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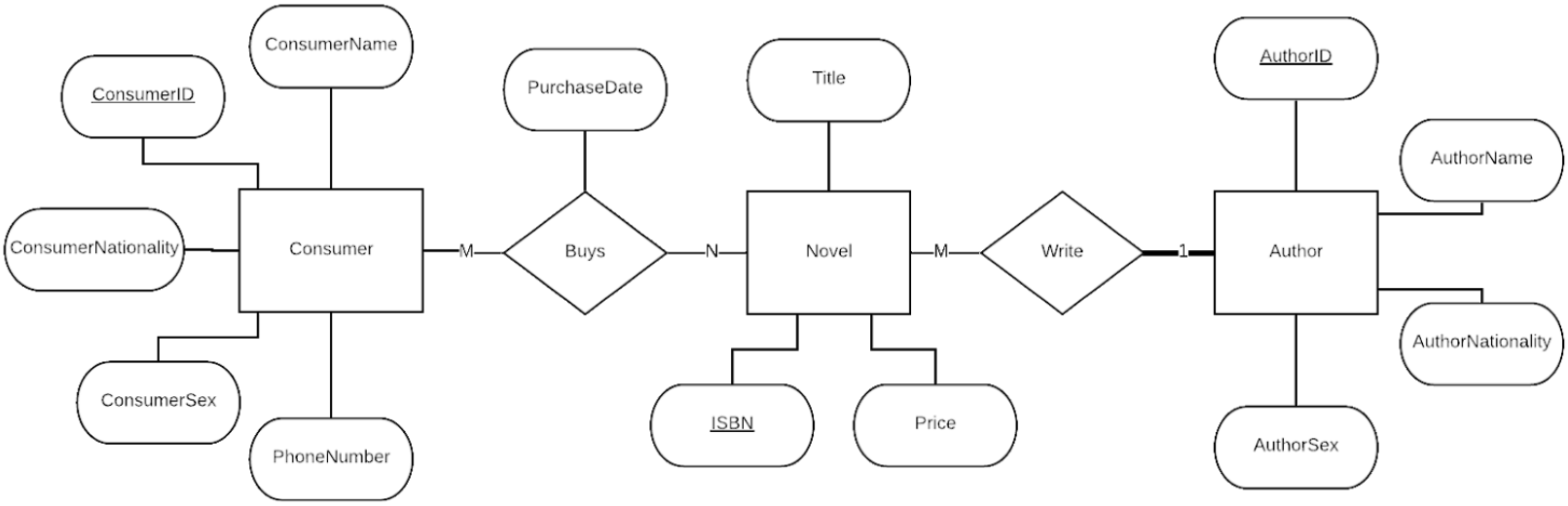
Novel Database

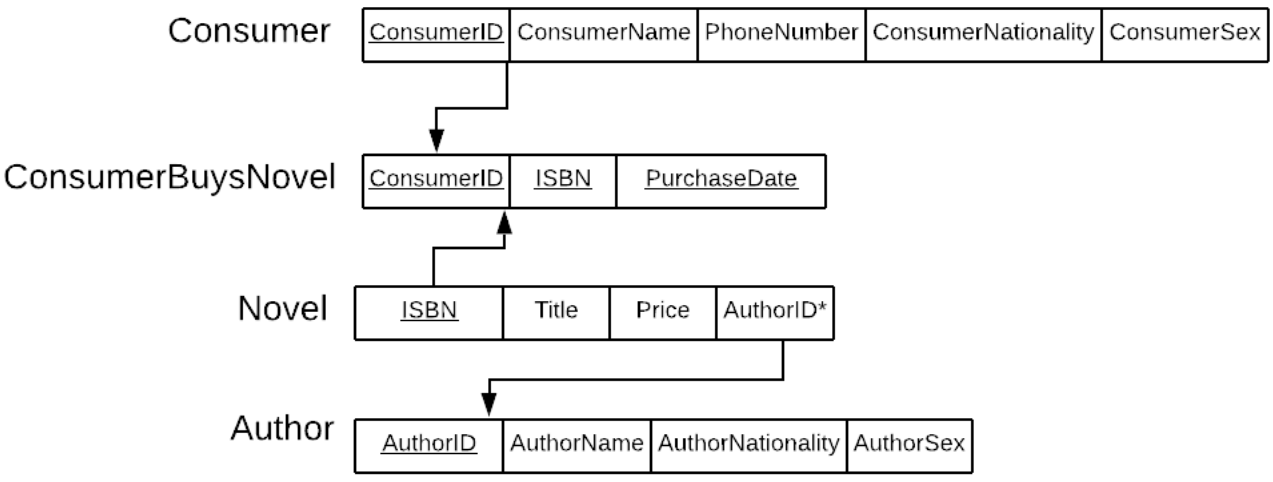
Prompt

Consumers buy novels all the time. Novels are written by one author. Brainstorm at least 3 attributes would be important to store for each entity and make an ERD.

