

FUNCTIONAL REQUIREMENTS

1. Order Creation and Management

- The system should allow staff to create customer orders by selecting products, quantities, and applying discounts if applicable.
- Orders should support both in-store purchases and delivery orders.

2. Billing and Invoice Generation

- The system should automatically generate bills with item-wise prices, taxes, and final payable amount.
- After successful payment, a finalized invoice and receipt should be generated.

3. Payment Processing

- The system should support multiple payment options such as cash, UPI, cards and wallets.
- It should record payment status (successful, failed, pending) for each order.

4. Inventory Monitoring and Updates

- The system should maintain real-time stock levels for each inventory item.
- Stock should automatically reduce after a sale and increase after goods receipt.

5. Reorder and Supplier Management

- The system should notify when stock falls below the reorder level.
- It should support creation and tracking of purchase orders to suppliers.

6. Delivery Order Processing

- The system should allow marking orders for home delivery.
- Delivery status should be updated from dispatch to completion.

NON-FUNCTIONAL REQUIREMENTS

1. Usability

- The system should be simple and easy to use by shop staff with minimal technical training.
- Common operations like billing and stock updates should require minimal steps.

2. Performance

- Order creation, billing, and payment confirmation should be processed with minimal delay, especially during peak hours.
- Inventory updates should reflect immediately after a transaction.

3. Reliability

- The system should not lose order, payment, or inventory data in case of failures.
- Transactions should be consistent and recoverable.

4. Scalability

- The system should handle increasing product range, customers, and transactions as the business grows.
- It should support future expansion to multiple branches or warehouses.

5. Security

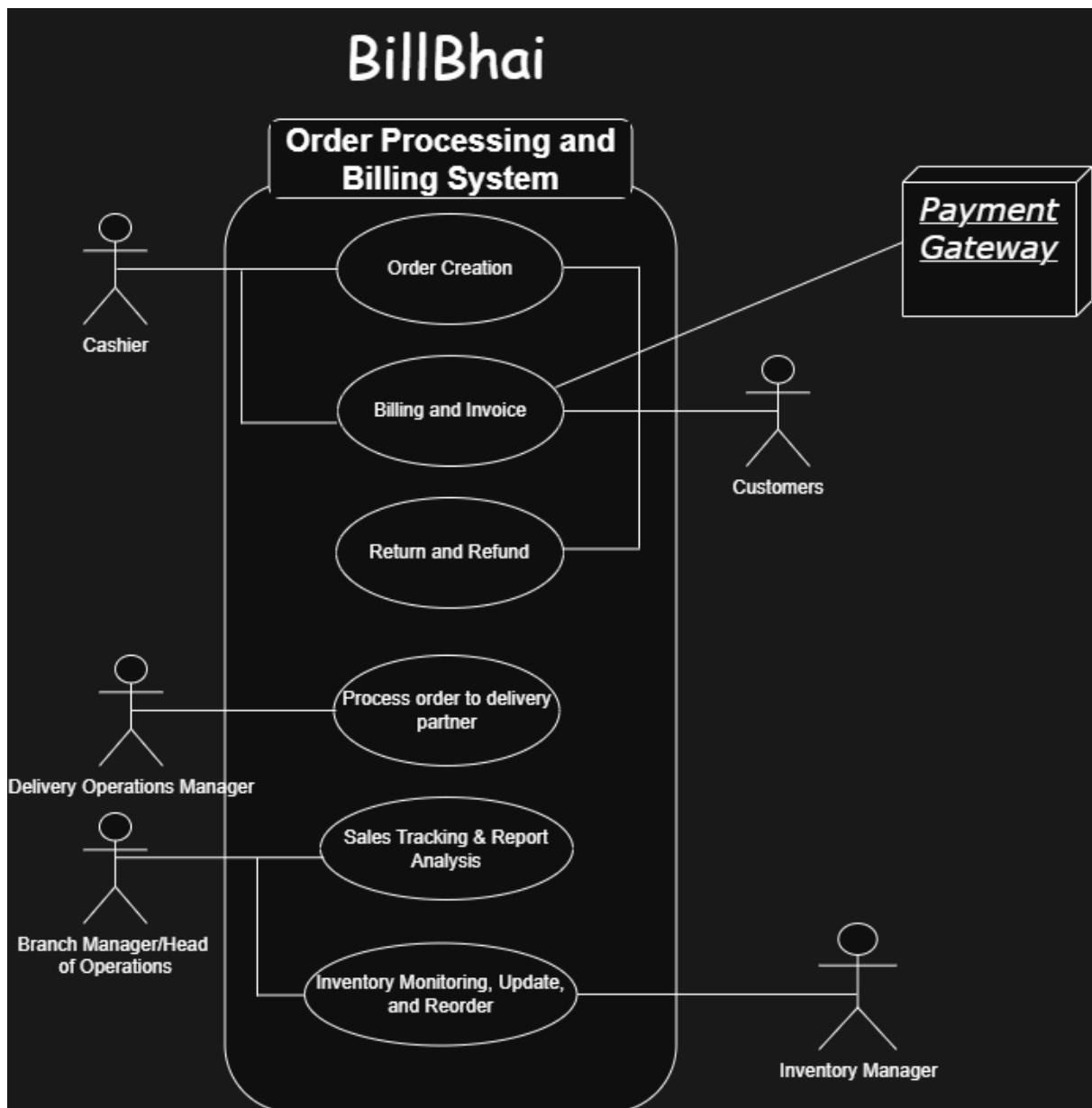
- Sensitive data such as payment details and invoices should be protected from unauthorized access.
- Only authorized users should be allowed to perform critical operations like stock adjustment.

