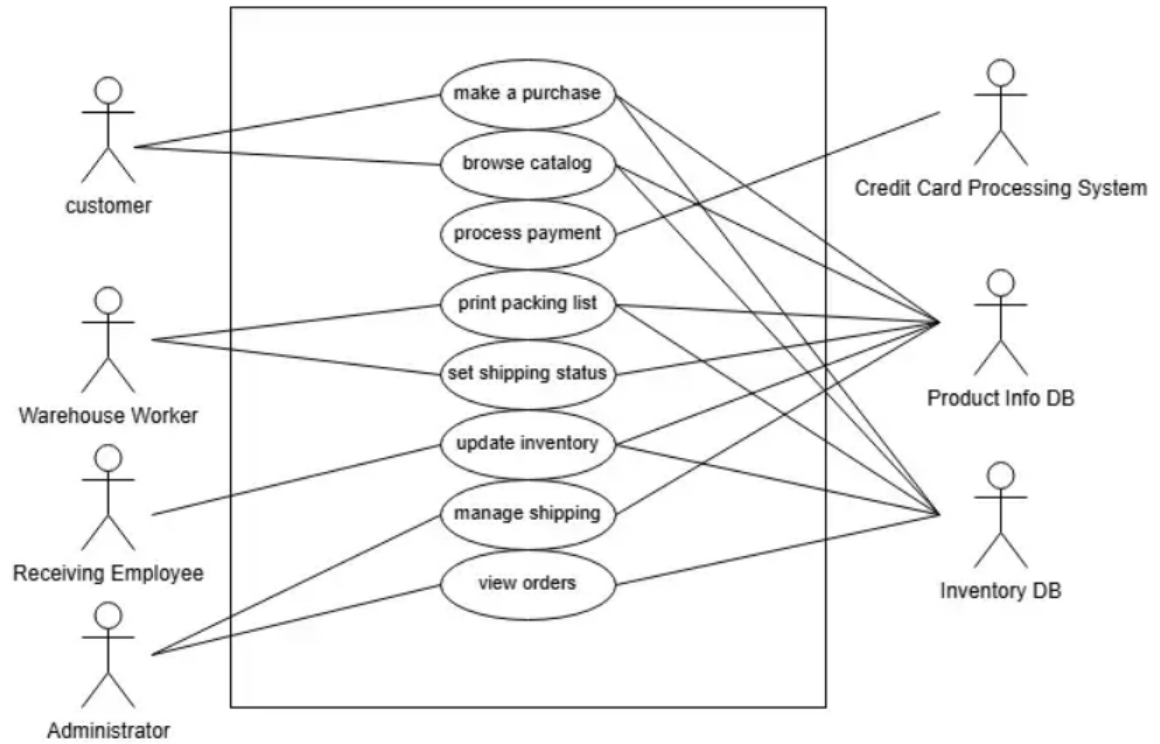


Use case diagram



Actor Descriptions

Actor	Description	Use Case(s)
Customer	An individual who uses the online interface to browse the product catalog, select auto parts, and place orders. They provide shipping/-billing info and finalize payment.	Browse Catalog, Make a Purchase
Warehouse Worker	An employee in the warehouse responsible for printing packing lists, picking items, packing shipments, and updating shipping status once an order is shipped.	Print Packing List, Set Shipping Status
Receiving Employee	An employee at the receiving desk who updates inventory whenever new product stock arrives (by part number or description) and adjusts quantities on hand in the system.	Update Inventory
Administrator	A privileged user who configures shipping handling charges, maintains weight-based pricing brackets, and views/searches orders by date, status, or price range.	Manage Shipping, View Orders
Credit Card Processing System	An external service used by the new system to authorize customer credit card transactions. Receives card info, expiration date, and amount, returning authorization.	Process Payment
Product Info DB	The legacy database storing product part numbers, descriptions, weights, pictures, and base prices. The new system retrieves product data from here when displaying the catalog.	Manage shipping, Update inventory, set shipping status, print packaging list, browse catalog, make a purchase
Inventory DB	A new or selected database that stores the quantity on hand for each product, as well as customer orders and their status (authorized, shipped, etc.).	Make a Purchase, Update Inventory, Browse catalog, Print packaging list, View Orders

