

# Glossary

**AccountStatus** – A boolean value indicating whether a client's account is active or inactive.

**Author** – An individual credited with the creation of written or digital content.

**AuthorID** – A unique identifier assigned to each author.

**Book** – A type of library item with specific attributes like ISBN, genre, and publication date.

**BorrowingLimit** – The maximum number of items a client can check out based on their membership type.

**Catalog** – A comprehensive listing of all items available in the library system.

**CheckoutDate** – The date on which an item was borrowed by a client.

**Client** – A registered user of the library who can borrow and reserve items.

**ClientID** – A unique identifier assigned to each client.

**CopiesAvailable** – An integer value indicating the number of available copies of a specific item.

**Creates** – A relationship entity indicating that an author has created an item.

**DB** – Acronym for Database.

**DBMS** – Database Management System; software used to create and manage databases.

**DDL** – Data Definition Language; used to define database structures.

**DML** – Data Manipulation Language; used for managing data (insert, update, delete).

**DCL** – Data Control Language; deals with permissions and access control.

**TCL** – Transaction Control Language; manages transactions in the database.

**DigitalMedia** – A type of library item that exists in a digital format (PDF, audio, video, etc.).

**DueDate** – The date by which a borrowed item must be returned.

**Format** – The media type for digital items (PDF, EPUB, MP3, etc.).

**Folio** – An oversized book, typically stored and shelved separately.

**Genre** – A classification that describes the subject or style of a book or magazine.

**Hold** – A request to reserve a currently checked-out item.

**ID** – Identifier; a unique value used to distinguish entities.

**ISBN** – International Standard Book Number; a 13-character identifier for books.

**Item** – A generic entity representing any borrowable material.

**ItemID** – A unique identifier for any item across all formats (used to ensure uniqueness system-wide).

**LateFee** – A fine applied when a borrowed item is returned past its due date.

**Magazine** – A type of periodical publication with an issue number and release date.

**MagazineID** – Unique identifier for a magazine.

**MediaID** – Unique identifier for a digital media item.

**Membership** – The status a client holds that determines borrowing limits and late fees.

**MembershipType** – The category of membership.

**Microform** – A reduced-size reproduction of documents used for archival storage.

**Monograph** – A scholarly book on a single, specific subject.

**Notification** – A message sent to a client about reservations, due dates, or other alerts.

**NotificationID** – Unique identifier for a notification.

**Periodical** – A publication that is issued on a regular basis.

**Product** – A general term for any borrowable item (book, magazine, etc.).

**Publishes** – A relationship entity indicating that a publisher has published an item.

**Publisher** – An organization responsible for producing or distributing a publication.

**PublisherID** – Unique identifier for a publisher.

**Renewal** – The act of extending the due date for a borrowed item.

**Reservation** – An entity representing a client's request to hold an item.

**ReservationID** – Unique identifier for a reservation.

**ReservationDate** – The date when a reservation was placed.

**SendDate** – The date a notification was sent.

**SQL** – Structured Query Language; used to manage and manipulate relational databases.

**Status** – A boolean attribute in reservations indicating if the reservation is active or fulfilled.

**The Librarians** – The development team working on this library database system.

**Title** – The name of the book, magazine, or digital media item.

**Transaction** – An entity representing the borrowing activity between a client and an item.

**TransactionID** – Unique identifier for a transaction.

## Appendix

### Item

- **ItemID** – VARCHAR, primary key

### Book

- **ItemID** – VARCHAR, primary key, foreign key → Item
- **Genre** – VARCHAR
- **ISBN** – VARCHAR
- **PublicationDate** – DATE
- **Title** – VARCHAR
- **CopiesAvailable** – INT

### DigitalMedia

- **ItemID** – VARCHAR, primary key, foreign key → Item
- **MediaID** – VARCHAR

- **PublicationDate** – DATE
- **Title** – VARCHAR
- **CopiesAvailable** – INT
- **Format** – VARCHAR

### **Magazine**

- **ItemID** – VARCHAR, primary key, foreign key → Item
- **MagazineID** – VARCHAR
- **PublicationDate** – DATE
- **Title** – VARCHAR
- **CopiesAvailable** – INT
- **IssueNumber** – VARCHAR

### **Client**

- **ClientID** – VARCHAR, primary key
- **Email** – VARCHAR
- **Name** – VARCHAR
- **AccountStatus** – BOOLEAN

### **Author**

- **AuthorID** – VARCHAR, primary key
- **Name** – VARCHAR

### **Publisher**

- **PublisherID** – VARCHAR, primary key
- **Name** – VARCHAR

## **Notification**

- **SendDate** – DATE
- **Message** – VARCHAR
- **NotificationID** – VARCHAR, primary key
- **ClientID** – VARCHAR, foreign key → Client

## **Transaction**

- **TransactionID** – VARCHAR, primary key
- **LateFee** – FLOAT
- **DueDate** – DATE
- **CheckoutDate** – DATE
- **ItemID** – VARCHAR, foreign key → Item
- **ClientID** – VARCHAR, foreign key → Client

## **Reservation**

- **ReservationID** – VARCHAR, primary key
- **Status** – BOOLEAN
- **ReservationDate** – DATE
- **ItemID** – VARCHAR, foreign key → Item
- **ClientID** – VARCHAR, foreign key → Client

## **Membership**

- **MembershipType** – VARCHAR, primary key
- **BorrowingLimit** – INT

- **LateFee** – FLOAT

#### **Creates (Relationship Table)**

- **ItemID** – VARCHAR, primary key, foreign key → Item
- **AuthorID** – VARCHAR, primary key, foreign key → Author

#### **Publishes (Relationship Table)**

- **ItemID** – VARCHAR, primary key, foreign key → Item
- **PublisherID** – VARCHAR, primary key, foreign key → Publisher