User Attributes	Data Type	Constraint	Description
user_id	INT	Primary key (auto - increment)	Unique ID for each user
name	VARCHAR	NOT NULL	User's full name
email	VARCHAR	Unique key (NOT NULL)	Ensures unique email (for logins)
password	VARCHAR	NOT NULL	Securely stores the password
phone_number	VARCHAR	Optional	User's phone number
address	VARCHAR	Optional	User's residential address
registration_date	DATE	Current Datetime	Stores the registration date

USER TABLE

user_id(pk)	name	email	password	phone_number	address	registration_date

SCHEMA FOR BOOK

Book Attributes	Data Type	Constraint	Description
book_id	INT	Primary key (auto- increment)	Unique ID for each book
tittle	VARCHAR	NOT NULL	Title of the book
author	VARCHAR	NOT NULL	Author of the book
genre	VARCHAR	NOT NULL	Book genre
condition	ENUM	('NEW','LIKE NEW','USED','OLD')	Options with default = `NEW'
price	DECIMAL	NOT NULL	Book price
seller_id	INT	FOREIGN_KEY(user_id)	ID of the seller
book_content_url	VARCHAR	NOT NULL	The url to the book content
book_description	TEXT	NOT NULL	Descriptive note about the book
listing_type	ENUM	(`SALE', `EXCHANGE')	Default = `SALE'
status	ENUM	('AVAILABLE','SOLD', 'EXCHANGE', 'REMOVED')	Default = `AVAILBALE'
date	DATE	Curent Datetime	The listing date

BOOK TABLE

book_id(pk)	title	author	genre	condition	price	seller_id	book_content_url	book_descrip tion	listing_type	status	date

SCHEMA FOR REVIEWS

Review Attributes	Data Type	Constraint	Description
review_id	INT	PRIMARY KEY(AUTO INCREMENT)	Unique ID for each review
book_id	INT	FOREIGN KEY(BOOK_ID)	The primary key of the book
user_id	INT	FOREIGN KEY(USER_ID)	The primary key of the user
rating	INT	(1 TO 5)	The ratings between 1 to 5
comment	VARCHAR	NOT NULL	The reviews
review_date	DATE	CURRENT DATETIME	Date the review was made

REVIEW TABLE

review_id	book_id	user_id	rating	comment	review_date

TRANSACTION SCHEMA

Transaction Attributes	Data Type	Constraint	Description
transaction_id	INT	PRIMARY KEY(AUTO INCREMENT)	Unique ID of the transaction
book_id	INT	FOREIGN KEY(BOOK_ID)	ID of the book
seller_id	INT	FOREIGN KEY(USER_ID)	ID of the seller
buyer_id	INT	FOREIGN KEY(USER_ID)	ID of the buyer
transaction_date	DATE	CURRENT DATETIME	Transaction date
payment_method	ENUM	(`CREDIT CARD', `CRYPTO',	Default = credit card
status	ENUM	(`PENDING',`SUCCESSFUL', `FAILED')	Default = pending

TRANSACTION TABLE

transaction_id	book_id	seller_id	buyer_id	transaction_date	payment_method	status