Entity-Relationship Diagram (ERD)



Relational Map



Mini Data Dictionary

Consumer

ConsumerID	INT	NOT NULL
ConsumerName	VarChar(40)	NOT NULL
ConsumerNationality	VarChar(40)	NOT NULL
ConsumerSex	VarChar(1)	NOT NULL
PhoneNumber	INT	

ConsumerBuysNovel

ConsumerID	INT	NOT NULL
ISBN	INT	NOT NULL
PurchaseDate	DATE	NOT NULL

Novel

	INT	NOT NULL
Title	VarChar(40)	NOT NULL
Price	FLOAT	NOT NULL
AuthorID*	INT	NOT NULL

Author

AuthorID	INT	NOT NULL
AuthorName	VarChar(40)	NOT NULL
AuthorNationality	VarChar(40)	NOT NULL
AuthorSex	VarChar(1)	NOT NULL

Data Definition Language (DDL)

```
-- Table Creation (DDL)

DROP TABLE IF EXISTS ConsumerBuysNovel;
DROP TABLE IF EXISTS Consumer;
DROP TABLE IF EXISTS Novel;
DROP TABLE IF EXISTS Author;

CREATE TABLE Consumer
(
        ConsumerID              INTEGER         NOT NULL,
        ConsumerName            VARCHAR(40)     NOT NULL,
        ConsumerNationality     VARCHAR(40)     NOT NULL,
        ConsumerSex             VARCHAR(1)      NOT NULL,
        PhoneNumber             INTEGER,
        PRIMARY KEY (ConsumerID)
);

CREATE TABLE Author
(
        AuthorID                INTEGER         NOT NULL,
        AuthorName              VARCHAR(40)     NOT NULL,
        AuthorNationality       VARCHAR(40)     NOT NULL,
        AuthorSex               VARCHAR(1)      NOT NULL,
        PRIMARY KEY (AuthorID)
);

CREATE TABLE Novel
(
        ISBN                    INTEGER         NOT NULL,
        Title                   VARCHAR(40)     NOT NULL,
        Price                   FLOAT           NOT NULL,
        AuthorID                INTEGER         NOT NULL,
        PRIMARY KEY (ISBN),
        FOREIGN KEY (AuthorID) REFERENCES Author(AuthorID)
);
```

```
CREATE TABLE ConsumerBuysNovel
(
        ConsumerID              INTEGER         NOT NULL,
        ISBN                    INTEGER         NOT NULL,
        PurchaseDate            DATE            NOT NULL,
        PRIMARY KEY (ConsumerID, ISBN, PurchaseDate),
        FOREIGN KEY (ConsumerID) REFERENCES Consumer(ConsumerID),
        FOREIGN KEY (ISBN) REFERENCES Novel(ISBN)
);

-- Table Population (DML)

INSERT INTO Consumer (ConsumerName, ConsumerNationality, ConsumerSex,
PhoneNumber) VALUES ('Henry Smith', 'USA', 'M', '0904439841');
INSERT INTO Consumer (ConsumerName, ConsumerNationality, ConsumerSex,
PhoneNumber) VALUES ('Elizabeth Wilson', 'UK', 'F', '0909481034');
INSERT INTO Consumer (ConsumerName, ConsumerNationality, ConsumerSex,
PhoneNumber) VALUES ('Viet Nguyen', 'Vietnam', 'M', '0904536444');
INSERT INTO Consumer (ConsumerName, ConsumerNationality, ConsumerSex,
PhoneNumber) VALUES ('Josh Brown', 'USA', 'M', null);

INSERT INTO Author (AuthorName, AuthorNationality, AuthorSex) VALUES ('J K Rowling', 'UK',
'F');
INSERT INTO Author (AuthorName, AuthorNationality, AuthorSex) VALUES ('Rick Riordan',
'USA', 'M');
INSERT INTO Author (AuthorName, AuthorNationality, AuthorSex) VALUES ('Chinua Achebe',
'Nigeria', 'M');
INSERT INTO Author (AuthorName, AuthorNationality, AuthorSex) VALUES ('William Golding',
'UK', 'M');

-- J K Rowling
INSERT INTO Novel (ISBN, Title, Price, AuthorID) VALUES (9788700631625, 'Harry Potter and
the Philosopher's Stone', '10.99', '1');
INSERT INTO Novel (ISBN, Title, Price, AuthorID) VALUES (9780605928183, 'Harry Potter and
the Chamber of Secrets', '10.99', '1');

-- Rick Riordan
INSERT INTO Novel (ISBN, Title, Price, AuthorID) VALUES (9780616541418, 'Percy Jackson & the
Olympians: The Lightning Thief', '17.99', '2');
INSERT INTO Novel (ISBN, Title, Price, AuthorID) VALUES (9783844905373, 'The Kane
Chronicles: The Red Pyramid', '17.99', '2');
```

-- Chinua Achebe
INSERT INTO Novel (ISBN, Title, Price, AuthorID) VALUES (9780908300181, 'Things Fall Apart', '5.99', '3');

-- William Golding
INSERT INTO Novel (ISBN, Title, Price, AuthorID) VALUES (9781404690301, 'Lord of the Flies', '5.99', '4');

INSERT INTO ConsumerBuysNovel (ConsumerID, ISBN, PurchaseDate) VALUES (1, 9780616541418, '02/10/2015');
INSERT INTO ConsumerBuysNovel (ConsumerID, ISBN, PurchaseDate) VALUES (1, 9780616541418, '12/01/2016');
INSERT INTO ConsumerBuysNovel (ConsumerID, ISBN, PurchaseDate) VALUES (2, 9788700631625, '17/04/2014');
INSERT INTO ConsumerBuysNovel (ConsumerID, ISBN, PurchaseDate) VALUES (2, 9780605928183, '24/04/2014');
INSERT INTO ConsumerBuysNovel (ConsumerID, ISBN, PurchaseDate) VALUES (3, 9780908300181, '24/11/2019');
INSERT INTO ConsumerBuysNovel (ConsumerID, ISBN, PurchaseDate) VALUES (4, 9780908300181, '24/11/2019');
INSERT INTO ConsumerBuysNovel (ConsumerID, ISBN, PurchaseDate) VALUES (4, 9781404690301, '24/11/2019')