Project Overview

The Islamic Library Management System is an online platform designed to manage an extensive collection of Islamic manuscripts, books, and resources. It facilitates borrowing, returns, fines, and reviews while providing features for librarian management, event organization, and notices, ensuring a comprehensive and user-friendly experience for all users.

Objectives

- To create a centralized database for all library resources.
- To streamline the process of cataloging and searching for items.
- To improve the efficiency of library management operations.
- To provide real-time updates on the availability of resources.
- To ensure data integrity and security.

Technologies

- Database: MySQL
- ERD plus

Entities and Attributes

1. **Bookshelf**: BookshelfID (PK), Location, Description, Capacity

2. **Manuscripts**: ManuscriptID (PK), Title, AuthorID (FK to Authors), GenreID (FK to Genres), BookshelfID (FK to Bookshelf), PublicationDate, Language

3. **Scribes**: ScribeID (PK), Name, Biography, BirthDate, DeathDate

4. **Borrowers**: BorrowerID (PK),Name,Email,PhoneNumber, Address, MembershipDate

5. **Genres**: GenreID (PK), GenreName, Description, CreatedAt, UpdatedAt

6. **Librarians**: LibrarianID (PK), Name, Email, PhoneNumber, EmploymentDate, Salary

7. **Fines**: FineID (PK), BorrowerID (FK to Borrowers), ManuscriptID (FK to Manuscripts), FineAmount, FineReason, FineDate, PaidStatus

8. **Loans**: LoanID (PK), BorrowerID (FK to Borrowers), ManuscriptID (FK to Manuscripts), LoanDate, ReturnDate, Status

9. **Authors**: AuthorID (PK), Name, Biography, BirthDate, DeathDate

10. **ReadingRooms**: RoomID (PK), Location, Capacity, Available, Schedule

11. **Publishers**: PublisherID (PK), Name, Address, ContactNumber, EstablishedYear

12. **Events**: EventID (PK), EventName, EventDate, Location, Description

13. **Reviews**: ReviewID (PK), ManuscriptID (FK to Manuscripts), BorrowerID (FK to Borrowers), Rating, Comment, ReviewDate

14. **Notices**: NoticeID (PK), Description, PublishingDate, Attachments, ExpiryDate