6. Auditability and Traceability

- The system should maintain logs for key actions such as stock adjustments, order cancellations, and refunds.
- This supports accountability and issue resolution.

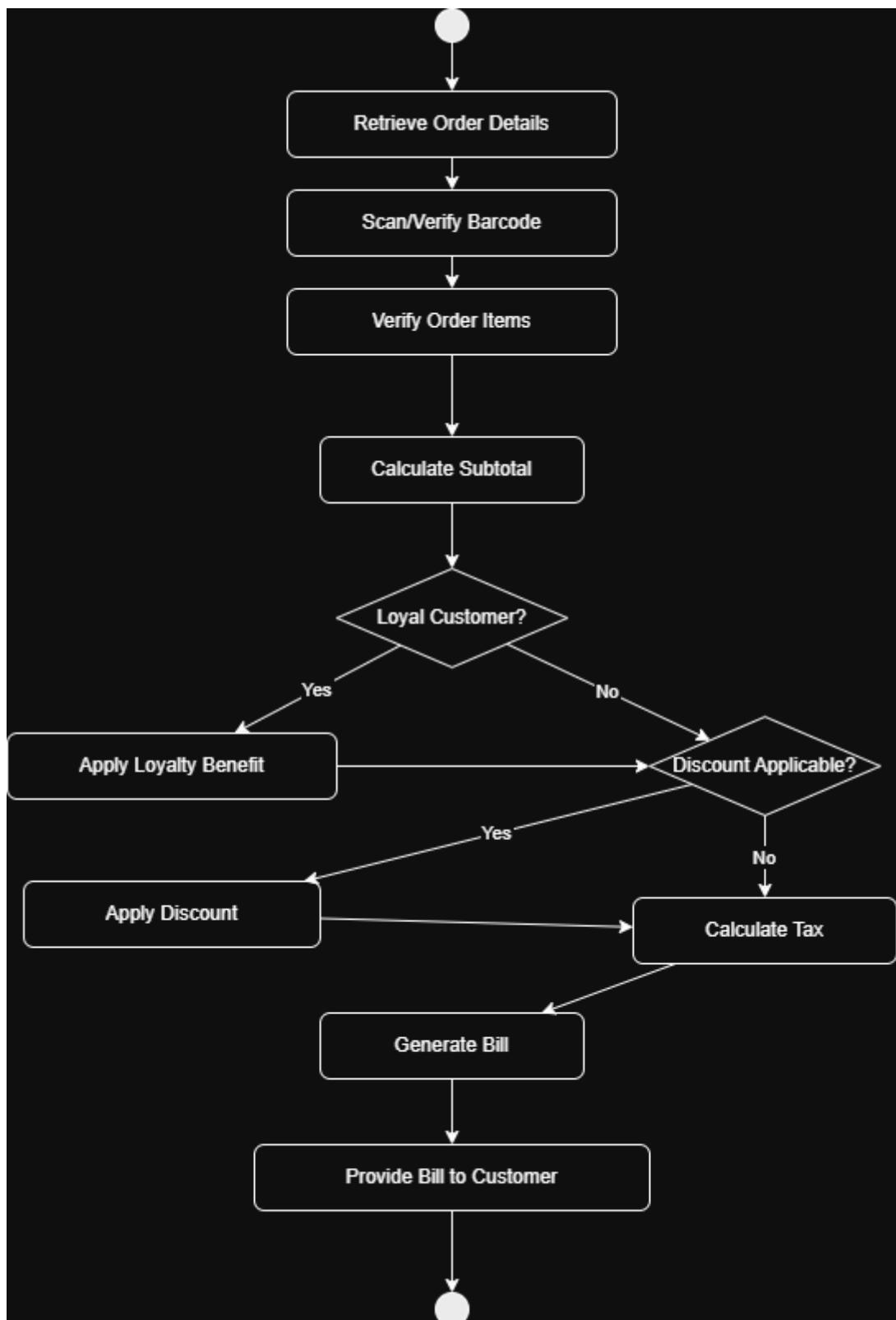
UML Diagrams

