FPT Education

FPT UNIVERSITY

Jewelry Auction Project

Software Requirements Specification

N3_SE1841

V1.0
15/06/2024

Revision History

Date	Description	Author	Comments
15/06/2024	Version 1	Nguyen Van Dai	Initial

Document Approval

The following Software Requirements Specification has been accepted and approved by the following:
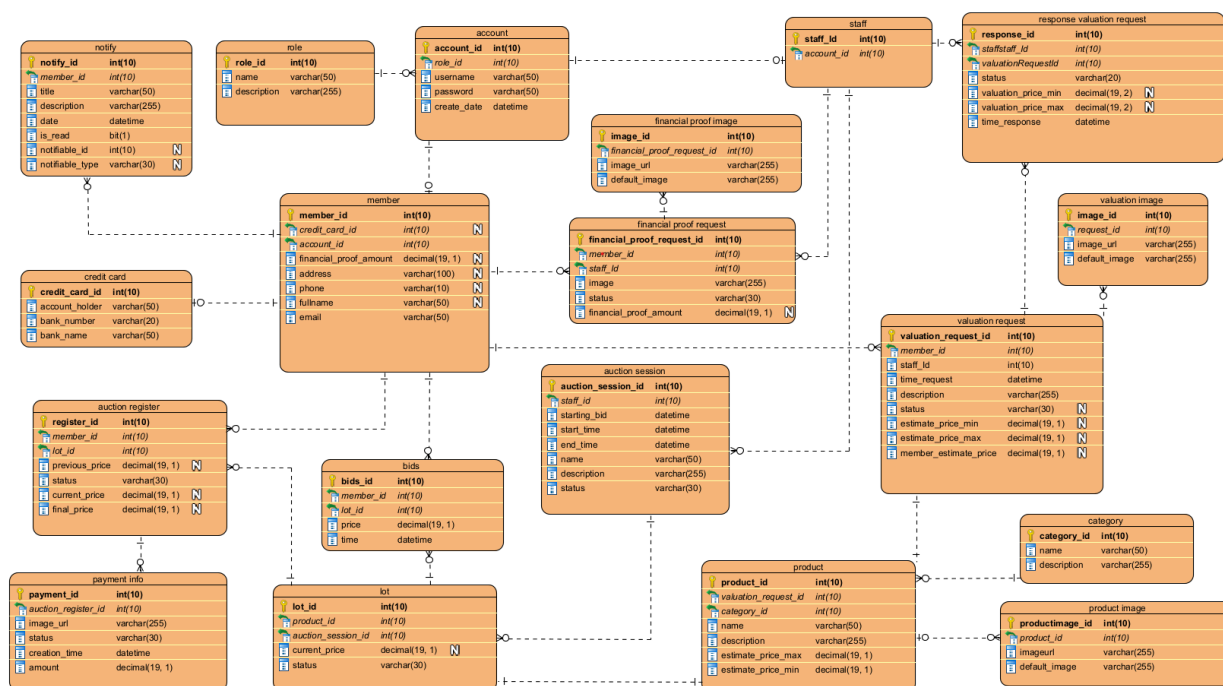
Printed Name	Title	Date

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1. Introduction

This is a capstone project developed by Team 6 - SE1839 - SWP391. The project involves creating an auction system where anyone can initiate an auction with their jewelry or participate in an online auction.

2. Database diagram

3. Function Requirements

This jewelry auction system has 5 major actors

No	Actors	Description
1	Guest	A Guest is an unregistered user who visits the auction platform to explore its offerings. Guests have limited access to the platform's features and cannot participate in auctions or create listings until they register.
2	Member	A Member is a registered user of the auction system who can participate in various activities such as bidding on auctions, creating their own auctions, and interacting with other users.
3	Staff	Staff members are responsible for assisting with the management and moderation of the platform.
4	Manager	Managers oversee the overall operations of the auction platform. They are responsible for ensuring that the

		platform functions efficiently and meets business objectives.
5	Administrator	Admins have the highest level of control over the auction platform. They are responsible for system administration, security, and ensuring the integrity and scalability of the platform.

