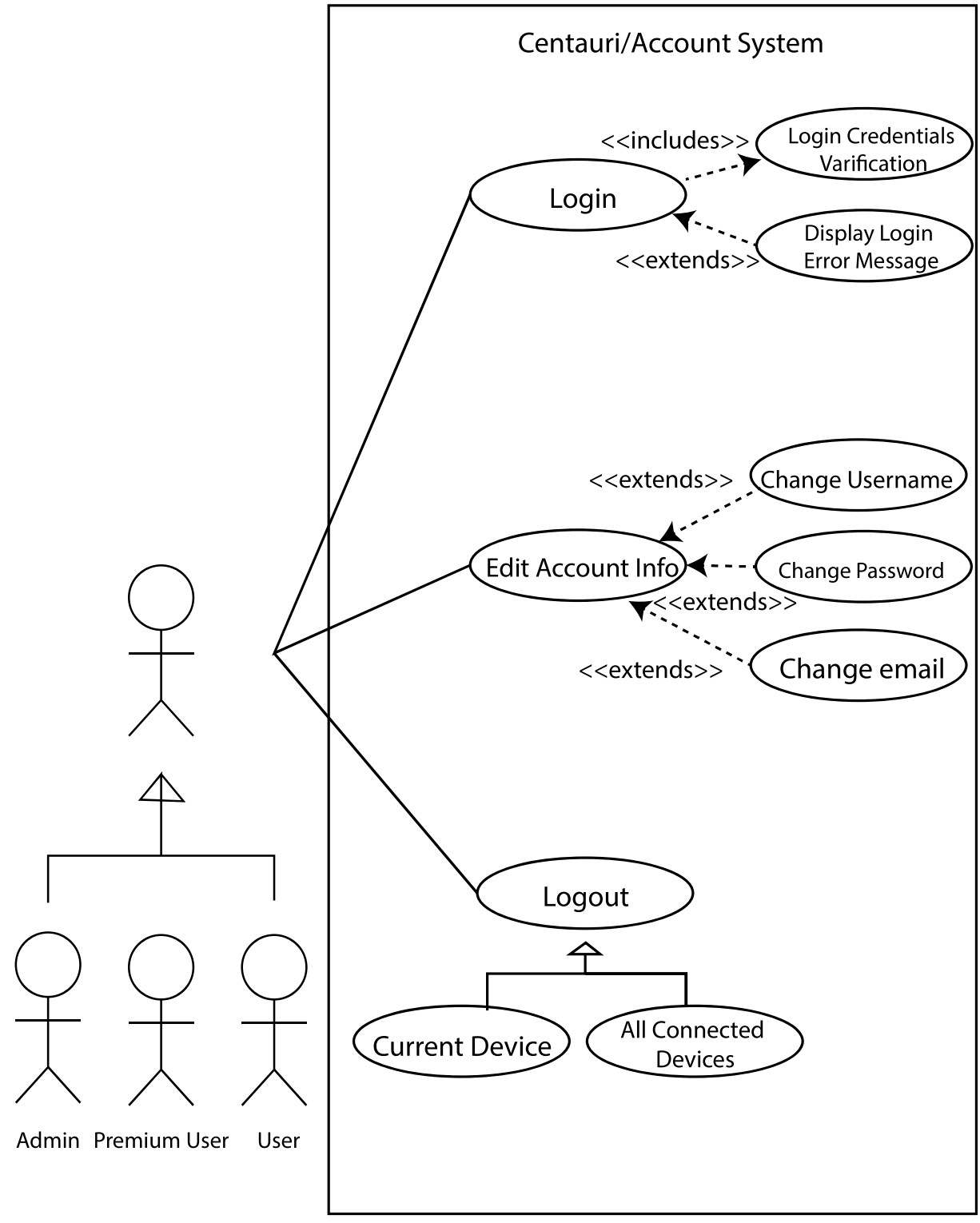
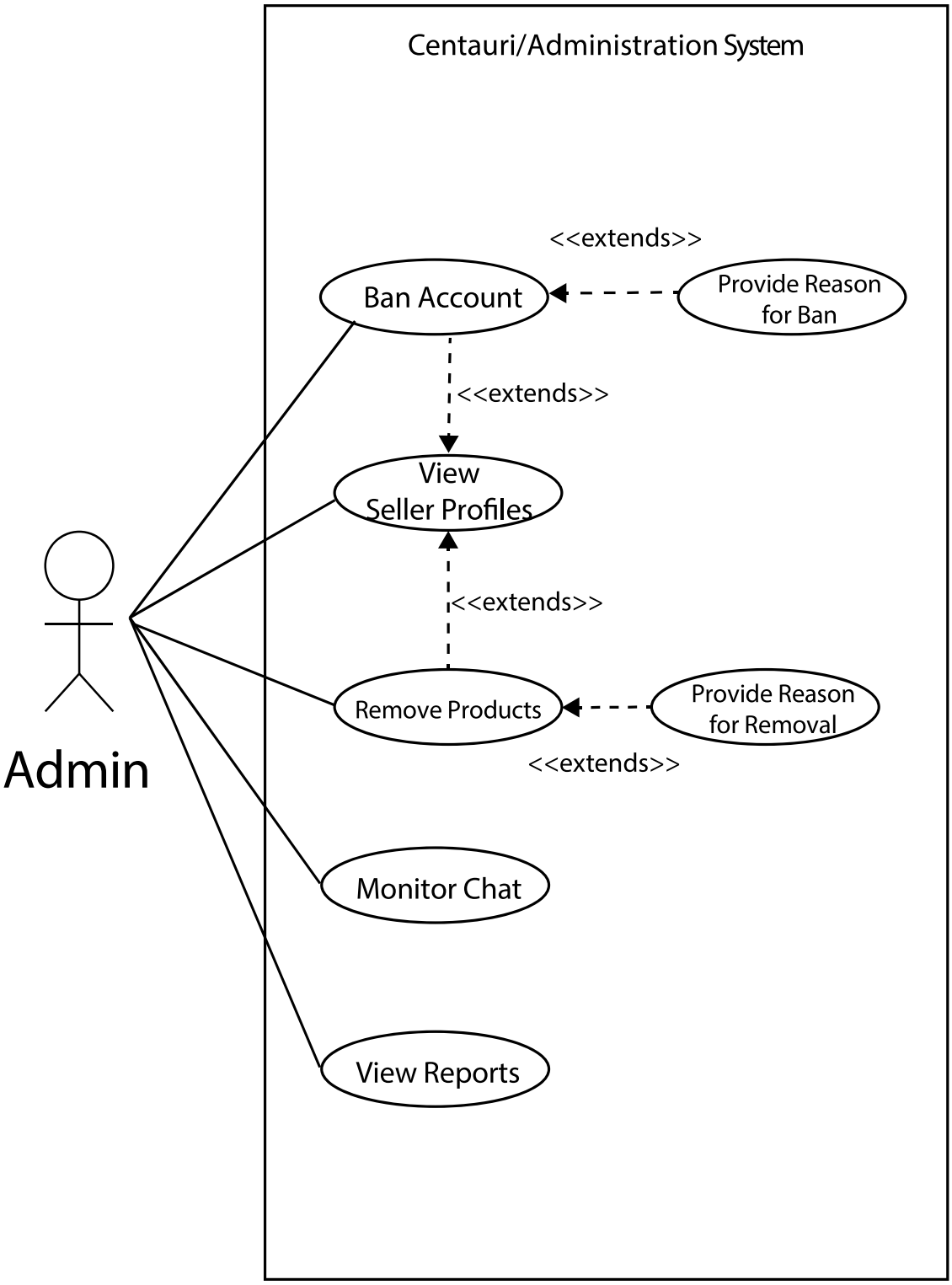
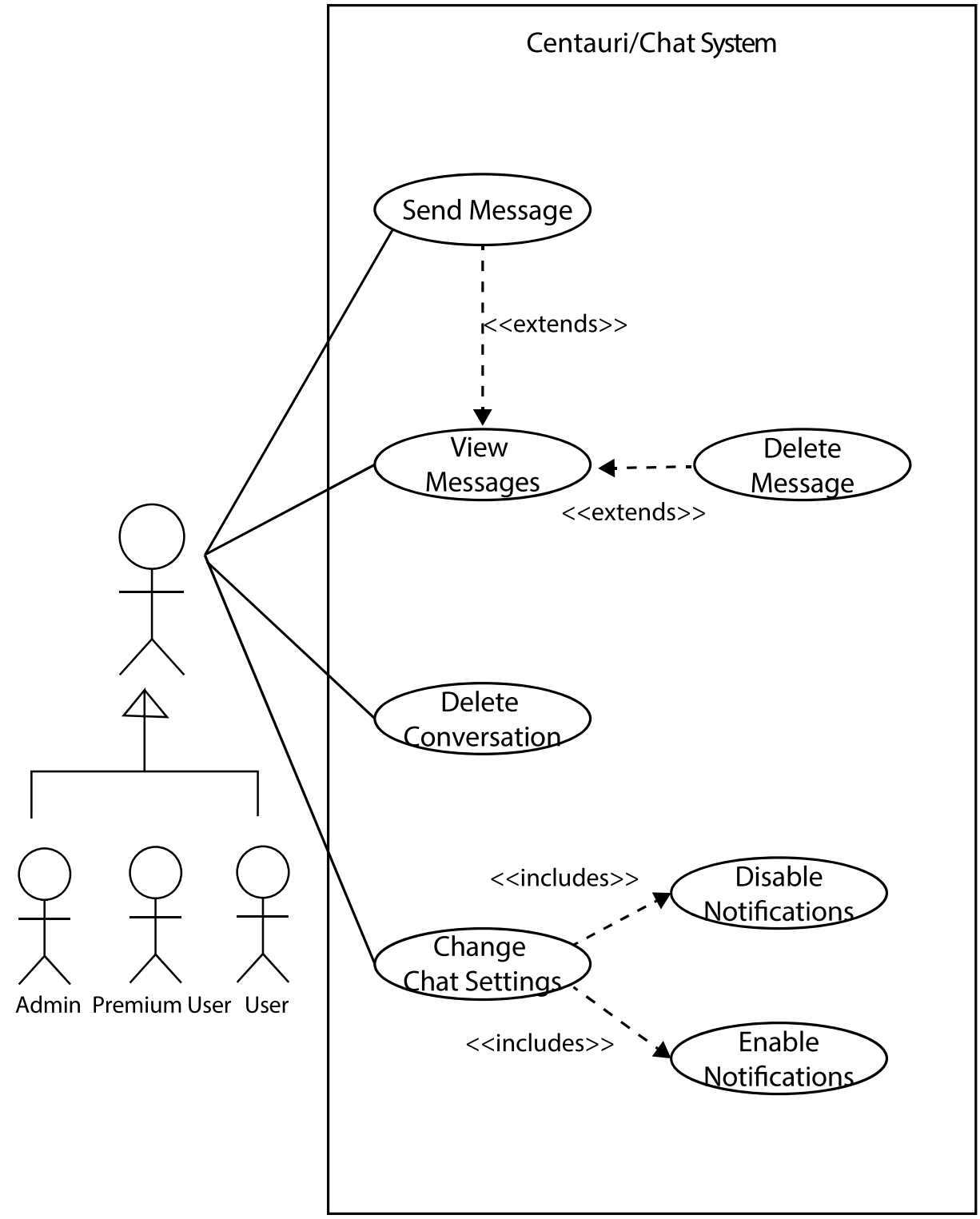