1. Use Case Diagram

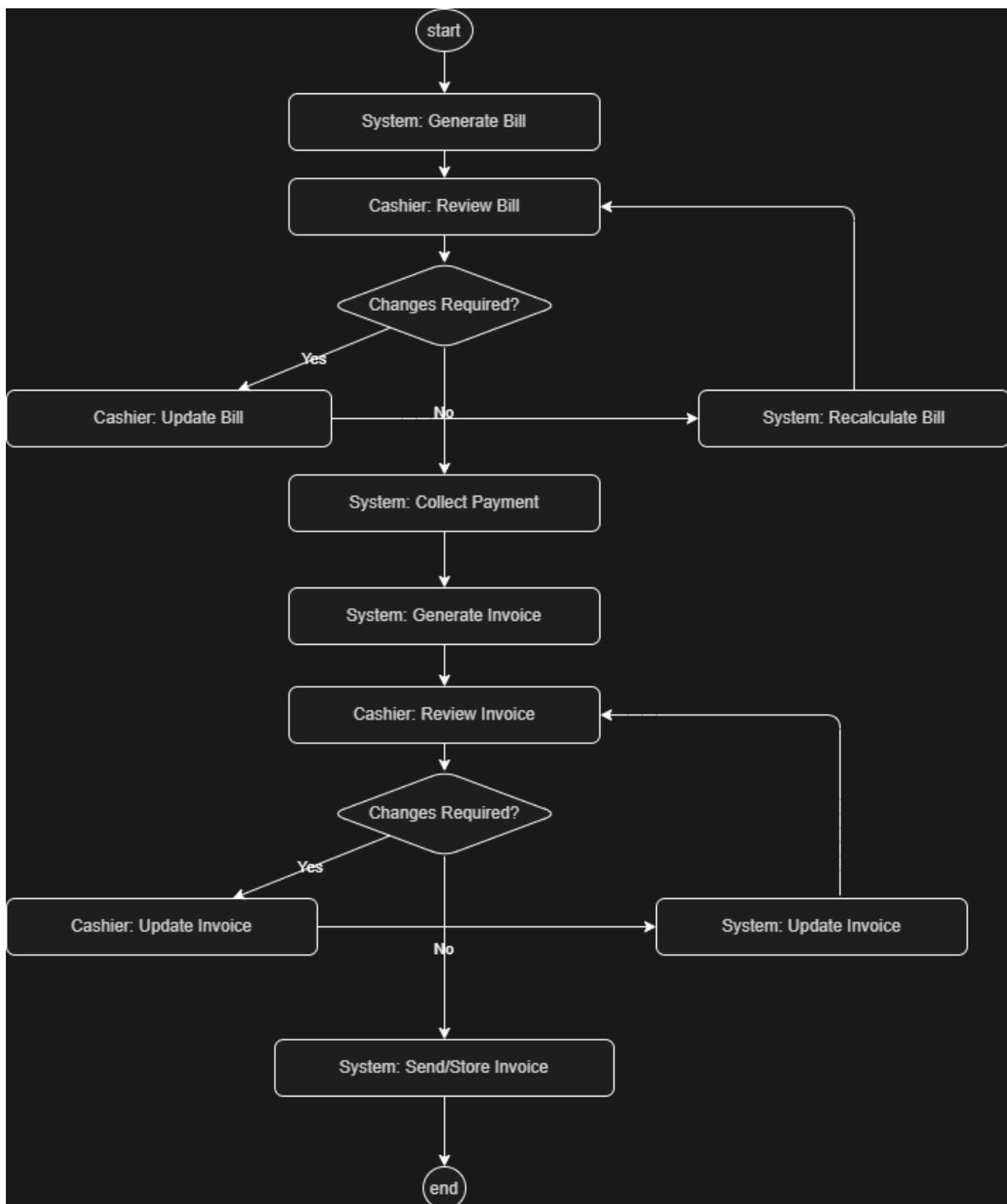


2. Activity Diagrams

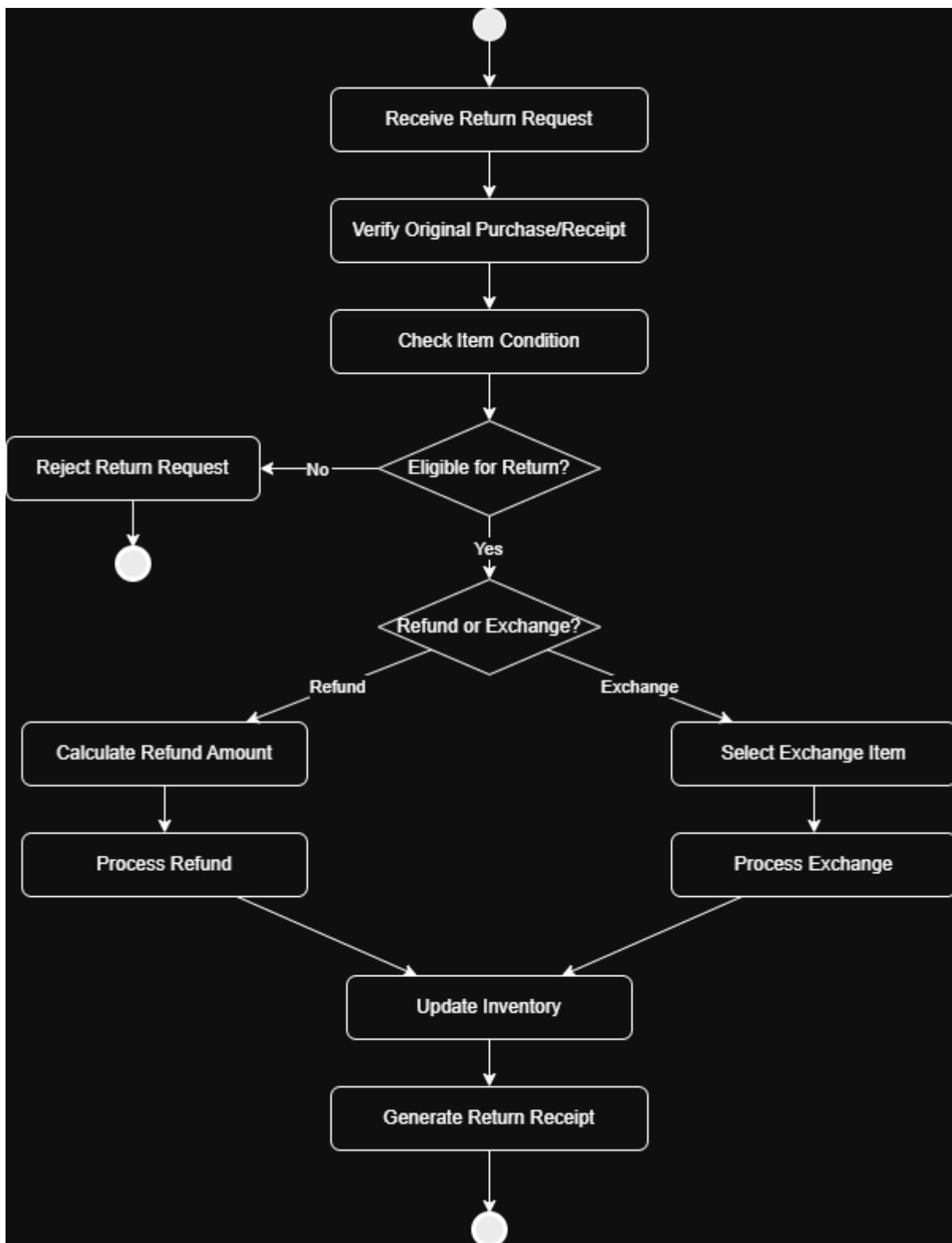
