**Entities:**

1. Resource
2. User or Member
3. Loan
4. Reservation
5. Inventory

**Relationships:**

1. Resource – Member (One to Many)
2. Resource – Loan (One to One)
3. Member – Loan (One to Many)
4. Resource – reservation (One to Many)
5. Member – reservation (One to Many)

**Attributes:**

* Resource Attributes:

1. Resource ID (Unique Identifier)
2. Title
3. Author
4. Publisher
5. Category (books, journals, magazines, materials)

* Member Attributes:

1. Member ID
2. Name
3. Date of Birth (optional)
4. Phone Number
5. Email
6. Role (student, faculty, staff members)
7. Status (active or inactive)

* Loan Attributes:

1. Loan ID or Transaction No
2. Resource ID
3. Member ID
4. Borrowed Date
5. Due Date
6. Return Date
7. Fine

* Reservation Attributes:

1. Reservation ID
2. Resource ID
3. Member ID
4. Reservation Date
5. On Loan (True or False)
6. Status (Notified or Waiting)

* Inventory Attributes:

1. Resource ID
2. Current Stock
3. Total Stock
4. Damaged Items (Quantity)