Identify the relationship needed

a. Manuscripts have Authors: Many-to-Many

b. Manuscripts belong to Genres: Many-to-One

c. Manuscripts are stored on Bookshelves: Many-to-One

d. Fines are incurred by Borrowers: Many-to-One

e. Fines are related to Manuscripts: Many-to-One

f. Loans are made by Borrowers: Many-to-One

g. Loans are associated with Manuscripts: Many-to-One

h. Reviews are written for Manuscripts: Many-to-One

i. Reviews are written by Borrowers: Many-to-One

j. Notices are related to Manuscripts: Many-to-Many

Cardnality Ratio

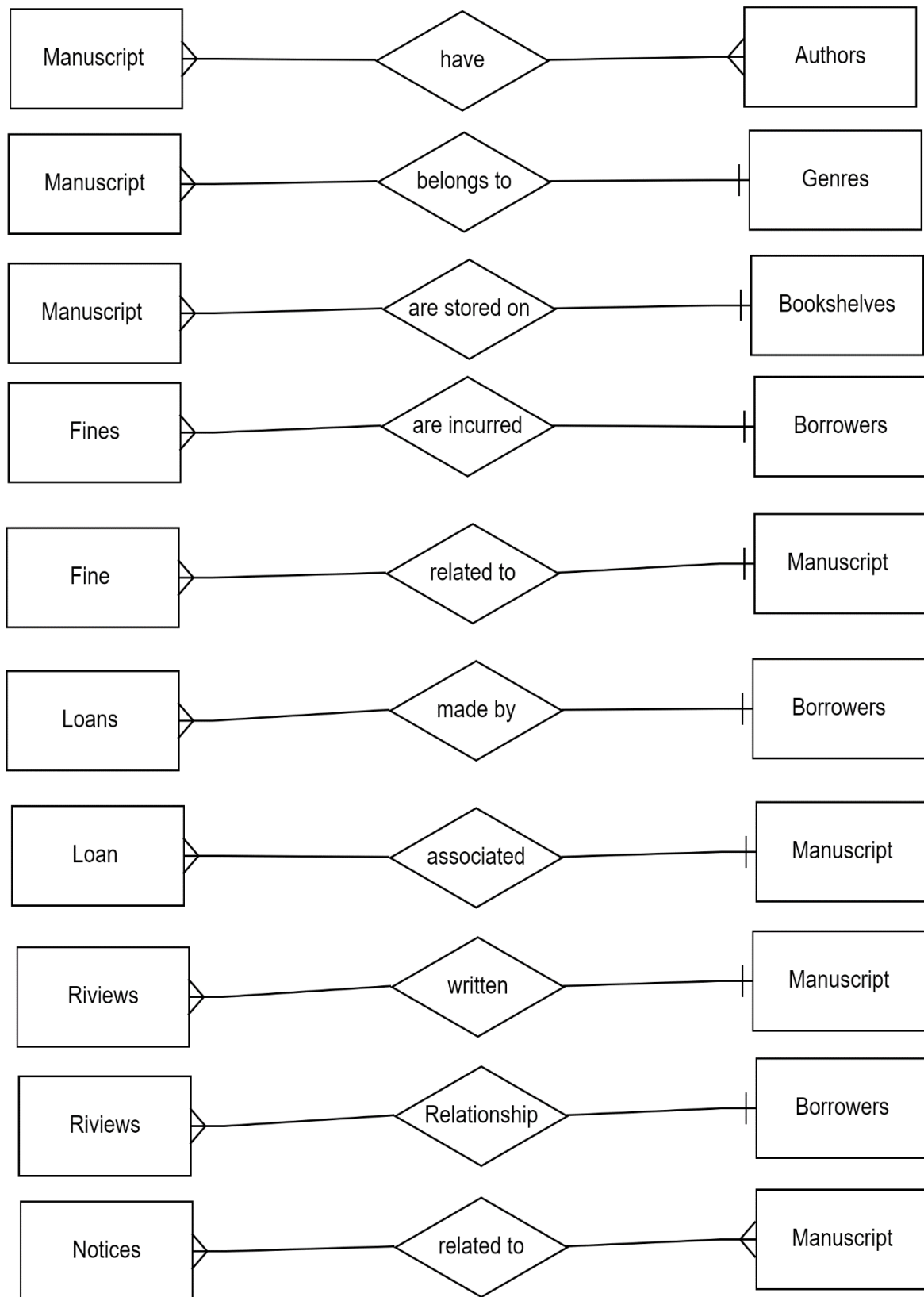| Entity	Relationship	Entity
Manuscript	have	Authors
Manuscript	belongs to	Genres
Manuscript	are stored on	Bookshelves
Fines	are incurred	Borrowers
Fine	related to	Manuscript
Loans	made by	Borrowers
Loan	associated	Manuscript
Riviews	written	Manuscript
Riviews	Relationship	Borrowers
Notices	related to	Manuscript

Figure 1 Islamic Library ER diagram

Structure | SQL | Search | Query | Export | Import | Operations | Privileges | Routines | Events | Triggers | Tracking | Designer | Central columns

Untitled *

buil events
- EventID : int(11)
- EventName : varchar(100)
- EventDate : date
- Location : varchar(255)
- Description : text

buil scribes
- ScribeID : int(11)
- Name : varchar(100)
- Biography : text
- BirthDate : date
- DeathDate : date

buil publishers
- PublisherID : int(11)
- Name : varchar(100)
- Address : varchar(255)
- ContactNumber : varchar(20)
- EstablishedYear : year(4)

buil bookshelf
- BookshelfID : int(11)
- Location : varchar(100)
- Description : varchar(255)
- Capacity : int(11)

buil genres
- GenreID : int(11)
- GenreName : varchar(100)
- Description : text
- CreatedAt : date
- UpdatedAt : date

buil authors
- AuthorID : int(11)
- Name : varchar(100)
- Biography : text
- BirthDate : date
- DeathDate : date

buil loans
- LoanID : int(11)
- BorrowerID : int(11)
- ManuscriptID : int(11)
- LoanDate : date
- ReturnDate : date
- Status : varchar(50)

buil manuscripts
- ManuscriptID : int(11)
- Title : varchar(255)
- AuthorID : int(11)
- GenreID : int(11)
- BookshelfID : int(11)
- PublicationDate : date
- Language : varchar(50)

buil fines
- FineID : int(11)
- BorrowerID : int(11)
- ManuscriptID : int(11)
- FineAmount : decimal(10,2)
- FineReason : varchar(255)
- FineDate : date
- PaidStatus : varchar(20)

buil borrowers
- BorrowerID : int(11)
- Name : varchar(100)
- Email : varchar(100)
- PhoneNumber : varchar(20)
- Address : varchar(255)
- MembershipDate : date

buil reviews
- ReviewID : int(11)
- ManuscriptID : int(11)
- BorrowerID : int(11)
- Rating : int(11)
- Comment : text
- ReviewDate : date

buil librarians
- LibrarianID : int(11)
- Name : varchar(100)
- Email : varchar(100)
- PhoneNumber : varchar(20)
- EmploymentDate : date
- Salary : decimal(10,2)

buil readingrooms
- RoomID : int(11)
- Location : varchar(100)
- Capacity : int(11)
- Available : tinyint(1)
- Schedule : varchar(255)

buil notices
- NoticeID : int(11)
- Description : text
- PublishingDate : date
- Attachments : text
- ExpiryDate : date