

User & Work Modeling

Scenario 1:

Purchasing a Specific Vinyl Record (Collector/Buyer)

User: Alex, a collector who knows they want a specific version of a rare vinyl album.

Goal: Find and purchase a vinyl record of a specific release version and in good condition for a fair price.

Steps:

1. Alex logs into their RecordShare account.
2. They use the Search bar to type in the album name and select the "MUSIC" category.
3. On the search results page, they use filters like the price range slider or genre categories to refine the results.
4. They view in-depth details of a filtered listing, checking the condition and release version of the product.
5. Satisfied with the condition and price, Alex clicks "Add to Cart".
6. Alex navigates to the cart (which shows "0 items - C\$0.00" until updated) and clicks "Buy Item" (initiating the checkout process).
7. They confirm their contact and shipping information during checkout and proceed to Make Payment.
8. After payment, Alex checks the Track Orders page to view the updates on their purchase.

Scenario 2:

Selling an Extra Copy of a Video Game (Seller)

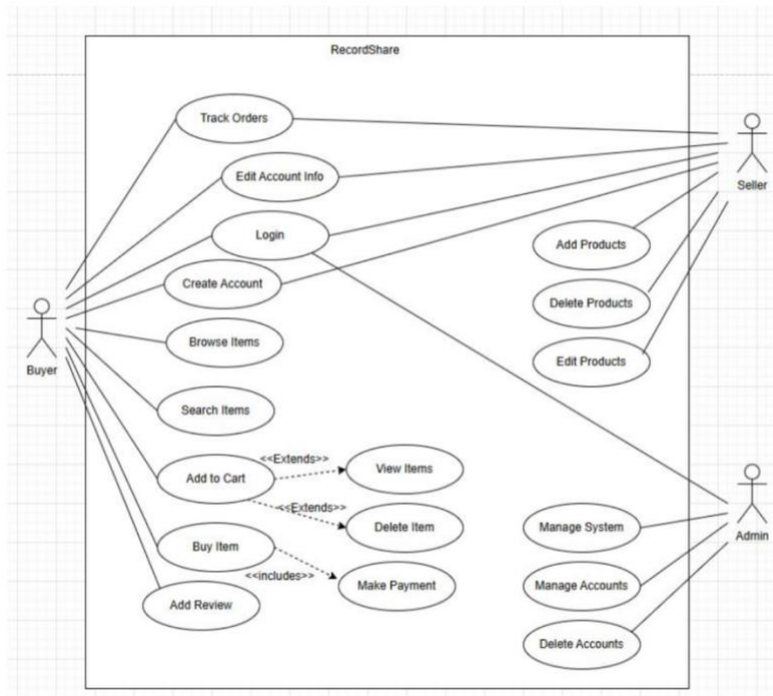
User: Maya, a casual seller who wants to offload an extra copy of a video game they own.

Goal: List and track the sale of a physical video game.

Steps:

1. Maya logs into her RecordShare account.
2. She navigates to the "Sell Items" section and clicks "Add Products" (Create listings).
3. She fills out the listing form, including the product name, condition, price, and uploads photos of the physical game.
4. Maya clicks "Submit" to create the new listing.
5. Later, when the item sells, she receives a notification.
6. She navigates to "Track Orders" to view the order and update the delivery status once she has shipped the game.
7. She updates her account profile with her latest Products Sold count and a short Bio.

Use Case Diagram



Use Case	Description	Actors
Create Account	Allows a new user to register and set up a profile	Buyer, Seller, Admin
Login	Allows any registered user to gain access to their personalized account area	Buyer, Seller, Admin
Edit Account Info	Allows the user to modify their personal details and profile information	Buyer, Seller
Track Orders	Allows the user to view the current status and history of transactions they are involved in (buying or selling)	Buyer, Seller

Use Case	Description	Relationships
Browse Items	Allows users to passively look through product listings, often by category or scrolling the home page ⁶⁶⁶ .	None
Search Items	Allows users to actively search for specific listings, often utilizing filters (like name, condition, or release version)	None
Add to Cart	Allows the user to place a listing into their virtual shopping cart ⁸⁸⁸⁸⁸⁸⁸⁸ .	Extends View Items , Extends Delete Item
Buy Item	Initiates the final checkout process to commit to the purchase of all items in the cart	Includes Make Payment
Add Review	Allows the Buyer to submit a rating or comment on a purchased listing or Seller	None

Use Case	Description	Actors
Add Products	Allows the Seller to create a new listing for a physical media item	Seller
Edit Products	Allows the Seller to modify existing listing details (e.g., price, condition, description)	Seller
Delete Products	Allows the Seller to remove a listing from the marketplace (e.g.,	Seller

	when it is sold out off-site)	
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Use Case	Description	Actors
Manage System	High-level controls for maintaining the platform, such as performing updates or configuration changes	Admin
Manage Accounts	Allows the Admin to monitor user accounts, often as part of addressing misconduct	Admin
Delete Accounts	Allows the Admin to suspend or ban accounts if necessary, such as due to user misconduct or seller issues	Admin

