Analyze a given business scenario and create an ER diagram that includes entities, relationships, attributes, and cardinality. Ensure that the diagram reflects proper normalization up to the third normal form.

**Business Scenario:**

A library wants to create a system to manage its operations. The library has books, which are categorized into different genres. Each book has a unique ISBN, title, author(s), publication year, and quantity available. The library also keeps track of its members who borrow books. Each member has a unique ID, name, contact information, and can borrow multiple books. The system needs to track when a book is borrowed and returned by a member.

**Entities:**

* Book
* Genre
* Author
* Member
* Borrowing

**Attributes:**

1. **Book**:

* ISBN (Primary Key)
* Title
* Publication Year
* Quantity Available
* Genre ID (Foreign Key)

1. **Genre:**

* Genre ID (Primary Key)
* Genre Name

1. **Member**:

* Member ID (Primary Key)
* Name
* Contact Information

1. **Borrowing**:

* Borrowing ID (Primary Key)
* Book ISBN (Foreign Key)
* Member ID (Foreign Key)
* Borrow Date
* Return Date

**Relationships:**

1. **Book belongs to Genre (Many-to-One):**

* A book belongs to one genre.
* A genre can have multiple books

1. **Book written by Author (Many-to-Many):**

* A book can be written by one or more authors.
* An author can write multiple books.

1. **Member borrows Book (Many-to-Many):**

* A member can borrow multiple books.
* A book can be borrowed by multiple members.

**Cardinality:**

* Book - Genre: Many-to-One
* Book - Author: Many-to-Many
* Member - Book: Many-to-Many

**ER Diagram**

