Patagonia Use Cases

Use Case Name:	Checkout Process	**ID:**	UC-1	Priority	High
Actor:	Customer				
Description:	The customer completes the checkout process by selecting payment methods and confirming the order				
Trigger:	Customer proceeds to checkout				
Type:	External				
Preconditions:	• The customer has items in the cart • The selected items are in stock				

Major Steps	Information for Steps
1. Customer proceeds to checkout	Input: Cart Items
2. System calculates total cost, taxes, and applicable discounts	Input: Product Price & Discounts Input: Tax Rate
3. Customer selects payment method (credit card, debit, PayPal, split payment)	Input: Payment Method Details
4. System processes payment	Output: Payment Confirmation
5. Order is created and assigned an Order ID	Output: Order Record Created
6. System updates inventory to reflect sold items	Output: Updated Inventory
7. Order confirmation email is sent to customer	Output: Order Confirmation Email

Postconditions:

- Order is successfully placed and recorded in the system
- Inventory is updated to reflect purchased items

Exceptions:

- If payment fails, the system prompts the customer to retry or select a different payment method
- If an item is out of stock before checkout completion, the system notifies the customer to remove or replace the item

Summary

Inputs	Source	Outputs	Destination
Cart Items	Shopping Cart Database	Order Confirmation	Customer
Product Price and Discounts	Product Database	Payment Confirmation	Payment System
Tax Rate	Tax System	Updated Inventory	Inventory Database

Payment Method	Payment System	Order Record	Order Database

<table>
<tr><td>Use Case Name:</td><td colspan="2">Adding Product to Cart</td><td>ID:</td><td>UC-2</td><td>Priority</td><td>Medium</td></tr>
<tr><td>Actor:</td><td colspan="6">Customer</td></tr>
<tr><td>Description:</td><td colspan="6">Customer adds a product to their shopping cart before proceeding to checkout</td></tr>
<tr><td>Trigger:</td><td colspan="6">Customer selects a product to add to their cart</td></tr>
<tr><td>Type:</td><td colspan="6">External</td></tr>
<tr><td>Preconditions:</td><td colspan="6">● The selected product must be available in stock</td></tr>
<tr><td colspan="2">Major Steps</td><td colspan="5">Information for Steps</td></tr>
<tr><td colspan="2">1. Customer selects a product from the store</td><td colspan="5">Input: Product ID</td></tr>
<tr><td colspan="2">2. System checks inventory for availability</td><td colspan="5">Input: Product Stock Data</td></tr>
<tr><td colspan="2">3. If available, system adds the product to the customer’s cart</td><td colspan="5">Input: Updated Cart</td></tr>
<tr><td colspan="2">4. System updates cart based on product price</td><td colspan="5">Output: Updated Cart Total</td></tr>
<tr><td colspan="2">5. Customer can proceed to checkout or continue shopping</td><td colspan="5">Output: Cart Updated Notification</td></tr>
<tr><td colspan="7">Postconditions:
● The selected product is successfully added to the cart.
● The cart reflects the updated total cost.</td></tr>
<tr><td colspan="7">Exceptions:
● If the product is out of stock, the system notifies the customer and prevents adding it to the cart.
● If the customer removes an item, the system updates the cart accordingly.</td></tr>
</table>

Summary			
Inputs	**Source**	**Outputs**	**Destination**
Product ID	Product Database	Updated Cart	Shopping Cart Database
Product Stock Data	Inventory Database	Updated Cart Total	Shopping Cart Database

Use Case Name:	Customer Account Management	**ID:**	UC-3	Priority	Medium
Actor:	Customer				
Description:	Customer creates or manages their Patagonia account to track orders, save payments and manage preferences				
Trigger:	Customer registers or logs into their account				
Type:	External				
Preconditions:	• Customer must provide valid registration information for account creation • Returning customers must enter valid login credentials				

Major Steps	**Information for Steps**
1. Customer navigates to the login/registration page	Input: Customer Request
2. Customer logs in/registers (a) If returning, customer enters login credentials (b) If new, customer enters personal details	Input: Username, Password Input: Registration Form Data
3. System verifies credentials or creates new account	Output: Login Success / Account Created Notification
4. Customer accesses their account dashboard	Output: Account Overview Page
5. Customer can update account details, payment methods, or shipping addresses	Output: Updated Account Details
6. Customer can view order history	Output: Order History Displayed

Postconditions:

- New accounts are registered successfully.
- Returning customers gain access to their dashboard.

Exceptions:

- If incorrect login credentials are provided, the system displays an error and prompts for retry.
- If an account already exists with the given email during registration, the system prevents duplicate accounts.