i. Order Creation



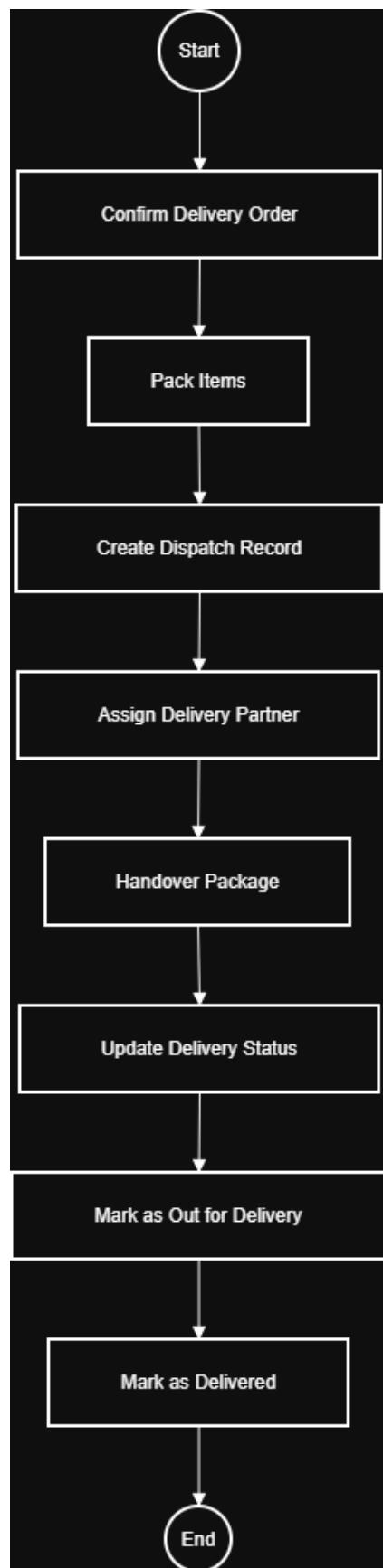
ii. Billing and Invoice



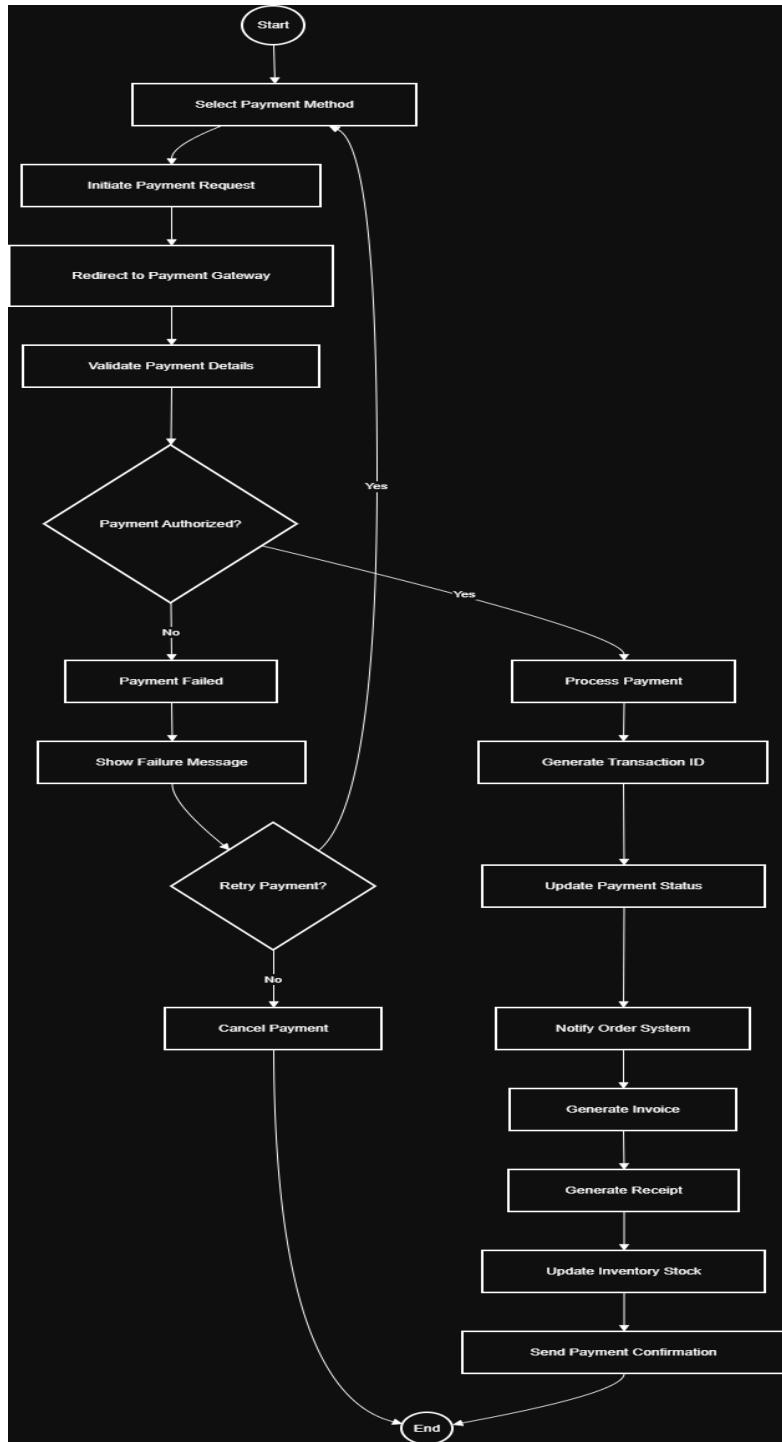