Hierarchical Task Analysis

Goal: Purchase Physical Media

P0: Purchase Physical Media

1. Find Item

1.1 Log in to RecordShare.

1.2 Search for item (by name or use filters).

1.3 Review search results.

1.4 View item details (condition, release version, price).

1.5 Add item to the Cart.

2. Checkout & Pay

2.1 Access the Cart.

2.2 Review and edit cart items.

2.3 Select "Buy Item" / "Proceed To Payment". 2.4 Enter/confirm shipping/contact information.

2.5 Make Payment.

3. Follow Up

3.1 Track Order.

3.2 (Optional) Add Review for the purchased listing.

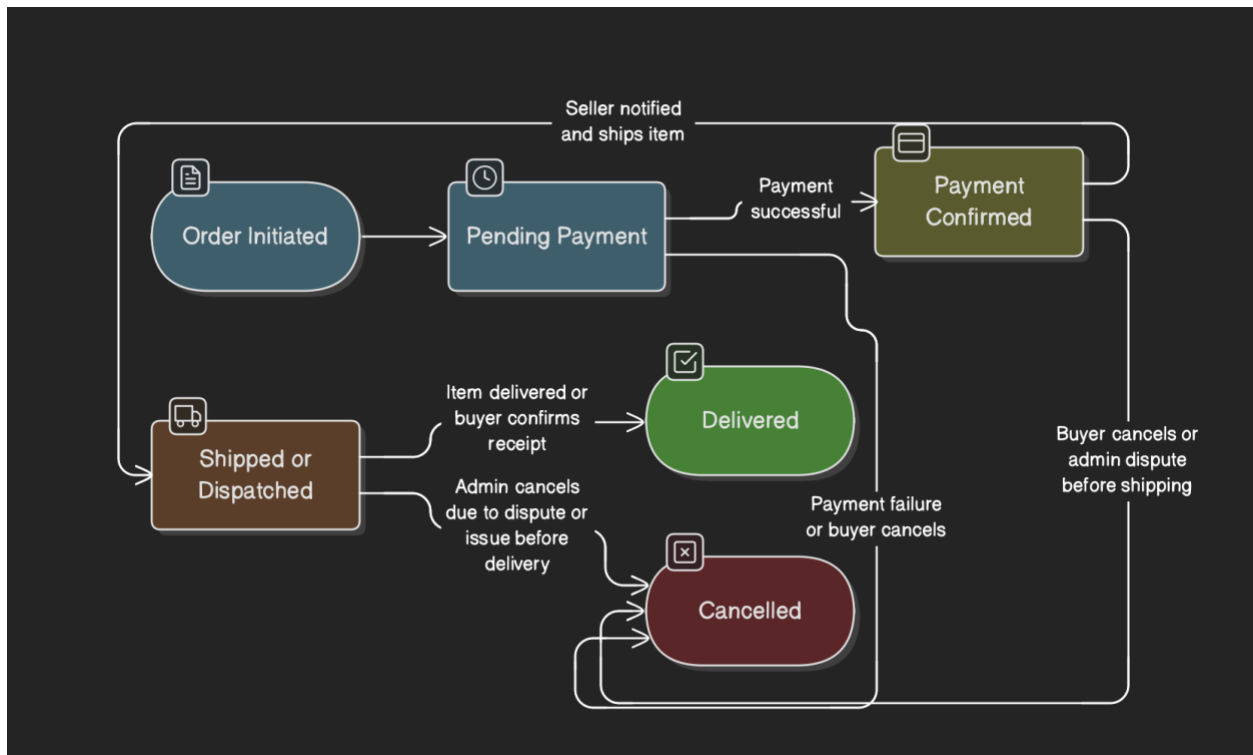
Plan 0:

Do 1.1 → 1.2 → 1.3 → 1.4. If satisfied with the item, do 1.5.

Then proceed to 2.1 → 2.2 → 2.3 → 2.4 → 2.5.

Finally, do 3.1 → 3.2 (optional).

State Diagram:



The diagram contains five key states representing where the order currently stands:

Order Initiated: This is the beginning of the process. The customer has likely added items to the cart and is now committing to the purchase (e.g., clicking "Buy Item" or proceeding to checkout).

Pending Payment: The system is waiting for payment confirmation. The order is reserved, but funds have not officially cleared.

Payment Confirmed: The payment transaction was successful. The order is now active, and the physical fulfillment process begins.

Shipped or Dispatched: The Seller has packaged the physical media and shipped it, updating the system with tracking information.

Delivered: The item has been successfully received by the Buyer. This is a terminal (final) state, signifying the transaction is complete.

Cancelled: A terminal (final) state where the order is terminated, either due to non-payment, Buyer request, or administrative action.