

Data Requirements

- A library has books. These books have titles, descriptions, dates published, and availability. The availability represents the number of copies of that particular book that are still available for checking out. Books keep track of the author, who possesses a name and an age. Many books can be written by one author.
- A customer checks these books out. Customers are the main priority of the library, and the library serves to provide them with access to books. A customer can check out a book and renew it. A customer has information put into the system including an ID, name, and contact info. Customers also have a reward system that encourages reading. The customer has a reward and reward tier associated with them. Customers are also provided with other luxuries such as reserved rooms and printing services.
- The library keeps track of book transactions in order to provide an accurate count of availability. The transactions also serve to record when books are checked out and when they should be returned. Customers cannot check out more books if they have any books past the deadline.
- Employees also work at the library. Many employees can work for one department. These employees can give many recommendations and receive many recommendations from customers. Employees have their ssn and name in the system, as well as employment details such as role and access level. One employee is chosen to maintain the one information website.
- The Information Website contains the opening and closing times, as well as holidays and the busiest hours.
- Library departments have a list of employees that work for them, they are identified by their name, and have a location and a description. Departments sort books by genre, and one department can host an event.
- Genres are identified by their name, and also possess a description and location
- Events are hosted by Departments, and may reserve a room for the event. The room number, Department, event date, and description are recorded so that guests can know where and when the party starts.