Module Name (SR#)	Applicable Roles	Description
User Authentication and Management	Member Admin	- **Members** are registered users who can log in to the auction platform using their credentials. They have access to functionalities such as viewing and updating their profile information, participating in auctions by placing bids, and receiving notifications about auction activities - **Admins** oversee user authentication and management processes. They have privileges to manage user accounts, including creating, editing, or deleting accounts as needed. Admins ensure compliance with platform policies regarding user registration, password management, and security measures
Auction Browsing and Interaction	Guest Member	- **Guests** are unregistered users who can browse auctions and view available jewelry items. They have limited interaction capabilities, such as searching for auctions, viewing auction details, and reading general platform information. Guests are encouraged to register to gain full access to auction participation features. - **Members** have full access to browse and interact with auctions on the platform. They can view detailed auction listings, place bids on items, manage their bidding history, and receive real-time updates on auction status. Members also have the ability to register their own jewelry items for auction and manage their active listings.

Auction Participation and Management	Member Staff	- **Members** participate actively in auctions by placing bids on listed items. They can manage their bids, receive notifications on bidding status, and track auction outcomes. Members engage in real-time bidding activities and can withdraw bids or adjust bidding strategies based on auction dynamics. - **Staff** members play a critical role in managing the technical aspects of auction participation. They oversee auction sessions, ensure smooth bidding processes, and resolve technical issues encountered by users during auctions. Staff members monitor bidding activities, handle escalated user inquiries, and maintain auction integrity according to platform guidelines.
Member and Staff Interactions	Member Staff	- **Members** interact with staff regarding auction inquiries, technical support, and account-related issues. They submit requests for appraisal services, manage their appraisal requests, and receive feedback on jewelry valuation. Members communicate with staff for assistance in resolving disputes or clarifying auction rules. - **Staff** members interact closely with members to provide support and assistance throughout their auction experience. They respond to member inquiries, facilitate appraisal requests, and communicate auction guidelines effectively. Staff engage in proactive communication to ensure members have a seamless and satisfying auction participation journey
Auction Control and Dashboard	Manager Staff	- **Managers** have comprehensive control over the auction control and dashboard functionalities. They oversee the setup and management of auction sessions, including scheduling, assigning lots, and configuring auction parameters such as starting bids and reserve prices - **Staff** members support managers in administering auction control and dashboard operations. They assist in setting up auction sessions, updating lot information, and monitoring real-time bidding activities.
User Account Administration	Admin	- **Admins** have exclusive control over user account management within the auction platform. They oversee the entire lifecycle of user accounts, including account creation, modification, and deletion.

4. Use case List

No	ID	Use Case	Actors	Description
1	UC-GU001	Login	Guest	Log in using an account or Google credentials.
2	UC-GU002	Register	Guest	Sign up for a new account.
3	UC-GU003	Forgot password	Guest	Recover a forgotten password by confirming with a code sent via email.
4	UC-GU004	View auctions session list	Guest, member	View the list of auction sessions, including upcoming, current, and past sessions.
5	UC-GU005	View auctions session detail	Guest, member	View detailed information about an auction session, including the list of lots.
6	UC-GU006	View Lots detail	Guest, member	View detailed information about a single lot, including its auction details.
7	UC-GU007	Search auctions	Guest, member	Search for lots within a session using various filters.
8	UC-GU008	View policies, terms and conditions	Guest, member	View the platform's rules and policies.
9	UC-GU009	View contact info	Guest, member	View contact information for support or inquiries.

