Requirements:

Inventory System:

Management:

- The system shall provide a dedicated inventory page for users to manage their owned items:
 - o Users shall be able to view all items they currently own in their inventory.
- The system shall display relevant information for each item including name, game of origin, rarity, and estimated market value.
- The inventory shall be visually organized, displaying items in a grid layout with item images and key information.

Navigation:

- The system shall provide a clear navigation path from the marketplace to the inventory and vice versa.
- Users shall be able to access their inventory from any page through a persistent navigation element.
- The system shall maintain inventory state between sessions, ensuring users always see their current item collection.

Filtering:

- The system shall provide the following filtering capabilities within the inventory:
 - o Filter by Game:
 - The system shall allow users to filter inventory items by specific game
 - When a user selects a game filter, only items from that game will be displayed.
 - Multiple game filters can be applied simultaneously
 - The system shall display the number of items per game category.
 - Search Item:
 - The system shall provide a search functionality that allows users to find specific items by name.

- The search shall match partial text strings within item names.
- The system shall display search results in real-time as the user types.
- If no items match the search criteria, the system shall display a "No items found" message.

Organization:

- Sort Items:
 - The system shall provide multiple sorting options for inventory items.
 - Users shall be able to sort their inventory by:
 - Item Value (high to low/low to high)
 - Item Name (alphabetical)
 - Acquisition Date (newest/oldest)
 - Rarity (common to rare/rare to common)
 - The sorting preference shall persist between sessions
 - The system shall apply sorting in real-time, with the inventory display updating immediately.

Actions:

- Sell Items:
 - Users shall be able to select any item in their inventory and create a marketplace listing.
 - The system shall guide users through setting a price for their item.
 - The system shall provide market price suggestions based on recent sales of similar items.
 - o Users shall receive confirmation when an item is successfully listed for sale.
 - o Items listed for sale shall remain in the inventory but be marked as "Listed" until sold.
- View Item Details:
 - Users shall be able to view detailed information about any item in their inventory
 - The item detail view shall include complete item specifications, origin, acquisition date, and market history
 - Users shall be able to see the trading history of the specific item they own.

Trading System:

Management:

- The system shall provide a dedicated trading interface with the following capabilities:
 - View Trade Offers:
 - The system shall display all incoming and outgoing trade offers
 - Trade offers shall be categorized as "Received" and "Sent" for clear organization
 - Each trade offer shall display a summary of items being exchanged and the trade partner's username
 - The system shall indicate the status of each trade (pending, accepted, declined, expired)
 - Create Trade Offer:
 - Users shall be able to initiate a trade offer to any other user who owns tradeable items.
 - The system shall provide an interface for selecting items from the user's inventory to offer in the trade
 - The system shall provide an interface for selecting items from the trade partner's inventory to request.
 - The trade creation process shall enforce platform rules regarding trade fairness and item eligibility.

Preview and Confirmation:

- Preview Trade:
 - Before finalizing a trade offer, users shall be presented with a preview showing all items being exchanged.
 - The preview shall clearly indicate which items will be sent and which will be received.
 - The system shall display the estimated market value of items on both sides of the trade.
 - Users shall be able to modify the trade offer from the preview screen before sending.
- Send Offer:
 - The system shall require explicit confirmation before sending a trade offer.
 - Upon confirmation, the trade offer shall be sent to the recipient and appear in their "Received Offers" section.

- The system shall notify the recipient of the new trade offer through the platform's notification system.
- Sent offers shall be recorded in the trading history and be accessible for reference.

Responses:

Accept Trade:

- Recipients shall be able to accept any valid trade offer they have received.
- Upon acceptance, the system shall immediately transfer the traded items between user inventories.
- Both parties shall receive a confirmation notification when a trade is successfully completed.
- The trade shall be recorded in both users' trading history.

Decline Trade:

- Recipients shall be able to decline any trade offer they have received.
- When declining a trade, users shall have the option to provide a reason for the decline.
- The system shall notify the sender when their trade offer has been declined.
- Declined trades shall be recorded in the trading history with their status clearly indicated.

History:

- View Trade History:
 - The system shall maintain a complete history of each user's trading activity.
 - The trade history shall display all completed, declined, and expired trades.
 - Users shall be able to filter their trade history by status, date range, and trade partner.
 - Each history entry shall include details of the items exchanged, the trade partner, and the completion date.
 - The system shall allow users to view the details of any historical trade.

Marketplace System:

Navigation:

• View Marketplace:

- The system shall provide a centralized marketplace where users can browse all items currently listed for sale.
- Users shall be able to access the marketplace from the main navigation menu.
- The marketplace shall display items in a grid layout with key information visible at a glance.

Search and Filtering:

Search Items:

- The system shall provide a dedicated search function in the marketplace interface.
- o The search shall match item names, descriptions, and relevant tags.
- Search results shall update in real-time as the user types.
- The system shall prioritize exact name matches, followed by partial matches in names, then matches in descriptions.
- If no items match the search criteria, the system shall display a "No items found" message and suggest broadening the search.
- The system shall remember recent searches for each user for quick access.
- Search functionality shall work in conjunction with filters, allowing users to search within filtered results.

Filter Items:

- The system shall provide comprehensive filtering options for marketplace items.
- Users shall be able to filter by game, item type, price range, and rarity.
- Filters shall be applied in real-time, with results updating immediately.
- The system shall allow combining multiple filters for precise item discovery.
- Filter by Game:
 - The system shall allow users to filter marketplace items by specific game.
 - Game filters shall display the number of available items for each game.
 - Multiple game filters can be selected simultaneously
- Filter by In-game Item Types:
 - The system shall categorize items by their in-game type (weapon, armor, cosmetic, etc.).

- Users shall be able to filter the marketplace to display only specific item types.
- The system shall adapt item type categories based on the selected game context.

Filter by Price:

- The system shall allow users to set minimum and maximum price ranges for marketplace items.
- Price filters shall be applied in real-time, displaying only items within the specified range.
- The system shall provide predefined price ranges for quick filtering.

Item Viewing and Purchases:

View Item:

- Users shall be able to view detailed information about any item in the marketplace.
- The item detail view shall include high-resolution images, complete specifications, and market history.
- The system shall display the item's price history over time when available.
- Users shall be able to see similar items currently listed on the marketplace.
- The item view shall provide direct options to buy the item or add it to a watchlist.
- For sellers viewing their own listed items, options to edit or remove the listing shall be prominently displayed.

Buy Item:

- Users shall be able to purchase any available item on the marketplace with a single action.
- The system shall verify that the user has sufficient funds before completing a purchase.
- Upon successful purchase, the item shall be immediately transferred to the buyer's inventory.
- Both the buyer and seller shall receive confirmation notifications of the completed transaction.

Sell Item:

- Users shall be able to list any item from their inventory for sale on the marketplace.
- When listing an item, users shall be able to set their own price.
- The system shall provide market price guidance based on recent sales of similar items.
- Users shall be able to cancel their listings at any time before purchase.
- o Listed items shall remain in the user's inventory but be marked as "Listed" until sold

Active Listings Management:

• View Active Listings:

- Users shall have access to a dedicated section showing all their currently active marketplace listings.
- The active listings view shall display the item's name, listed price, listing date, and current market value.
- Users shall be able to edit the price of any active listing.
- $\circ\hspace{0.4cm}$ Users shall be able to remove any active listing with a single action.
- The system shall update the status of active listings in real-time when they are purchased.