SRS – Sequence Diagrams

1. Order Placement Sequence

```
Customer -> Cart : Add items
Customer -> Checkout : Start checkout
Checkout -> Pricing : Calculate totals
Checkout -> Payment : Initiate payment
Payment -> Gateway : Process payment
Gateway -> Payment : Payment confirmation
Payment -> Order : Mark order as paid
Order -> Notification : Send confirmation
```

2. Payment Failure Sequence

```
Customer -> Checkout : Confirm order
Checkout -> Payment : Initiate payment
Payment -> Gateway : Process payment
Gateway -> Payment : Failure response
Payment -> Order : Keep order pending
Order -> Notification : Send failure message
```

3. Shipping Sequence

```
Store Owner -> Order : Prepare shipment
Order -> Shipping : Create shipment
Shipping -> Carrier : Send shipment data
Carrier -> Shipping : Tracking number
Shipping -> Notification : Send tracking info
```