Summary

Inputs	**Source**	**Outputs**	**Destination**
Customer Request	Customer Database	Login Success	Authentication System
Username, Password	Authentication System	Account Created Notification	Authentication System
Registration Form Data	Authentication System	Account Overview	Customer Database

Login Credentials	Authentication System	Updated Account Details	Customer Database

Use Case Name:	Shipping an Order	**ID:**	UC-4	Priority	High
Actor:	Warehouse Employee				
Description:	Employee packs and ships customer orders				
Trigger:	Customer places order				
Type:	External				
Preconditions:	• Customer has placed the order • Products are in stock				

Major Steps	**Information for Steps**
1. Order details are transmitted to the warehouse system	Input: Order Details, Customer Information
2. Warehouse employee picks and packs the products	Input: Product Inventory
3. Packed order is sent out for delivery	Output: Updated Product Inventory
4. System sends email with tracking number and confirmation of shipping	Output: Confirmation Email, Tracking Number
5. Customer receives product	
6. System confirms successful delivery	Output: Confirmed Delivery Notification

Postconditions: Customer decides to keep or return products from the order

Exceptions: If customer order is lost during shipping, a new order will be created and sent

Summary

Inputs	**Source**	**Outputs**	**Destination**
Order Details Customer Details Product Inventory	Order Database Customer Database Inventory Database	Confirmation Email Tracking Number Confirmed Delivery Notification	Customer Customer Customer

Use Case Name:	Processing Customer Returns	**ID:**	UC–5	Priority	High
Actor:	System Admin				
Description:	Receiving, and refunding products that a customer wishes to return				
Trigger:	Customer initiates a return request				
Type:	External				
Preconditions:	• Customer must provide valid order number • Item must be eligible for return based on company policy				

Major Steps	**Information for Steps**
1. Customer initiates a return request via the website	Input: Return Request
2. System verifies eligibility based on return policy a. IF in-eligible, send customer an email declining option to return	Input: Return Eligibility Criteria
3. System emails customer with instructions for return	Output: Return Instructions Email
4. Customer ships item back to warehouse	
5. Warehouse receives returned items	
6. Staff inspects returned items a. IF items are deemed unfit for return, send products back to customer	
7. System processes refund or replacement	Output: Payment Update
8. Update inventory with returned item a. IF product is defective, DO NOT update inventory	Output: Inventory Update
9. System sends the customer an email confirming the refund or replacement	Output: Refund Confirmation

Postconditions: Status of return updated to “complete”

Exceptions: If product is in-eligible for return, cancel process

Summary

Inputs	**Source**	**Outputs**	**Destination**
Return Request Return Eligibility Criteria	Customer Return Database	Payment Update Inventory Update Refund Confirmation	Payment Database Inventory Database Customer

<table>
<tr><td>Use Case Name:</td><td colspan="2">Process and Fulfill Repair Request</td><td>ID:</td><td>UC-6</td><td>Priority</td><td>High</td></tr>
<tr><td>Actor:</td><td colspan="6">Employee</td></tr>
<tr><td>Description:</td><td colspan="6">Receiving customer products and repairing them</td></tr>
<tr><td>Trigger:</td><td colspan="6">Customer initiates a repair request</td></tr>
<tr><td>Type:</td><td colspan="6">External</td></tr>
<tr><td>Preconditions:</td><td colspan="6">• Product is manufactured by Patagonia</td></tr>
<tr><td colspan="2">Major Steps</td><td colspan="5">Information for Steps</td></tr>
<tr><td colspan="2">1. Customer fills repair request form and submits it to the website</td><td colspan="5">Input: Repair Request Form</td></tr>
<tr><td colspan="2">2. Customer brings/ships the product to the store for repair</td><td colspan="5"></td></tr>
<tr><td colspan="2">3. Store accepts the repaired item
a. IF the item is un-repairable, the item will be returned to customer or recycled</td><td colspan="5"></td></tr>
<tr><td colspan="2">4. Store receives payment for repair</td><td colspan="5">Input: Repair Fee</td></tr>
<tr><td colspan="2">5. Repair Item Inventory is updated</td><td colspan="5">Input: Repair Item Inventory</td></tr>
<tr><td colspan="2">6. Store will order materials to repair item</td><td colspan="5">Output: Material Request</td></tr>
<tr><td colspan="2">7. Store will repair item
a. IF item is un-repairable, the item will be returned to customer, repair fee will be refunded, and product will be returned or recycled</td><td colspan="5"></td></tr>
<tr><td colspan="2">8. Store will notify customer of completed repair, and indicate appointment to pick up
a. IF the customer shipped the item, they would ship the product back and provide a tracking number</td><td colspan="5">Output: Repair Completion Notification
Output: Repaired Item Tracking Number</td></tr>
<tr><td colspan="7">Postconditions: Customer receives repaired product</td></tr>
<tr><td colspan="7">Exceptions: Item is un-repairable</td></tr>
</table>

Summary			
Inputs	**Source**	**Outputs**	**Destination**
Repair Request Form Repair Fee	Database POS	Material Request Repair Completion Notification Repaired Item Tracking Number	Warehouse Customer Customer