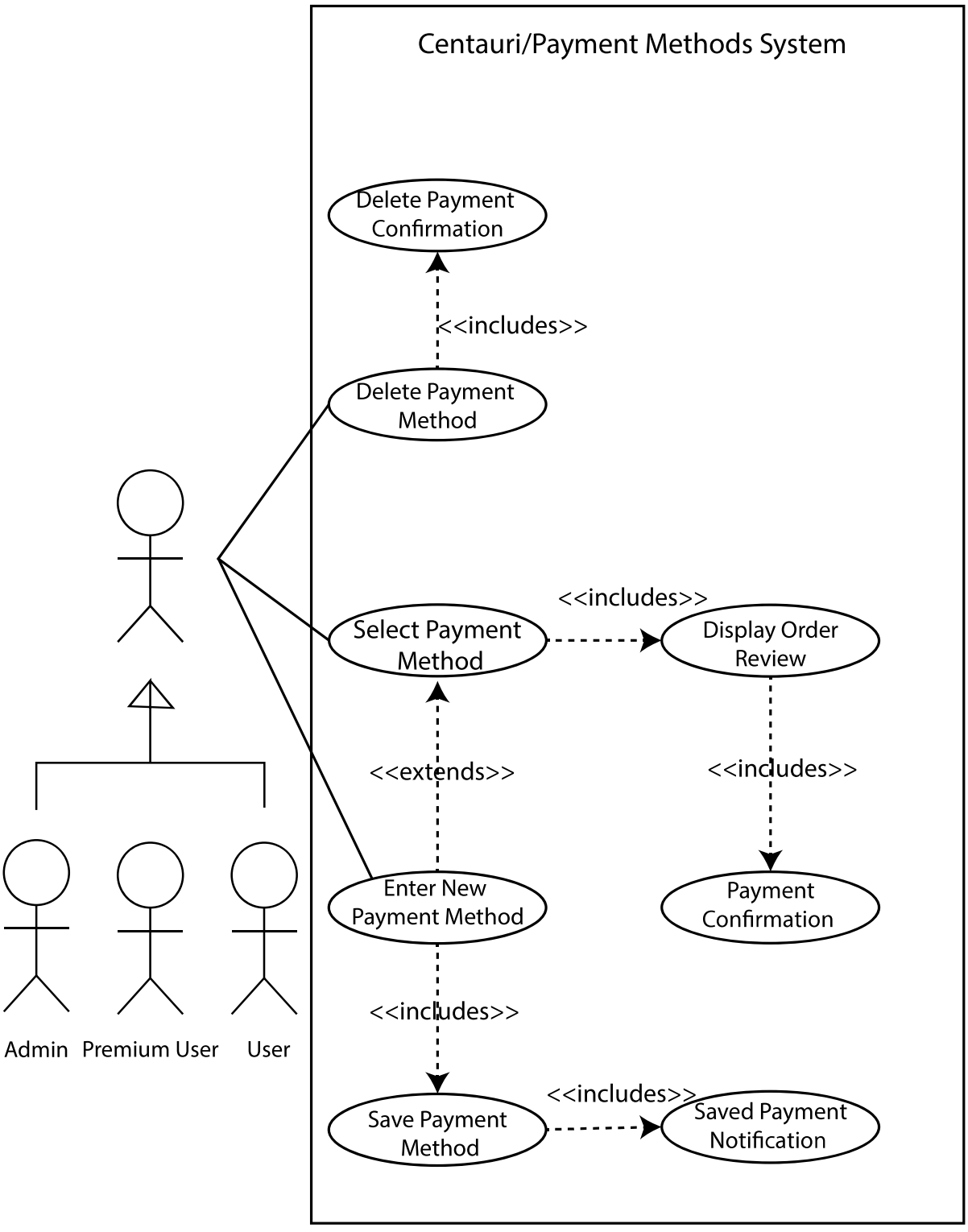
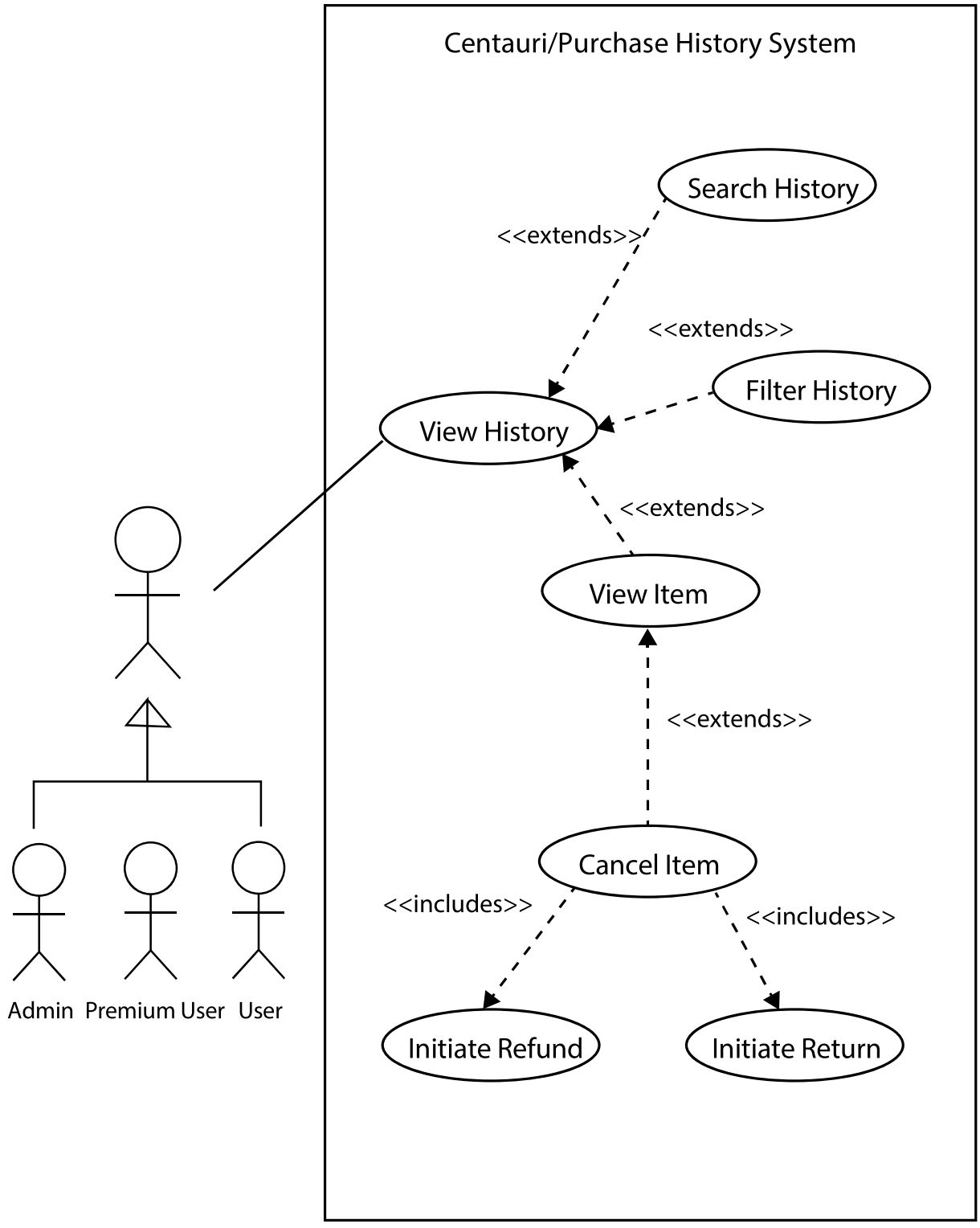
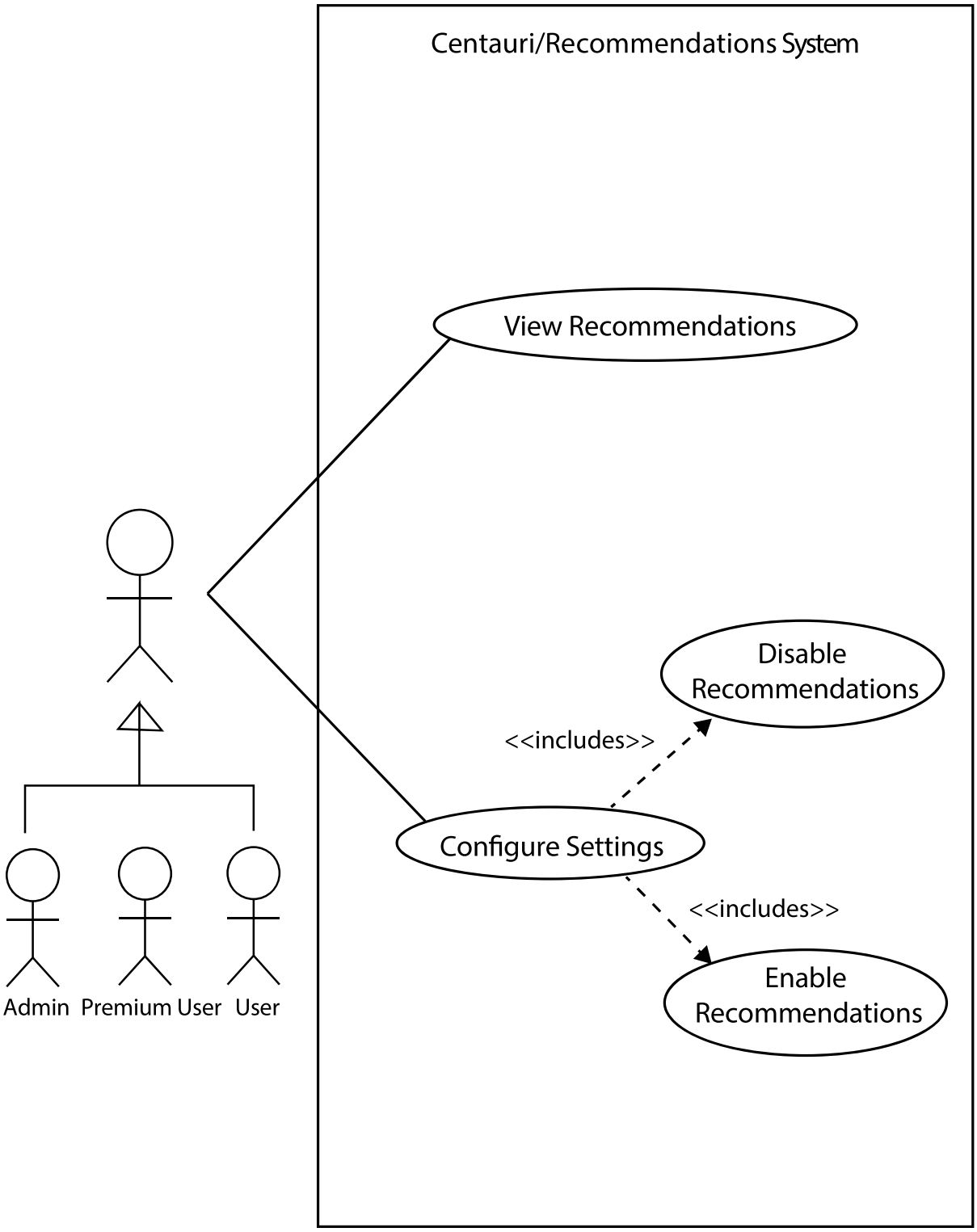

Centauri/Account System
