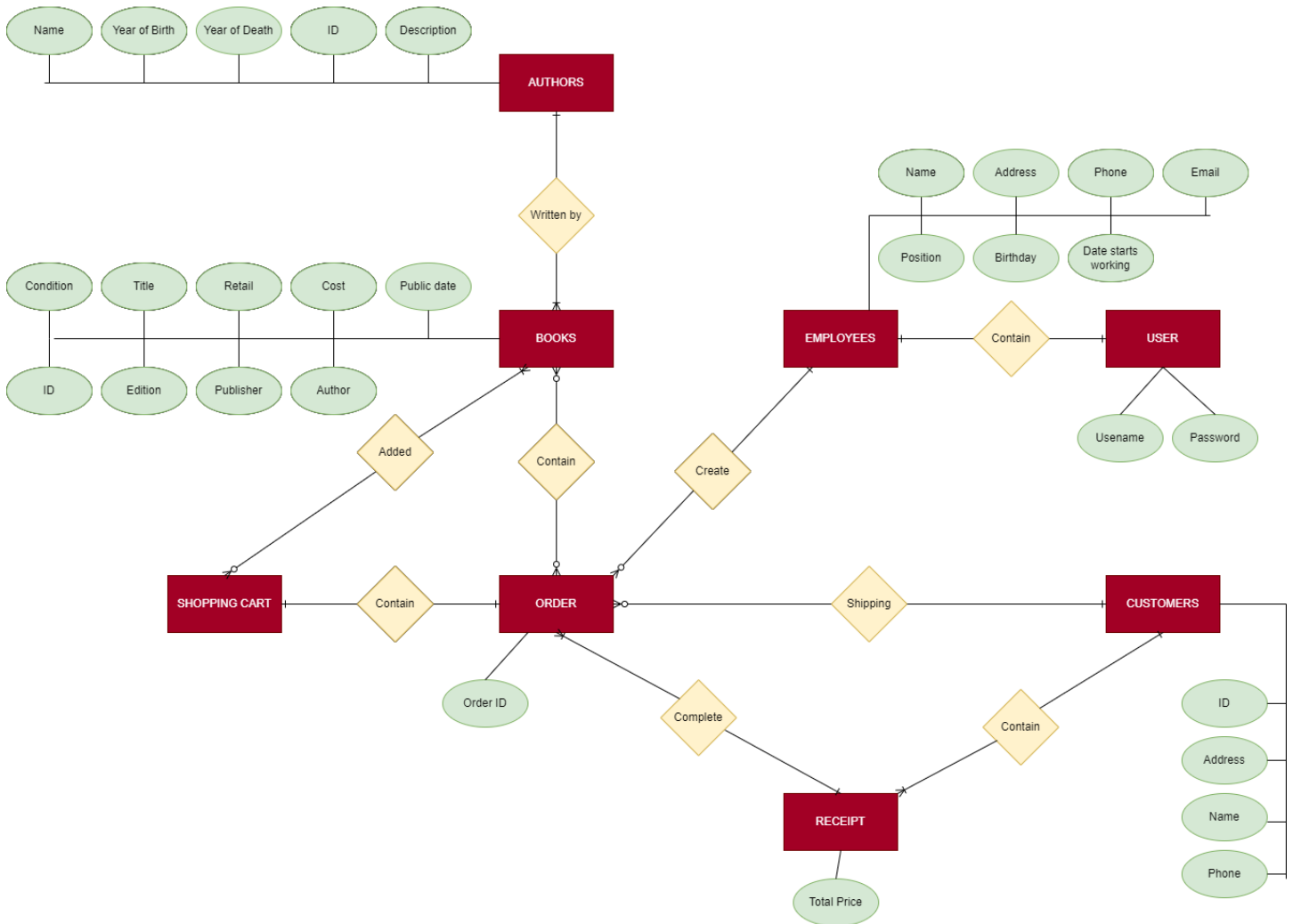
• Use Case Diagram:



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- ER Diagram:

