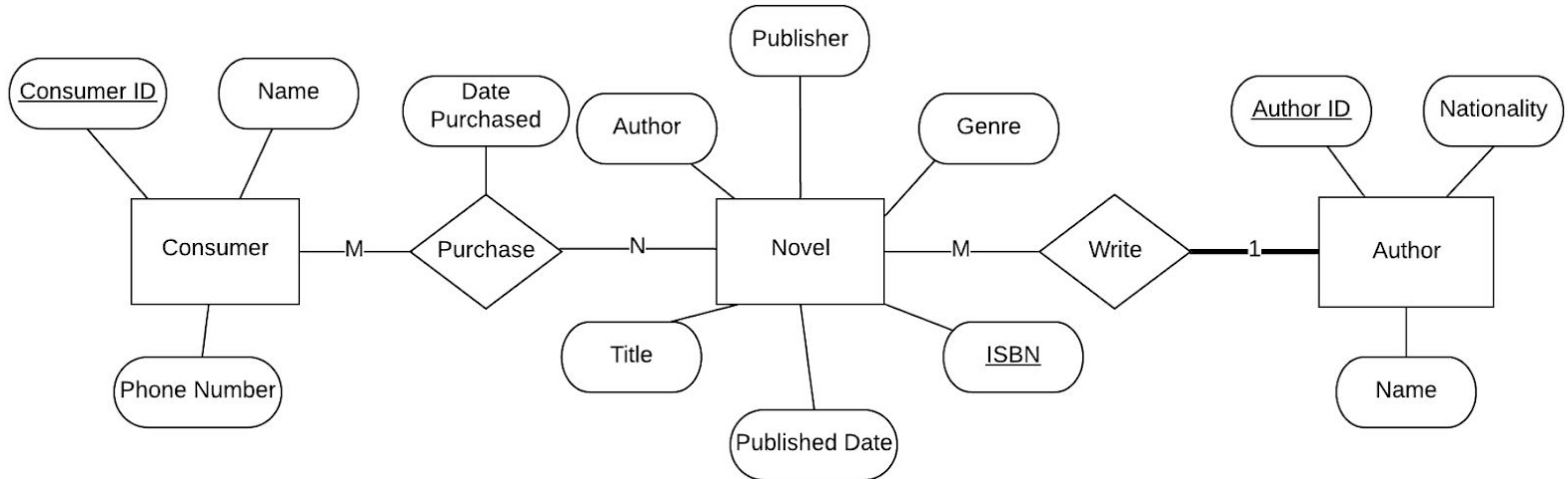
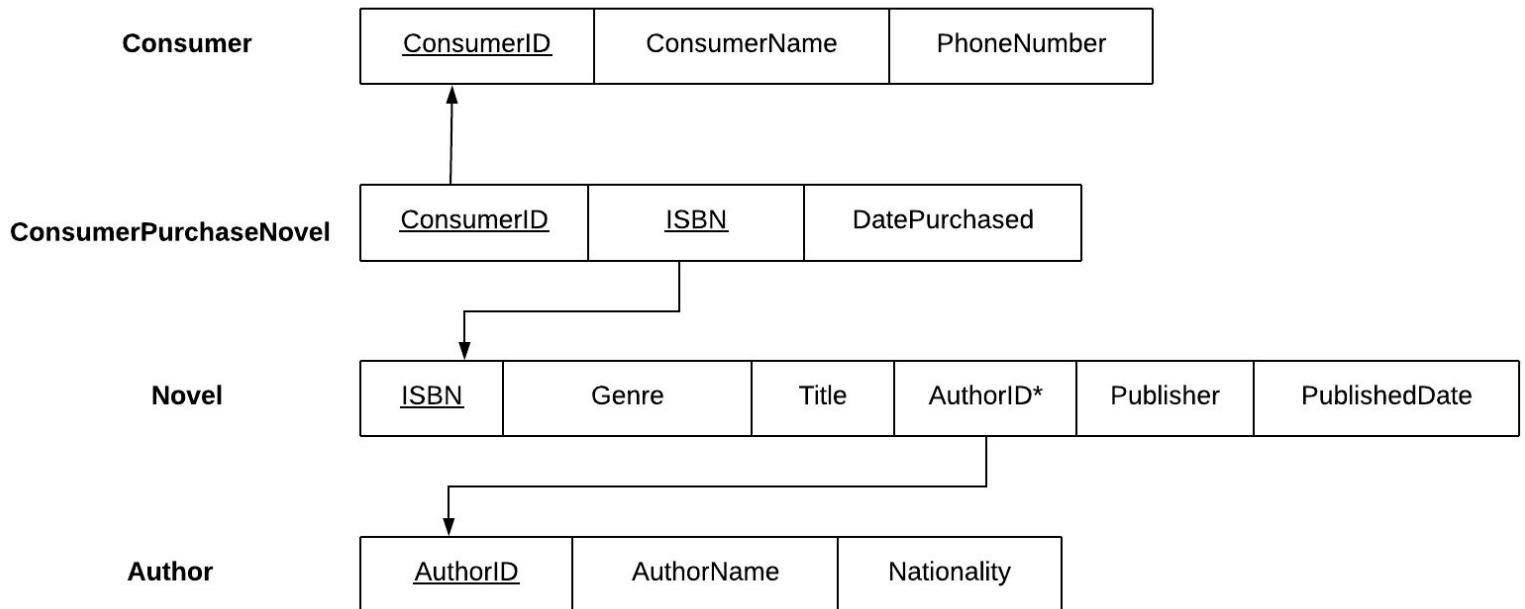