<<includes>>
Login Credentials Varification
Login
Display Login Error Message
<<extends>>
<<extends>>
Change Username
Edit Account Info
Change Password
<<extends>>
<<extends>>
Change email
Logout
Current Device
All Connected Devices
Admin
Premium User
User

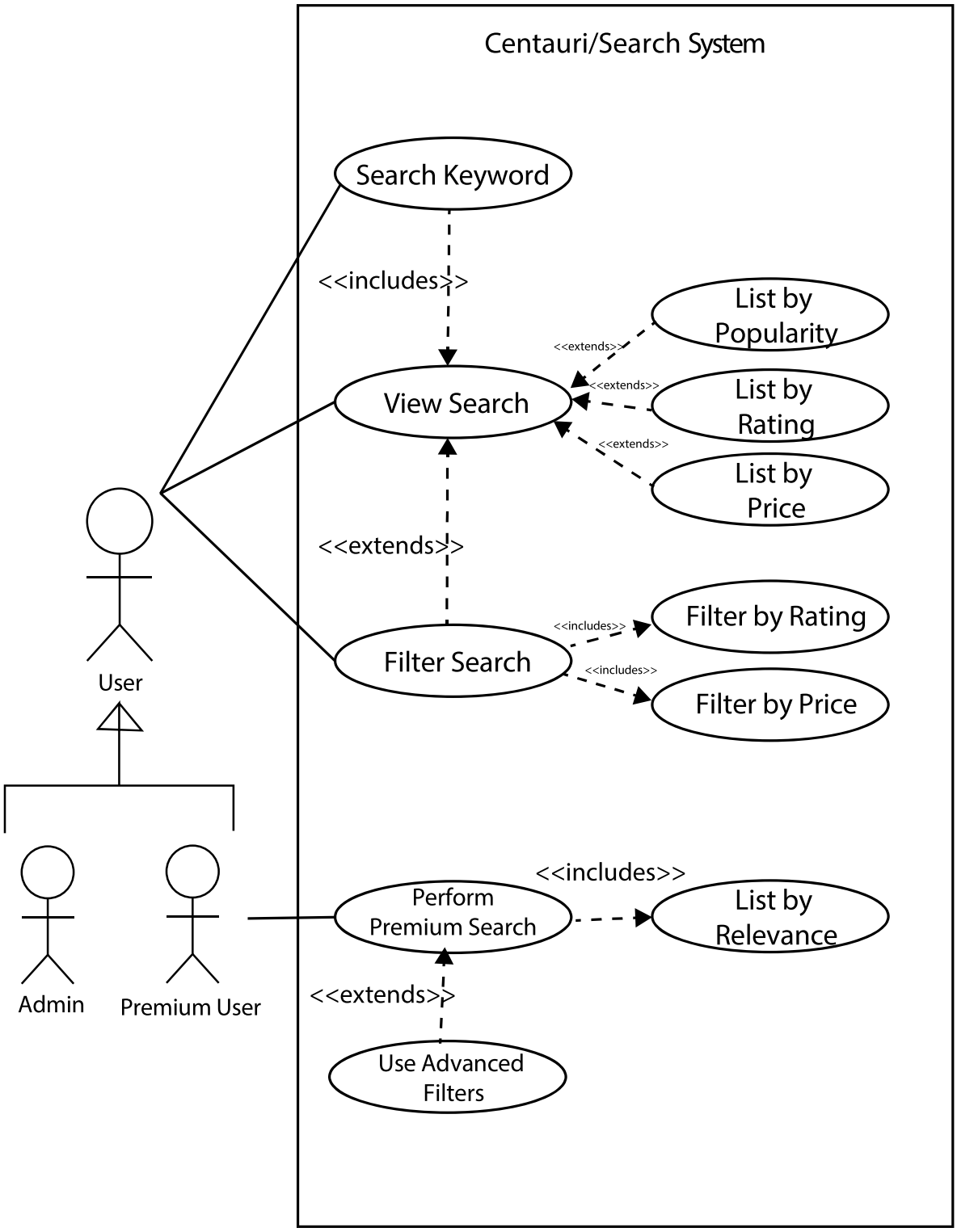

Centauri/Administration System
<<extends>>
Ban Account
Provide Reason for Ban