10	UC-MB001	Logout	Member, staff, manager, admin	Log out of the account.
11	UC-MB002	View profile	Member	View personal account information.
12	UC-MB003	Edit profile	Member	Edit all fields of personal account information.
13	UC-MB004	Change password	Member, staff, manager, admin	Change the password by entering the old password and re-entering the new password twice.
14	UC-MB005	Sent Financial proof request	Member	Submit proof of financial capacity by sending an image.
15	UC-MB006	View notification	Member	View notifications sent to the user.
16	UC-MB007	Sent Valuation request	Member	Submit a request for jewelry appraisal.
17	UC-MB008	View send valuation request	Member	View the list of submitted appraisal requests.
18	UC-MB009	View Valuation response	Member	View responses to the submitted appraisal requests.
19	UC-MB010	Confirm Final Valuation	Member	Accept the final valuation for jewelry that has been appraised.

20	UC-MB011	Register to bid	Member	Register for an auction, receive notifications when it starts, and only participate in registered auctions.
21	UC-MB012	View list registered auction	Member	View the list of auction lots the user has registered for.
22	UC-MB013	Cancel registered auctions	Member	Cancel a registered auction session, only if it has not yet started.
23	UC-MB014	Place bid before auctions	Member	Place pre-bids before the auction starts, only on items the user has registered for.
24	UC-MB015	View live auction	Member	View the details of an ongoing auction session.
25	UC-MB016	Place bid in the auctions	Member	Place bids during an auction session, view own placed bids.
26	UC-MB017	View my past auction	Member	View the history of auction sessions the user has participated in.
27	UC-MB018	View payment information	Member	View payment information for products won in auctions.
28	UC-MB019	Pay auction	Member	Make payments for successfully won auction items.
29	UC-ST001	View member's valuation request	Staff	View the list of jewelry appraisal requests submitted by users.
30	UC-ST002	Send preliminary	Staff	Complete and send a preliminary appraisal report for jewelry to users.

		valuation report		
31	UC-ST003	Confirm jewelry is received	Staff	Confirm the receipt of jewelry sent by members to the company.
32	UC-ST004	Create a new jewelry	Staff	Create and edit product information based on appraisal requests and save it to a separate database.
33	UC-ST005	Send final valuation to Manager	Staff	Complete and submit the final valuation of jewelry for manager approval.
34	UC-ST006	Send final valuation to Member	Staff	Send the final valuation report to the member.
35	UC-ST007	View Financial proof request	Staff	View submitted requests for proof of financial capacity.
36	UC-ST008	Confirm financial proof request	Staff	Determine the required financial capacity amount for the member.
37	UC-ST009	Pause auction	Staff	Temporarily pause an auction session.
38	UC-ST010	Continue auction	Staff	Resume a paused auction session.
39	UC-ST011	View assigned auctions	Staff	View auction sessions assigned to the staff member.
40	UC-MN001	View final valuation request	Manager	View final valuation reports sent by staff.

5. User Interface

In this project, we have 2 UI, User UI for Guest, Member and Manager UI for Staff, Manager and Administrator

5.1.　User UI
5.1.1.　Login page

Log In

Email

Password

Forgot password   Register?

Log in

G Sign up with Google

5.1.2. Home page

Jewelry Auction
Where your product reaches new heights

Live Auction

VIEW ALL LIVE AUCTION

INITIAL PENDANT
$100.00

HEART DROP
$200.00

DIAMOND CHOKER
$300.00

LEAF PENDANT
$90.00

RUBY PENDANT
$250.00

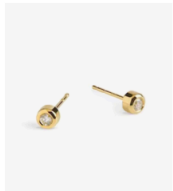## Upcoming Auction

VIEW ALL UPCOMING

Signed Jewelry   Diamond Jewrlry   Timepieces

DIAMOND STUDS
Sold for $200.00

MINI HOOPS
Sold for $90.00

DANGLING LEAVES
Sold for $60.00

LEAF STUDS
Sold for $40.00

CHAIN DROPS
Sold for $40.00

CUSTOMER SERVICES
Contact Us
Track your Order
Shipping & Returns
Frequently Asked Questions
Schedule an appointment

ABOUT US
Origins
Our Purpose
Careers
Sustainability
Giving Back

MATERIAL CARE
Jewelry Repair
Ring Sizing
Metal Allergy Resources
Styling Tips

MAIN LOCATIONS
Chicago, IL
San Francisco, CA
New York, NY
Seattle, WA

You can be one step ahead.
Sign up to hear about our updates on the dot.