iii. Return Item Processing



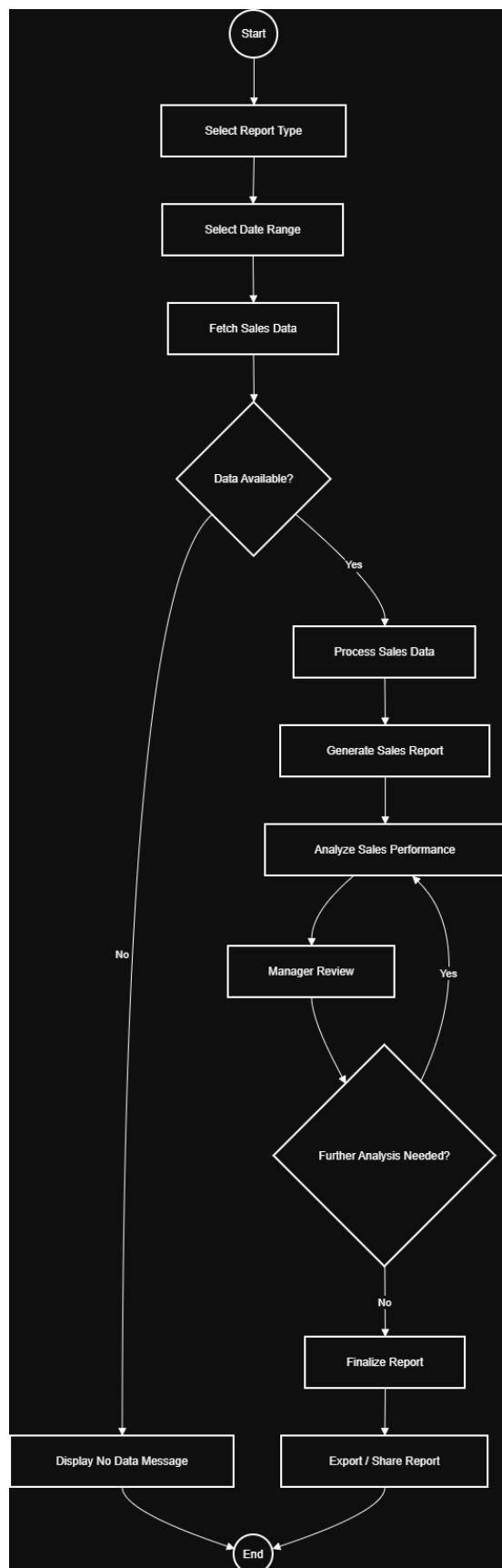
iv. Delivery Partner



