

## 1. Payment Processing Test Cases

### Test Case 1: Process Cash on Delivery Payment

Test ID: PP-01

Description: Verify cash on delivery payment processing


Pre-condition: Order has been placed and marked for cash on delivery

#### Test Steps:

1. Select an order with cash on delivery payment method
2. Mark the order as "Delivered" in the system
3. Confirm cash payment received from customer
4. Verify system generates an automatic bill
5. Check bill is saved in system records
6. Confirm bill is sent to customer's profile

#### Expected Result:

- Bill is generated automatically upon delivery confirmation
- Bill is saved in system records
- Bill is visible in customer's profile
- Order status updated to "Payment Completed"

Test ID	Test inputs	Expected output	Actual output	Result (Pass / Fail)	Description
PP-01	Order #1005 Amount: \$250 Cash Received: 	"Bill #INV1005 Generated" Status: Complete	"Bill #INV1005 Generated" Status: Completed	Pass	COD payment verification

## Test Case 2: Process Credit/Debit Card Payment

Test ID:PP-02

Description: Verify credit/debit card payment processing

Pre-condition:Order has been placed with credit/debit card payment method

Test Steps:

1. Initiate payment process for the order
2. Enter valid card details (card number, expiry date, CVV)
3. Submit payment
4. Verify payment gateway response
5. Check system generates automatic bill
6. Confirm bill is saved and sent to customer

Expected Result:

- Payment is processed successfully through payment gateway
- Bill is generated and saved in system
- Bill is visible in customer's profile
- Order status updated to "Paid"

Test ID	Test inputs	Expected output	Actual output	Result (Pass / Fail)	Description
PP-02	Card: 4111 1111 1111 1111 Exp: 12/2025 CVV: 123	"Payment Successful" Invoice # generated	"Payment Successful" Invoice #10025	Pass	Confirm credit card processing

### Test Case 3: Payment Failure Handling

Test ID: PP-04

Description: Verify system behavior when payment fails

Pre-condition: Order has been placed with online payment method

Test Steps:

1. Initiate payment process
2. Enter invalid payment details (expired card, insufficient funds)
3. Submit payment
4. Verify payment gateway response
5. Check system behavior

Expected Result:

- System displays appropriate error message
- Order status remains "Pending Payment"
- No bill is generated
- Customer receives payment failure notification

Test ID	Test inputs	Expected output	Actual output	Result (Pass / Fail)	Description
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PP-03	Card: 4000 0000 0000 0069 Exp: 12/2020 CVV: 123	"Card expired" error	"Card expired. Please use another card."	Pass	Validate expired card rejection
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## 2. Payment History Management Test Cases

### Test Case 5: View Payment History

Test ID: PH-01

Description: Verify users can view their payment history

Pre-condition: User has completed at least one payment

Test Steps:

1. Log in as customer
2. Navigate to payment history section
3. View list of past payments
4. Select a payment to view details

Expected Result:

- All completed payments are visible
- Payment details are accurate (date, amount, method)
- Bills are accessible from payment history

Test ID	Test inputs	Expected output	Actual output	Result (Pass / Fail)	Description
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PP-05	Click "Payment History"	Lists 5 most recent payments Details: Date/Amount/Method	Shows 5 payments Details visible	Pass	Payment history accessibility
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### Test Case 7: Export Payment History

Test ID: PH-03

Description: Verify payment history export functionality

Pre-condition: User has multiple payments in history

Test Steps:

1. Log in as customer
2. Navigate to payment history
3. Select export option (PDF/CSV)
4. Download the file
5. Verify file contents

Expected Result:

- File is downloaded successfully
- File contains all payment history data
- Format matches selected export type

Test ID	Test inputs	Expected output	Actual output	Result (Pass / Fail)	Description
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PP-05	Format: PDF Date Range: Last 3 months	PDF file downloads Contains 5 transactions Headers: Date/Amount/ Invoice#	"payment_history_20241015.pdf" 5 transactions listed	Pass	Validate PDF export integrity
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### 3. Order Cancellation & Refund Test Cases

#### Test Case 8: Cancel Order Before Payment

Test ID: OC-01

Description: Verify order cancellation before payment

Pre-condition: Order has been placed but not paid

Test Steps:

1. Log in as customer
2. Navigate to orders
3. Select unpaid order
4. Initiate cancellation
5. Confirm cancellation

Expected Result:

- Order is cancelled successfully
- No payment processing occurs
- Customer receives cancellation confirmation

Test ID	Test inputs	Expected output	Actual output	Result (Pass / Fail)	Description
PP-05	Order #ORD-1005 Action: Cancel	Status changes to "Cancelled" No payment attempted Confirmation email sent	Status: Cancelled No payment record Email received	Pass	Verify customer self-cancellation

#### Test Case 9: Cancel Order After Payment

Test ID: OC-02

Description: Verify order cancellation after payment

Pre-condition: Order has been paid but not shipped

Test Steps:

1. Log in as customer
2. Navigate to orders
3. Select paid order
4. Initiate cancellation
5. Confirm cancellation
6. Verify refund process

Expected Result:

- Order is cancelled successfully
- Refund is initiated through original payment method
- Customer receives cancellation and refund confirmation

- Refund appears in payment history

Test ID	Test inputs	Expected output	Actual output	Result (Pass / Fail)	Description
PP-05	Order #ORD-2008 Amount: \$350 Reason: Changed Mind	Status: "Refund Pending" Email/SMS confirmation Refund ID in history	Status updated Refund #RF-5421 created SMS received	Pass	End-to-end paid order cancellation

#### Test Case 10: Partial Refund Processing

Test ID:OC-03

Description: Verify partial refund functionality

Pre-condition: Order has been paid and partially fulfilled

Test Steps:

1. Log in as admin
2. Navigate to order management
3. Select order for partial refund
4. Enter refund amount
5. Process refund
6. Verify results

Expected Result:

- Partial refund is processed successfully
- Correct amount is refunded
- System updates order status accordingly
- Both admin and customer can see refund details



Test ID	Test inputs	Expected output	Actual output	Result (Pass / Fail)	Description
PP-05	Order #ORD-3009 Refund Amount: \$200 Reason: Partial fulfillment 2FA: Approved	Status: "Partially Refunded"  200deducted from original 1200deducted from original 1500 Refund #RF-6789 generated Customer notification sent	tatus updated Refund #RF-6789 visible Email received by customer	Pass	Verify partial refund accuracy

#### 4. Sales Report Generation Test Cases

Test Case 11: Generate Revenue Report

Test ID: SR-01

Description: Verify revenue report generation

Pre-condition: Multiple completed payments exist in system

Test Steps:

1. Log in as admin/financial manager
2. Navigate to reports section
3. Select revenue report
4. Set date range
5. Generate report
6. Verify contents

Expected Result:

- Report is generated successfully
- Contains accurate revenue totals
- Breakdown by payment method is correct
- Can be exported in multiple formats

Test ID	Test inputs	Expected output	Actual output	Result (Pass / Fail)	Description
PP-05	Date Range: Oct 1-31, 2024 Export Formats: PDF, CSV	Report shows \$15,200 total revenue PDF/CSV files download successfully Payment method breakdown:	\$15,200 total verified Files downloaded Breakdown matches records	Pass	Revenue report accuracy validation

		Card(60%), Bank(30%), COD(10%)			
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Test Case 12: Generate Profit & Loss Report

Test ID: SR-02

Description: Verify profit & loss report generation

Pre-condition: System has both income and expense records

Test Steps:

1. Log in as admin/financial manager
2. Navigate to reports section
3. Select profit & loss report
4. Set date range
5. Generate report
6. Verify calculations

Expected Result:

- Report shows accurate income and expenses
- Profit/loss calculations are correct
- Breakdown by category is available
- Can be exported in multiple formats

Test ID	Test inputs	Expected output	Actual output	Result (Pass / Fail)	Description
PP-05	Date Range: Oct 2024 Export	Shows: Income: 18,500 Expenses:18,	XLSX file generated All values match	Pass	P&L report mathematical accuracy

	Format: XLSX	500 Exp enses:12,30 0 Profit: \$6,200 Category breakdown visible	ledger Formulas calculate correctly		
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## Work Progression & Technical Specifications

### Sales and Payment Management (Your Name or ID Here)

The Sales and Payment Management module plays a critical role in handling financial transactions and tracking sales activities within the system. This component ensures efficient order processing, secure payment handling, and real-time transaction monitoring.

The system facilitates seamless sales tracking, order processing, payment verification, and financial reporting to streamline business operations. Under the supervision of the Sales & Finance Manager, this component guarantees real-time updates on order placements, payment confirmations, and revenue analysis.

A well-maintained database ensures the secure storage of all transaction details, including customer purchases, payment modes, invoice details, and order fulfillment status. The module integrates with automated payment gateways to validate transactions and reduce errors.

From order placement to final payment confirmation, the system continuously monitors every financial transaction. It also integrates fraud detection mechanisms to prevent unauthorized transactions and ensure data security. Detailed financial reports help managers analyze sales trends, customer purchasing behavior, and revenue growth, enabling data-driven decision-making.

## Work Progression

## Flowchart

(I'll generate a flowchart next to visualize the process.)

## Algorithm

Step 1: Start

Step 2: User accesses the sales and payment management system

Step 3: User logs in

If login fails → Display "Incorrect credentials" → Return to Step 3

If login succeeds → Proceed to Step 4

Step 4: User selects an action:

If "Add New Sale" is selected → Proceed to Step 5

If "Process Payment" is selected → Proceed to Step 7

Step 5: Enter sales details

If any required fields are empty → Display error message → Return to Step 5

Else → Proceed to Step 6

Step 6: Save sales data

If successful → Display "Sale recorded successfully" → Return to Dashboard

If failed → Display error message → Return to Step 5

Step 7: Enter payment details

If payment fails → Display "Transaction failed, please retry" → Return to Step 7

Else → Proceed to Step 8

Step 8: Payment confirmation

If successful → Display "Payment processed successfully" → Generate receipt

If failed → Display error message → Return to Step 7

Step 9: Logout (if necessary)

End

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BEGIN

Step 1: Start the system

Step 2: User logs in

IF login fails THEN

DISPLAY "Incorrect credentials"

RETURN to Step 2

ELSE

IF "Add New Sale" selected THEN

GO TO Step 4

ELSE IF "Process Payment" selected THEN

GO TO Step 6

END IF

END IF

Step 4: Enter sales details

IF missing fields THEN

```
    DISPLAY "Error: Required fields missing"  
    RETURN to Step 4  
ELSE  
    GO TO Step 5  
END IF
```

Step 5: Save sales data

```
IF success THEN  
    DISPLAY "Sale recorded successfully"  
    RETURN to dashboard  
ELSE  
    DISPLAY "Error: Failed to record sale"  
    RETURN to Step 4  
END IF
```

Step 6: Enter payment details

```
IF payment fails THEN  
    DISPLAY "Transaction failed, please retry"  
    RETURN to Step 6  
ELSE  
    GO TO Step 7  
END IF
```

Step 7: Payment confirmation

```
IF success THEN  
    DISPLAY "Payment processed successfully"  
    GENERATE receipt  
ELSE  
    DISPLAY "Error: Payment failure"  
    RETURN to Step 6  
END IF
```

Step 8: Logout if necessary

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END
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