**Example 2: Consumers buy novels all the time. Novels are written by one writer.**

**ERD:**



**ERD -> Relational Mapping:**



# Data Types (Mini Data Dictionary):

## Consumer

<u>ConsumerID</u>	INT	NOT NULL
ConsumerName	VarChar(50)	NOT NULL
PhoneNumber	VarChar(11)	NOT NULL

## ConsumerPurchaseNovel

<u>ConsumerID</u>	INT	NOT NULL
<u>ISBN</u>	VARCHAR(13)	NOT NULL
DatePurchased	DATE	NOT NULL

## Novel

<u>ISBN</u>	VarChar(13)	NOT NULL
Genre	VarChar(50)	NOT NULL
Title	VarChar(200)	NOT NULL
AuthorID*	INT	NOT NULL
Publisher	VarChar(100)	NOT NULL
PublishedDate	DATE	NULL

## Author

<u>AuthorID</u>	INT	NOT NULL
AuthorName	VarChar(50)	NOT NULL
Nationality	VarChar(50)	NULL

# DDL & DML:

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-- Refrence <https://stackoverflow.com/questions/15443913/sqlite3-foreign-key-constraint-failed>

----

PRAGMA foreign\_keys = 0;

DROP TABLE IF EXISTS "Author";

CREATE TABLE Author

(

    AuthorID        INTEGER NOT NULL ,  
    AuthorName      VARCHAR(50) NOT NULL,  
    Nationality      VARCHAR(50) NULL,  
    PRIMARY KEY (AuthorID)

);

INSERT INTO Author (AuthorName, Nationality) VALUES ('Hinata Nakashima', 'Japanese');

INSERT INTO Author (AuthorName, Nationality) VALUES ('Jessika Kröger', 'German');

INSERT INTO Author (AuthorName, Nationality) VALUES ('Davin Abraham', 'American');

INSERT INTO Author (AuthorName, Nationality) VALUES ('Nuru Ayodele', 'South African');

DROP TABLE IF EXISTS "Consumer";

CREATE TABLE Consumer

(

    ConsumerID      INTEGER NOT NULL,  
    ConsumerName     VARCHAR(50) NOT NULL,  
    PhoneNumber      VARCHAR(11) NOT NULL,  
    PRIMARY KEY (ConsumerID)

);

INSERT INTO Consumer (ConsumerName, PhoneNumber) VALUES ('Ando, Miki', '09011762222');

INSERT INTO Consumer (ConsumerName, PhoneNumber) VALUES ('Brown, Bryan', '08084191498');

INSERT INTO Consumer (ConsumerName, PhoneNumber) VALUES ('Robertson, Amy', '08084191498');

INSERT INTO Consumer (ConsumerName, PhoneNumber) VALUES ('Smith, Jason', '09617491823');

DROP TABLE IF EXISTS "Novel";

CREATE TABLE Novel

(

    ISBN              VARCHAR(13) NOT NULL,  
    Genre              VARCHAR(50) NOT NULL,  
    Title              VARCHAR(200) NOT NULL,  
    AuthorID          INTEGER NOT NULL,  
    Publisher          VARCHAR(100) NOT NULL,  
    PublishedDate      DATE NULL,  
    PRIMARY KEY (ISBN),

```

FOREIGN KEY (AuthorID) REFERENCES Author(AuthorID)
);
INSERT INTO Novel (ISBN, Genre, Title, AuthorID, Publisher, PublishedDate)
VALUES (9780063473508, 'Mystery', 'The Door Outside', 2, 'Yasdafe', '11/13/1992');
INSERT INTO Novel (ISBN, Genre, Title, AuthorID, Publisher, PublishedDate)
VALUES (9783179227744, 'Fantasy', 'How to Train an Unicorn', 3, 'Giraffe Books',
'01/09/2000');
INSERT INTO Novel (ISBN, Genre, Title, AuthorID, Publisher, PublishedDate)
VALUES (9784214776913, 'Scientific Fiction', '2100', 1, 'Woodgate', '09/09/2003');
INSERT INTO Novel (ISBN, Genre, Title, AuthorID, Publisher, PublishedDate)
VALUES (9787128174967, 'Fantasy', 'The Dwarf', 4, 'Giraffe Books', '07/26/1986');

DROP TABLE IF EXISTS "ConsumerPurchaseNovel";
CREATE TABLE ConsumerPurchaseNovel
(
    ConsumerID INTEGER NOT NULL,
    ISBN        VARCHAR(13) NOT NULL,
    DatePurchased DATE NOT NULL,
    PRIMARY KEY (ConsumerID, ISBN, DatePurchased),
    FOREIGN KEY (ConsumerID) REFERENCES Consumer(ConsumerID),
    FOREIGN KEY (ISBN) REFERENCES Novel(ISBN)
);
INSERT INTO ConsumerPurchaseNovel (ConsumerID, ISBN, DatePurchased)
VALUES (3, 9780063473508, '10/22/2009');
INSERT INTO ConsumerPurchaseNovel (ConsumerID, ISBN, DatePurchased)
VALUES (1, 9787128174967, '04/24/2010');
INSERT INTO ConsumerPurchaseNovel (ConsumerID, ISBN, DatePurchased)
VALUES (2, 9783179227744, '01/05/2011');
INSERT INTO ConsumerPurchaseNovel (ConsumerID, ISBN, DatePurchased)
VALUES (3, 9784214776913, '05/15/2011');
INSERT INTO ConsumerPurchaseNovel (ConsumerID, ISBN, DatePurchased)
VALUES (4, 9787128174967, '03/31/2019');

```