Your email address   SIGN UP

5.2. Manager UI
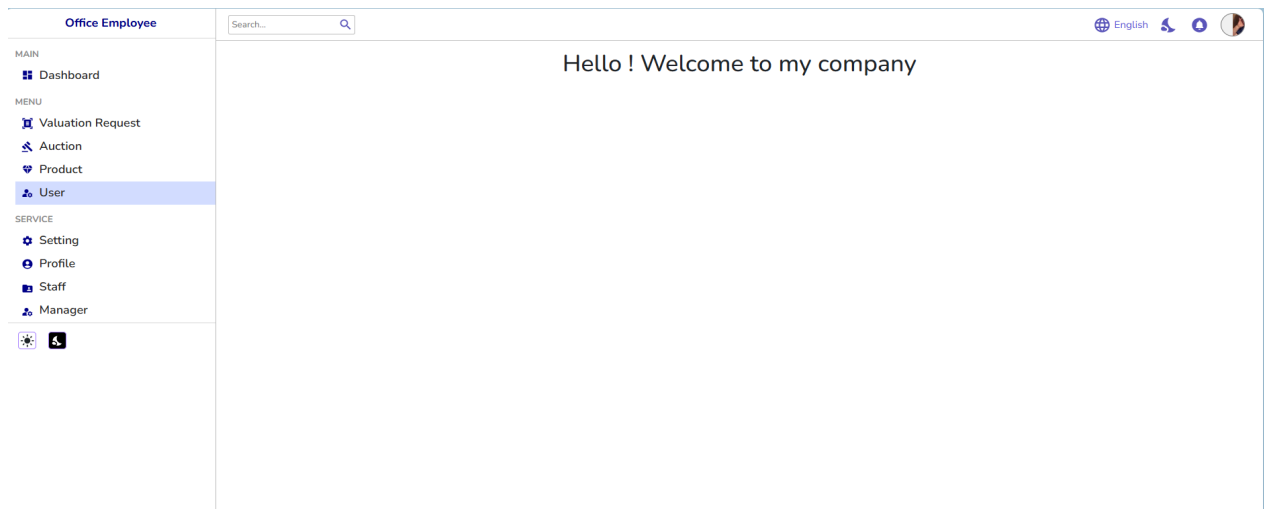
6. Technical Requirements

User Authentication and Management

Auction Browsing and Interaction

UC-GU004 - View auctions session list - Verify access as a member.

UC-GU005 - View auctions session detail - Verify navigation and UI elements.

UC-GU006 - View lot detail as member - Navigate to an auction and select a lot.

UC-GU007-Search lots as guest - Verify empty search results.

Auction Participation and Management

UC-ST003 - Confirm jewelry is received - Verify Successful Jewelry Receive Confirmation

UC-ST004 - Create a new jewelry-Verify Successful Creation of New Jewelry

UC-ST005 - Send final valuation to Manager - Verify Successful Sending of Final Valuation to Manager

UC-ST006 - Send final valuation to Member - Verify Successful Sending of Final Valuation to Member

UC-ST007 - View Financial proof request - Verify Successful Viewing of Financial Proof Requests

UC-ST008 - Confirm financial proof request - Verify Successful Confirmation of Financial Proof Request

UC-ST009 - Pause auction - Verify Successful Pausing of Auction

UC-ST010 - Continue auction - Verify Successful Resuming of Paused Auction

UC-MB011 - Register to bid as member

UC-MB012 - View list of registered auctions as member

UC-MB013 - Cancel registered auction as member

Member and Staff Interactions

UC-MB006 - View unread notifications as member - Check unread notifications.

