

Task 1 Identify Use-Cases:

1. Identify Use-Cases:

a) Use cases:

Delivery Note

Actor: system, admin, customer.

Description: The system generates a delivery note for each transaction, summarizing the delivery details and items delivered.

Preconditions: A delivery order has been created and confirmed. Delivery details and items have been entered into the system.

Steps:

1. Retrieve recipient details (name, contact, address).
2. Retrieve delivery information (order number, reference number, delivery date, delivery method).
3. Retrieve the summary of items delivered (item code, description, quantity, unit price, total price).
4. Calculate subtotal, taxes, and grand total.
5. The system allows printing or emailing the delivery note.

Postconditions: A delivery note is generated and made available to the recipient and can be printed or emailed.

If one data is missing, then the system will prompt the user to complete it first.

Delivery Information

Actor: Admin, Delivery Personnel

Description: The system records and updates delivery details.

Preconditions: A delivery order has been created.

Steps:

1. The admin assigns delivery personnel.
2. The system records the delivery date and method.
3. The system updates the package weight and dimensions.
4. The delivery personnel updates the status.
5. The system saves all delivery information.

Postcondition: Delivery information is updated in the system.

If the delivery method is unavailable, suggest alternative methods.

Summary of items delivered

Actor: system.

Description: it creates an itemized summary of all items included in the delivery, including their quantities, unit prices, and total prices.

Preconditions: Items have been added to the delivery order.

Steps:

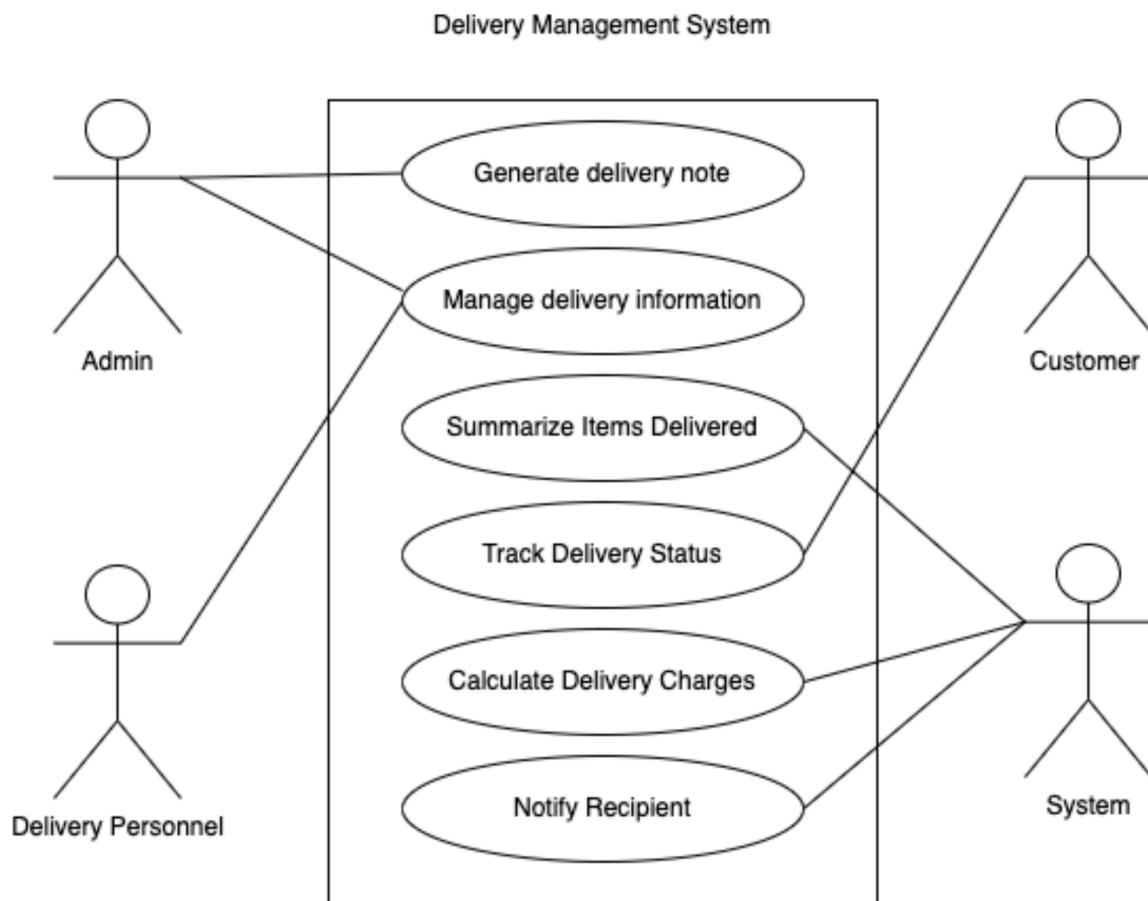
1. Retrieve the list of items included in the delivery order.
2. For each item it displays Item code and description, quantity, unit price and total price.
3. Calculate the subtotal by summing up the total prices of all items.

