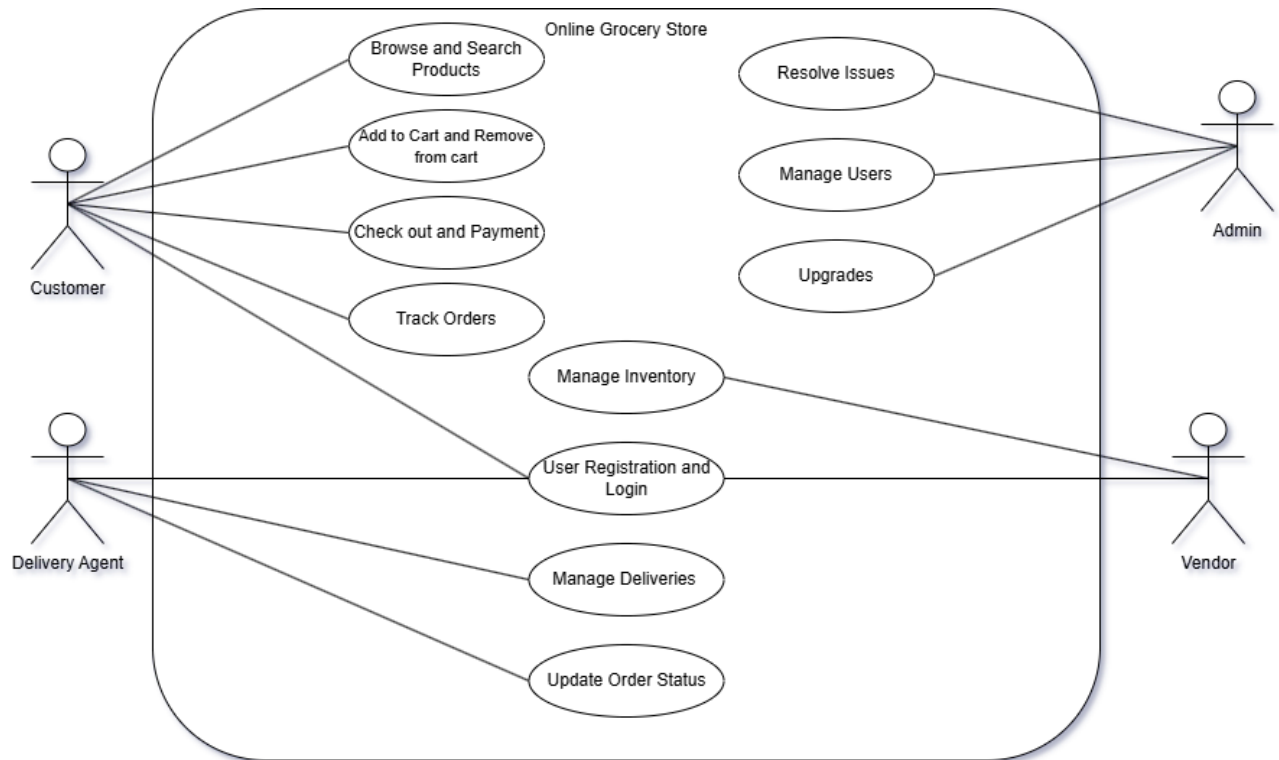# Use Case Diagram – B00150982

Must-Have Use Cases

1. User Registration & Login

- Actors: Customer, Vendor, DeliveryAgent
- Description: Users register or log in using the authentication system. Vendors provide store details; delivery agents provide region and contact.
- Relation: All users -> Register/Login

2. Browse & Search Products

- Actor: Customer
- Description: Customers can view products listed by vendors, filter by category, and search by name.
- Relation: Customer -> Browse/Search

3. Add to Cart & Checkout

- Actor: Customer

- Description: Customers select products, add them to a cart, and proceed to checkout. This triggers an order and payment record.