UC-MB007 - Verify Send valuation request as member

UC-MB008 - View details of a specific sent valuation request as member.

UC-MB009 - Verify Valuation responses

UC-MB010 - Confirm final valuation as member

Auction Control and Dashboard

UC-ST011 - View assigned auctions - Verify Viewing of Assigned Auctions

UC-MN001 - View final valuation request - Verify Viewing of Final Valuation Requests

UC-MN002 - Confirm an auction request- Verify Confirmation of Final Auction Request

UC-MN003 - Create auction session - Verify Creation of Auction Session

UC-MN004 - View ready lots - Verify Viewing of Ready Lots

UC-MN005 - Set up auction- Verify Setting Up Auction Session

UC-MN007 - View Dashboard - Verify Viewing of Dashboard

UC-MN008 - View existed Payment - Verify Viewing of Existing Payments

User Account Administration

UC-AD001-Create Account-Verify creation of User Account

UC-AD002 - Edit Account Information   - Verify Editing of User Account Information

UC-AD003 - Delete Account   - Verify Deletion of User Account

7. Screen Flow

7.1. Member screen
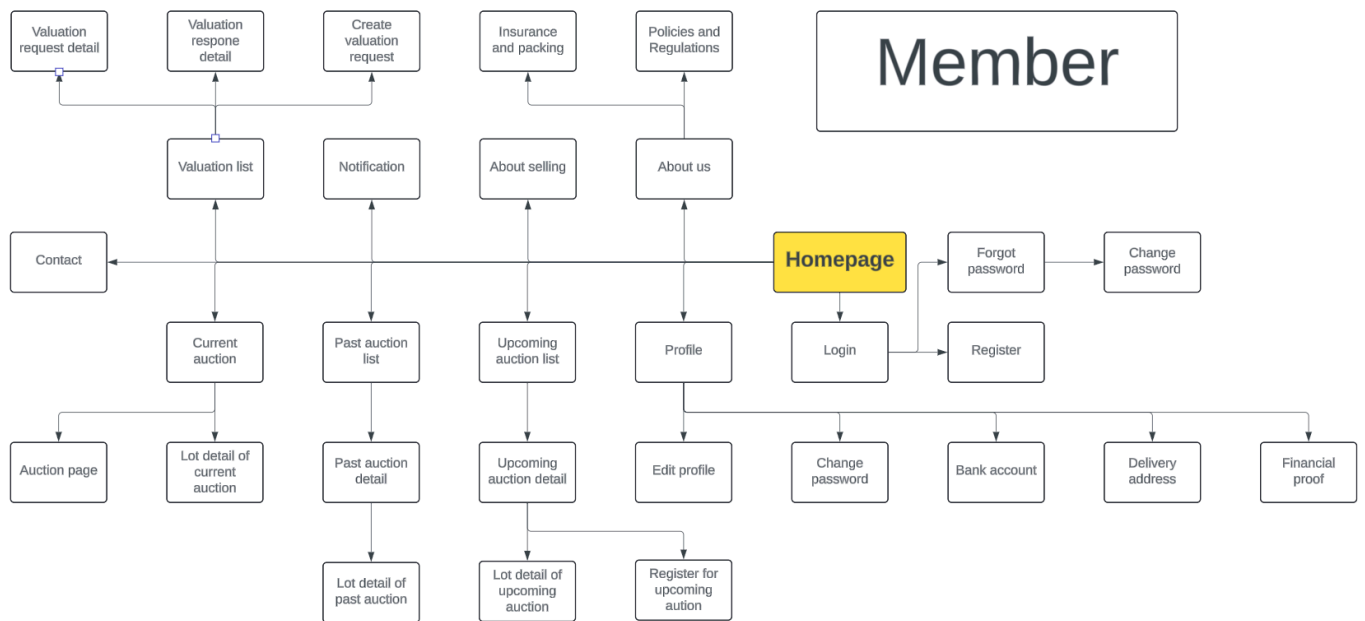
7.2. Staff screen
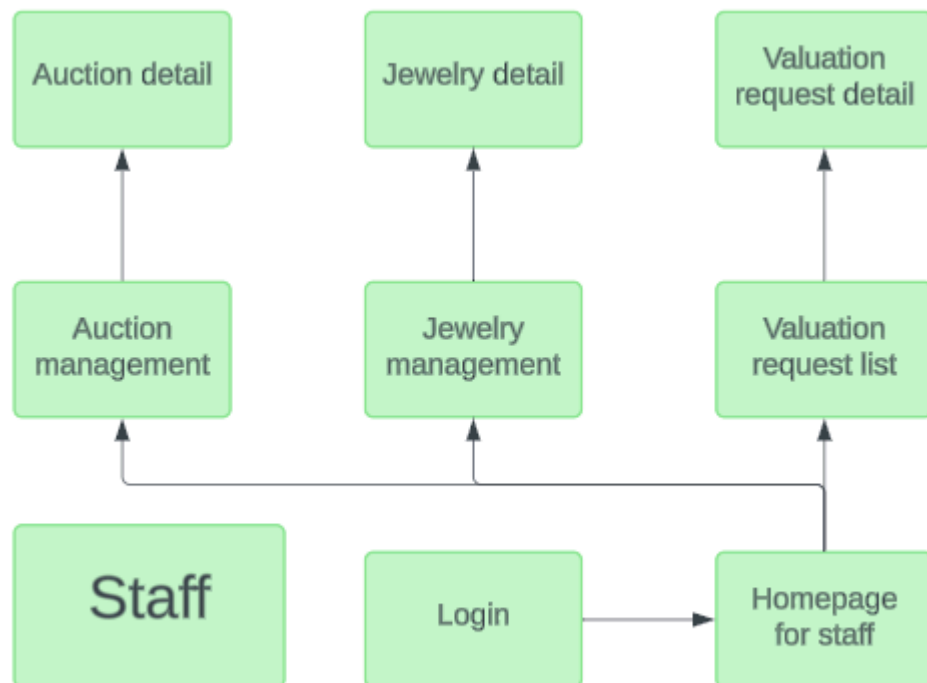
7.3. Manager screen
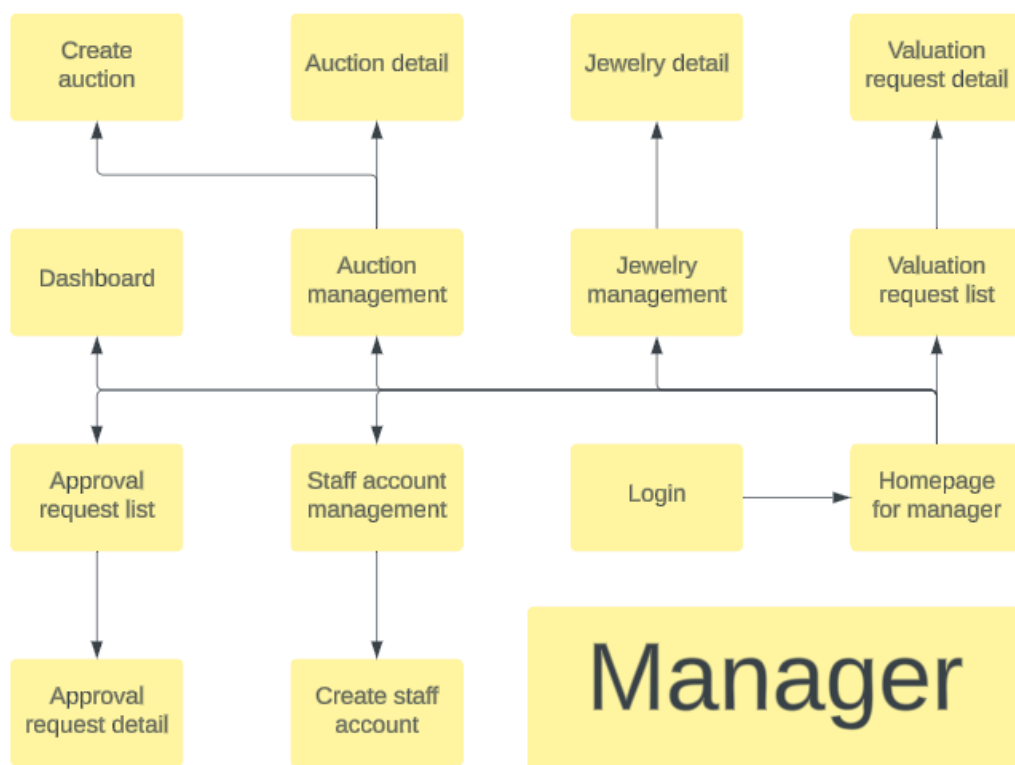
7.4. Administrator screen
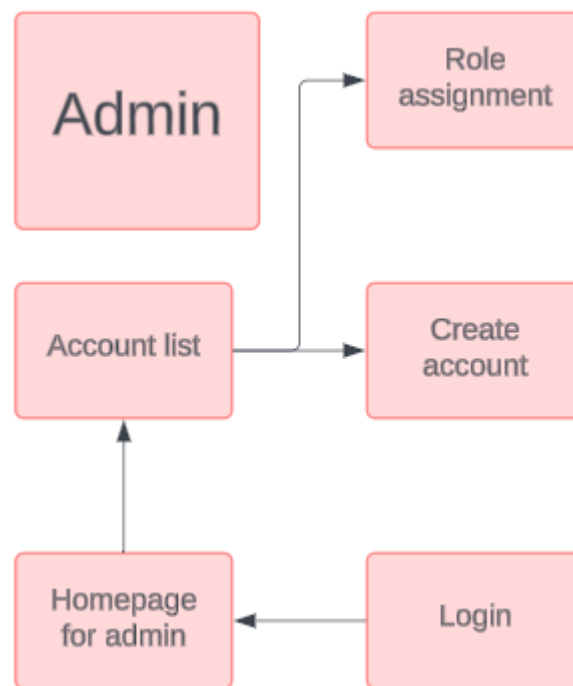
8. Business Rule