4. Apply any applicable taxes or fees to calculate the final total.
5. Display the itemized summary in a table format.
6. Save the summary in the system for inclusion in the delivery note.

Postconditions: A summary of items delivered is generated and displayed in the delivery note.

If an item's quantity or price is missing, prompt the user to provide the missing information.

b) UML use case diagram:



Field	Description
Use Case Name	Generate Delivery Note.

Actors	Admin, Customer.
Description	The system generates a delivery note summarizing delivery details and items.
Preconditions	A delivery order has been created and confirmed.
Steps	<ol style="list-style-type: none"> 1. Admin or customer selects the order. 2. System retrieves delivery details. 3. System generates the delivery note.
Postconditions	A delivery note is generated and shared with the recipient.

Field	Description
Use Case Name	Manage Delivery Information.
Actors	Admin, Delivery Personnel.
Description	The system allows updating and managing delivery details.
Preconditions	A delivery order exists in the system.
Steps	<ol style="list-style-type: none"> 1. Admin or delivery personnel access the order. 2. Updates delivery details. 3. System saves changes.
Postconditions	Delivery information is updated in the system.

Field	Description
Use Case Name	Summarize Items Delivered.
Actors	System.
Description	The system generates a summary of items

	delivered for each order.
Preconditions	Items have been added to the delivery order.
Steps	<ol style="list-style-type: none"> 1. System retrieves the list of items. 2. System calculates the total price for each item. 3. System compiles the summary.
Postconditions	A summary of items delivered is generated and included in the delivery note.

Field	Description
Use Case Name	Track Delivery Status.
Actors	Customer, Admin.
Description	The system allows customers and admins to track the status of a delivery.
Preconditions	A delivery order has been created.
Steps	<ol style="list-style-type: none"> 1. Customer or admin enters the order number. 2. System retrieves the delivery status. 3. System displays the status.
Postconditions	The delivery status is displayed to the user.

Field	Description
Use Case Name	Calculate Delivery Charges.
Actors	System.
Description	The system calculates delivery charges based on package weight, dimensions, and delivery method.

Preconditions	Package details and delivery method are provided.
Steps	<ol style="list-style-type: none"> 1. System retrieves package details and delivery method. 2. System calculates the base delivery charge. 3. System adds taxes and fees. 4. System displays the total delivery charge.
Postconditions	The total delivery charge is calculated and displayed.

Field	Description
Use Case Name	Notify Recipient.
Actors	System.
Description	The system sends notifications to the recipient about the delivery status.
Preconditions	A delivery order has been created, and the recipient's contact information is available.
Steps	<ol style="list-style-type: none"> 1. System detects a change in delivery status. 2. System retrieves the recipient's contact information. 3. System sends a notification with the updated status.
Postconditions	The recipient is notified of the delivery status.

c) 3 scenarios:

Scenario1: Track Delivery Status.

- Track Delivery Status (main use case).
- Notify Recipient (extended use case).

Description: When a customer tracks the delivery status, the system may optionally notify the recipient if there is a status change (e.g., from "Pending" to "In Transit"). This is an optional step, so the Notify Recipient use case extends the Track Delivery Status use case.

Steps:

1. Customer enters the order number.
2. System retrieves the delivery status.
3. If the status has changed, the system extends the notify recipient use case to send a notification.
4. System displays the updated status to the customer.

Scenario2: Handle Returns and Refunds.

- Handle Returns and Refunds (main use case).
- Update Inventory (included use case).

Description: When a customer requests a return and the admin approves it, the system must update the inventory to reflect the returned items. This is a mandatory step, so the update inventory use case is included in the handle returns and refunds use case.

Steps:

1. Customer submits a return request.
2. Admin reviews and approves the request.
3. System includes the update inventory use case to add the returned items back to stock.
4. System processes the refund and notifies the customer.

Scenario3: Manage Delivery Information.

- Manage Delivery Information (main use case).
- Notify Recipient (extended use case).

Description: When an admin or delivery personnel updates delivery information (e.g., changes the delivery date), the system may optionally notify the recipient if the update affects the delivery timeline. This is an optional step, so the Notify Recipient use case extends the Manage Delivery Information use case.

Steps:

1. Admin or delivery personnel access the delivery order.
2. Updates delivery details (e.g., changes delivery status to "Delayed").
3. If the update affects the delivery timeline, the system extends the Notify Recipient use case to send a notification.
4. System saves the updated delivery information.