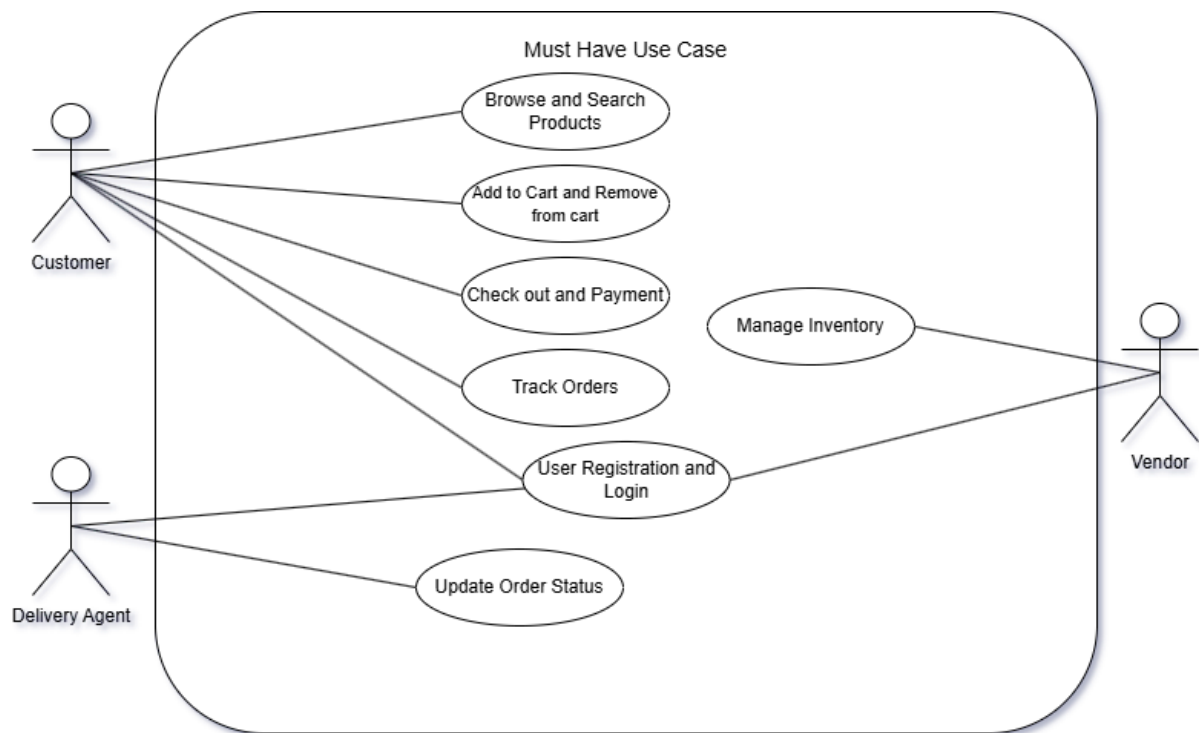- Relation: Customer -> Add to Cart & Checkout

4. Track Orders

- Actor: Customer

- Description: After placing an order, customers can track the status (Pending, Shipped, Delivered).

- Relation: Customer -> Track Orders

5. Manage Inventory

- Actor: Vendor

- Description: Vendors can create, update, and remove product listings, and update stock levels.

- Relation: Vendor -> Manage Inventory

6. Update Delivery Status

- Actor: Delivery Agent

- Description: After receiving an assignment, agents can mark orders as "In Transit" or "Delivered."

- Relation: DeliveryAgent -> Update Delivery Status

Grouped Use Cases (Administrative & Supporting)

1. Manage Users

- Actor: Admin
- Description: Admins can activate/deactivate accounts and monitor user activity.
- Relation: Admin -> Manage Users

2. Resolve Issues

- Actor: Admin
- Description: Handles complaints, flags, and reported issues from vendors or customers.
- Relation: Admin -> Resolve Issues

3. Assign Delivery Agents

- Actor: Admin
- Description: Admins assign orders to delivery agents, or it's done automatically based on region.
- Relation: Admin -> Assign Delivery Agent

4. View Order History

- Actor: Customer

- Description: Customers can view a list of their past orders.

- Relation: Customer -> View Order History

5. View Assigned Orders

- Actor: Delivery Agent

- Description: Agents can see all orders they're responsible for delivering.

- Relation: DeliveryAgent -> View Assigned Orders

6. Payment Processing

- System Use Case

- Description: Automatically triggered during checkout. Records amount, payment method, and updates order status.

- Relation: Tied to Order, Customer, Vendor