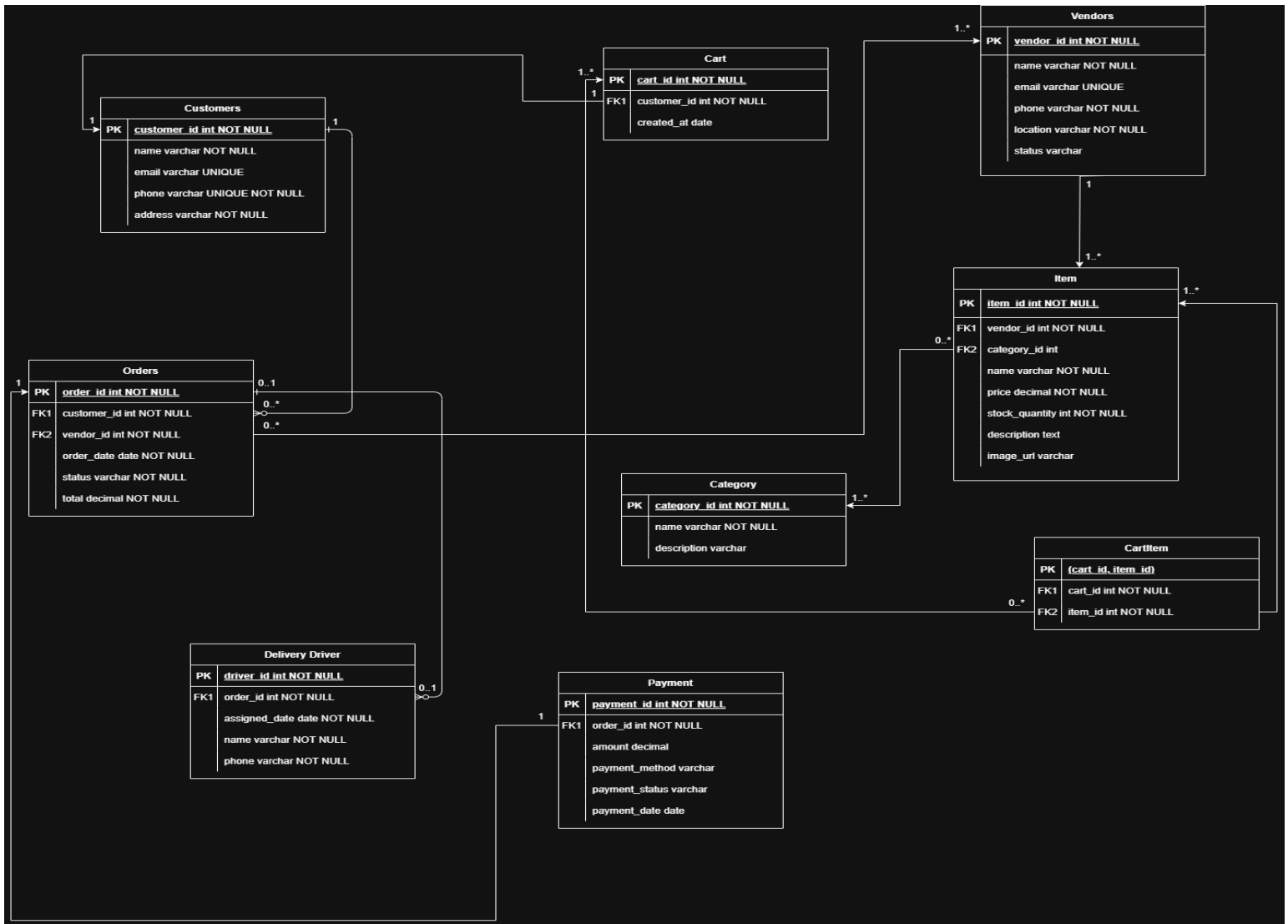# ENTITY RELATIONSHIP DIAGRAM

Entities and their Descriptions:

1. Customers

- Stores customer data (name, email, phone, address).
- Each customer can have **one or more carts** and **multiple orders.**
- customer_id is the **Primary Key.**

2. Vendors

- Represents businesses or sellers.

- Holds vendor contact info and location.
- Vendors are linked to multiple **items** and receive **orders.**
- vendor_id is the **Primary Key.**

3. Cart

- Tracks shopping carts per customer.
- Each cart belongs to **one customer**, but customers can have multiple carts (historically).
- Related to CartItem to store which items are in each cart.

4. Item

- Represents the actual products sold.
- Each item is tied to a **vendor** and a **category.**
- Includes price, stock, description, and image.
- item_id is the **Primary Key.**

5. CartItem

- A bridge (junction) table for **Cart** and **Item** (many-to-many relationship).
- Stores which items are in which cart.

6. Category

- Categorizes items for filtering or browsing.
- Each category can have multiple items.
- category_id is the **Primary Key.**

7. Orders

- Contains placed orders.
- Linked to **customers, vendors,** and optionally **delivery drivers.**
- Includes order status, total price, and order date.

8. Delivery Driver

- Each driver is assigned to an order (one-to-one or optional).
- Includes name, phone, and assigned date.

9. Payment

- Each order has one payment record.
- Includes amount, method, status, and date of payment.