Use case descriptions

3.1 Browse Catalog

Actors	Customer, Product Info DB, Inventory DB
Description	The Customer views the online catalog of auto parts. The system retrieves product information (name, description, picture, price, weight) from the Product Info DB. The system retrieves inventory information from the inventory DB.
Data	Product details: part number, description, weight, picture link, price,
Stimulus	Customer requests to browse or search the product catalog.
Response	System displays a list of products with relevant details.
Comments	This use case is the entry point for a Customer before selecting items to purchase.

3.2 Make a purchase

Actors	Customer, Product Info DB, Inventory DB
Description	The Customer selects products, specifies quantities, provides shipping/billing details, and confirms the order. The system calculates the total cost (including shipping/handling).
Data	Selected products and quantities, Customer shipping/billing information, Shipping and handling charges, Total order price
Stimulus	Customer proceeds to checkout (submits order).
Response	System creates a new order record, updates inventory levels, and confirms the order
Comments	Credit card authorization is handled by the <i>Process Payment</i> use case. An email confirmation is sent upon successful purchase.

3.3 Print Packing List

Actors	Warehouse Worker, Product Info DB, Inventory DB
Description	Warehouse Worker retrieves a list of authorized (paid) orders ready for fulfillment, then prints a packing list that includes product details and shipping information.
Data	Order details (items, quantities, shipping address), Inventory DB records (order status)
Stimulus	Warehouse Worker selects an order to be packed.
Response	System generates and prints the packing list
Comments	Printing a packing list helps the Warehouse Worker gather all required items for shipment.

3.4 Set Shipping Status

Actors	Warehouse Worker, Product Info DB
Description	After packing and shipping an order, the Warehouse Worker updates the order status to indicate it has shipped.
Data	Order ID, Shipping status (shipped date/time, tracking info if applicable)
Stimulus	Warehouse Worker marks the order as shipped in the system.
Response	System updates the order record in the DB, sends shipment confirmation email to the Customer.
Comments	Indicating that the order is shipped completes the fulfillment process for that order.

3.5 Update Inventory

Actors	Receiving Employee, Product Info DB, Inventory DB
Description	The Receiving Employee updates the system whenever new stock arrives, increasing the quantity on hand for specific products.
Data	Product part number or description, New quantity delivered, Current inventory levels
Stimulus	Receiving Employee logs new products into the system.
Response	System updates the product's quantity on hand in the DB.
Comments	Ensures accurate inventory data for orders.

3.6 Manage Shipping

Actors	Administrator, Product Info DB
Description	Administrator configures shipping and handling charges, including defining or updating weight brackets and associated costs.
Data	Shipping weight brackets, Shipping/handling charges
Stimulus	Administrator chooses to add or modify shipping cost rules.
Response	System saves updated shipping rules in the DB, used for future order calculations.
Comments	These charges are factored into the total price when Customers place orders.

3.7 View Orders

Actors	Administrator, Inventory DB
Description	Administrator searches and views orders by date range, status, or price range, and can display full order details.
Data	Order records: ID, date, status, items, price, etc.
Stimulus	Administrator requests to see orders
Response	System retrieves matching orders from the Inventory DB and displays the results.
Comments	The Administrator may also use this information for analysis or troubleshooting.

3.8 Process Payment

Actors	Credit Card Processing System
Description	The new system submits credit card details (number, expiration, amount) to the external Credit Card Processing System for authorization.
Data	Credit card information (number, expiry date), Purchase amount, Authorization result (approval or decline)
Stimulus	A request to authorize payment is sent by the new system during checkout.
Response	The external system returns an authorization or decline code. The new system updates the order status accordingly.
Comments	If payment is authorized, the order is marked as paid and an email confirmation is sent to the Customer.