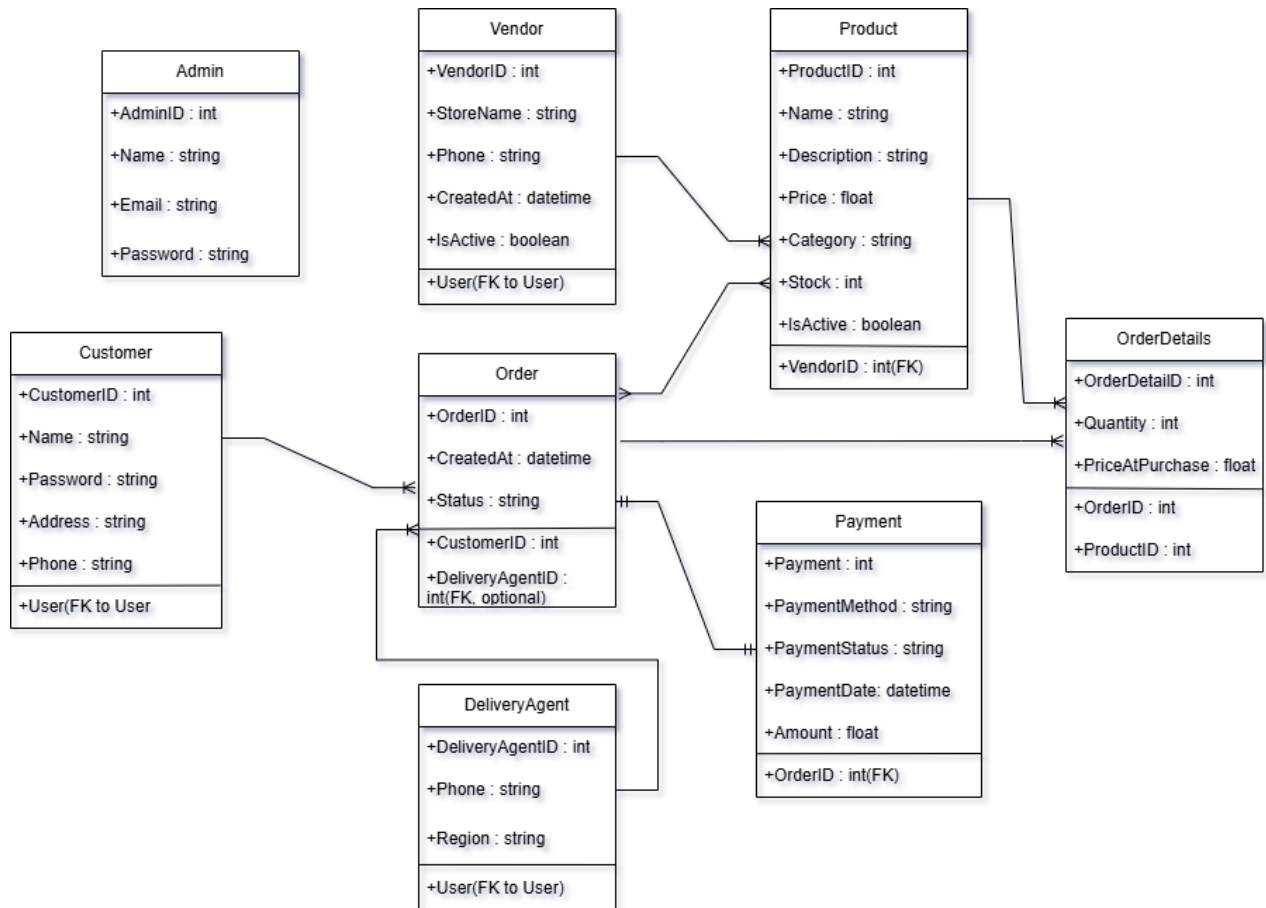


Entity-Relationship Diagram – B00150982



1. User (Django Base Model)

- Shared by all roles (Customer, Vendor, DeliveryAgent, Admin)
- Manages authentication and basic user info (username, password, email)

2. Customer

- **One-to-One** with User
- Contains customer-specific info like address and phone
- **Has Many Orders**
- **Use Case Supported:** Register/login, browse products, add to cart, place orders, track orders

3. Vendor

- **One-to-One** with User
- Stores store name and phone number
- **Has Many Products**
- **Use Case Supported:** Register/login, manage inventory, view orders of their products

4. Product

- Created and owned by a **Vendor**
- Contains details like name, category, description, stock, availability
- **Referenced in OrderDetail** to track products in each order
- **Use Case Supported:** Vendors manage inventory; customers browse/search products and add to cart

5. Order

- Placed by a **Customer**
- Optionally assigned to a **Delivery Agent**
- **Has Many OrderDetails**
- **Has One Payment**
- Tracks order status (Pending, Shipped, Delivered, etc.)
- **Use Case Supported:** Place order, track status, vendor fulfillment, delivery management

6. OrderDetail

- Join table between **Order** and **Product**
- Captures quantity, price at time of purchase
- Supports a **Many-to-Many** relationship between orders and products
- **Use Case Supported:** Line-by-line tracking of what's in each order

7. Payment

- Each **Order has one Payment**
- Records payment method, status, and timestamp
- **Use Case Supported:** Customers complete payment at checkout

8. DeliveryAgent

- **One-to-One** with User
- Assigned to multiple orders via a foreign key in Order
- Contains info like phone and region
- **Use Case Supported:** Delivery agents view assigned orders and update delivery status