

## DawnRx Community Pharmacy

Entity 1: Customers (Parent Entity)

Primary Key: CUSTOMER\_ID

Attributes & Data Types:

- CUSTOMER\_ID — INT (PK)
- FIRST\_Name — VARCHAR(50)
- LAST\_NAME — VARCHAR(50)
- DOB — DATE
- PHONE — VARCHAR(20)
- EMAIL — VARCHAR(100)
- ADDRESS — VARCHAR(150)

Related Entities & Relationship Classification

- Prescriptions — 1:M  
Business Rule: Each patient may have multiple prescriptions; each prescription is linked to one patient.
- Orders — 1:M  
Business Rule: Each patient may place many orders; each order belongs to exactly one patient.

Entity 2: Medications (Parent Entity)

Primary Key: MEDICATION\_ID

Attributes & Data Types:

- MEDICATION\_ID — INT (PK)
- BRAND\_NAME — VARCHAR(100)
- GENERIC\_NAME — VARCHAR(100)
- STRENGTH — VARCHAR(50)
- FORM — VARCHAR(50)
- PRICE — DECIMAL(10,2)

Related Entities & Relationship Classification

- Prescriptions — 1:M  
Business Rule: One medication can be prescribed many times, but a prescription refers to only one medication.
- OrderItems — 1:M  
Business Rule: A medication may appear in many order items, but each order item only includes one medication.

### Entity 3: Prescriptions (Child Entity)

Primary Key: PRESCRIPTION\_ID

Foreign Keys:

- CUSTOMER\_ID → Customers
- MEDICATION\_ID → Medications

Attributes & Data Types:

- PRESCRIPTION\_ID — INT (PK)
- CUSTOMER\_ID — INT (FK)
- MEDICATION\_ID — INT (FK)
- PRESCRIBER\_NAME — VARCHAR(100)
- DATE\_PRESCRIBED — DATE
- QUANTITY — INT
- REFILLS\_ALLOWED — INT
- REFILLS\_USED — INT
- DIRECTIONS — VARCHAR(255)

Related Entities & Relationship Classification

- Customers — 1:M
- Medications — 1:M

Business Rule: Each prescription must be tied to one patient and one medication.

### Entity 4: Orders (Child Entity)

Primary Key: ORDER\_ID

Foreign Key:

- CUSTOMER\_ID → Customers

Attributes & Data Types:

- ORDER\_ID — INT (PK)
- CUSTOMER\_ID — INT (FK)
- ORDER\_DATE — DATE
- PAYMENT\_METHOD — VARCHAR(20)
- TOTAL\_AMOUNT — DECIMAL(10,2)

Related Entities & Relationship Classification

- OrderItems — 1:M  
Business Rule: An order may contain multiple items; each order item belongs to exactly one order.

Entity 5: OrderItems (Child Entity)

Primary Key: ORDERITEM\_ID

Foreign Keys:

- ORDER\_ID → Orders
- MEDICATION\_ID → Medications

Attributes & Data Types:

- ORDERITEM\_ID — INT (PK)
- ORDER\_ID — INT (FK)
- MEDICATION\_ID — INT (FK)
- QUANTITY — INT
- UNIT\_PRICE — DECIMAL(10,2)

Related Entities & Relationship Classification

- Orders — 1:M  
Business Rule: Each order contains one or more order items.
- Medications — 1:M  
Business Rule: A medication may appear in many order items.