8.1. Auction Participation Fee

Auction Participation Fee

Member	System	Admin
Pay auction fee	Success	Receive Money
Notice to pay auction fee again	No	
Attend Auction		

Yes

8.2. Auction Listing Fees

Auction Listing Fees

Member	System	Staff	Manager	Admin
Submit jewelry's information	Receiving jewelry's information	Complete jewelry's information	Accept?	Yes
Receive refuse notice	Send refuse notice		No	
Accept?	Send confirm notice			
Yes / No	Cancel transaction			
Pay fee	Success			Received Money
	Yes / No			
	Send notice to pay money again			
	Create auction session			
Received auction information	Send auction session information			

8.3. Auction session

Auction session

Member	System	Admin	Seller

Join auction session → Deposit → Yes

Deposit → No → Deposit notifiaction

Deposit notifiaction → Recharge

Recharge → Success → Yes → Confirmed receiving money

Success → No → Notice recharge again

Notice recharge again → Recharge

Confirmed receiving money → Enter auction session → Win bid?

Win bid? → Yes

Win bid? → No → End auction session

End auction session → Caculate all costs payable

Caculate all costs payable → Receiving bid result

Receiving bid result → Conplete transaction

Conplete transaction → Success → Yes

Success → No → Process deposit money

Process deposit money → Process profit

Process profit → Receive money

Process profit → Receive jewelry

Receive money (Admin)

Receive money (Seller)

Receive jewelry