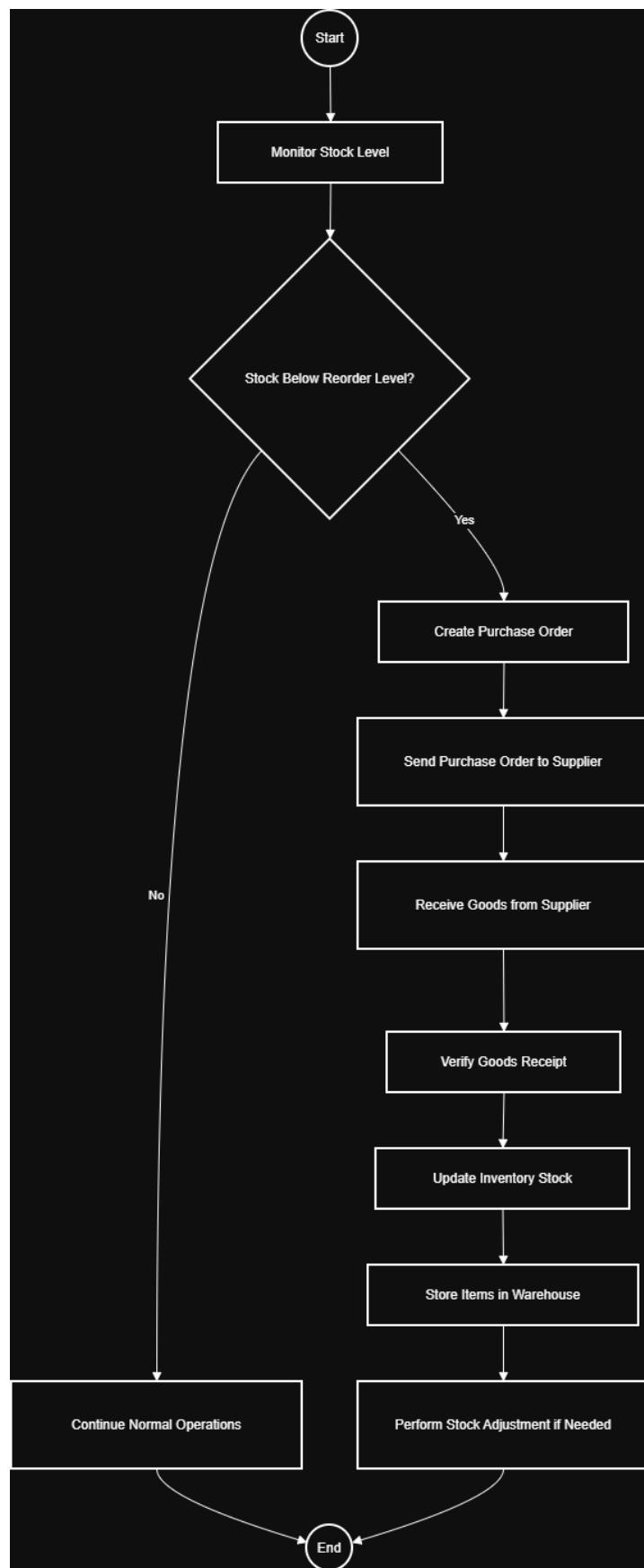
v. Payment Gateway



vi. Sales T & Report A



vii. Inventory Monitoring



3. Sequence Diagram