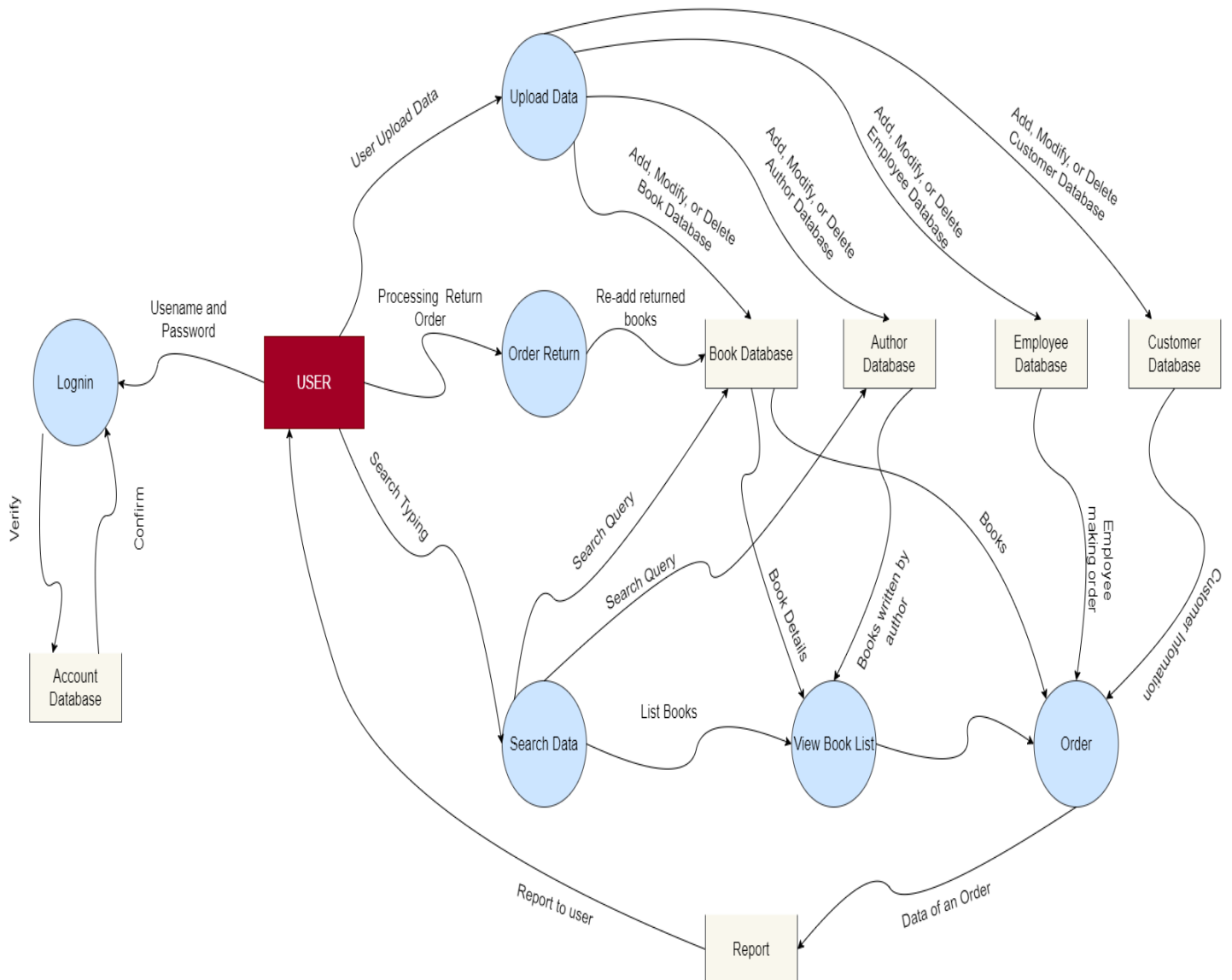
Bookstore ER Diagram



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- Data Flow Diagram:

Bookstore Data Flow Diagram



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Agreed to and Accepted By:

Project Team		Business Unit	
Project Lead Name:		Project Sponsor Name:	
Signature:		Signature:	
Date:		Date:	