<<extends>>
View Seller Profiles
<<extends>>
Remove Products
Provide Reason for Removal
<<extends>>
Admin
Monitor Chat
View Reports

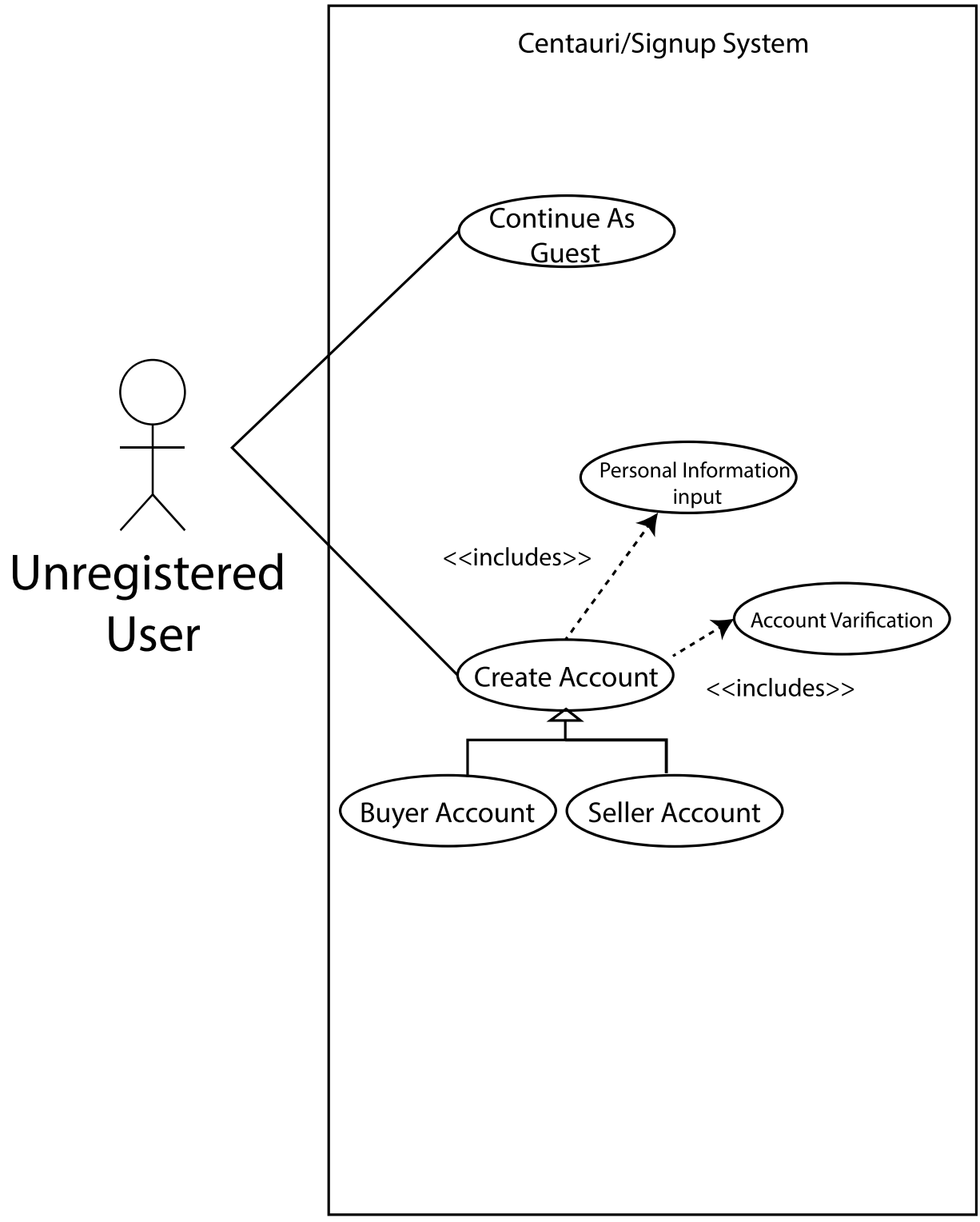

Centauri/Chat System
Send Message
<<extends>>
View Messages
Delete Message
<<extends>>
Delete Conversation
<<includes>>
Disable Notifications
Change Chat Settings
<<includes>>
Enable Notifications
Admin
Premium User
User

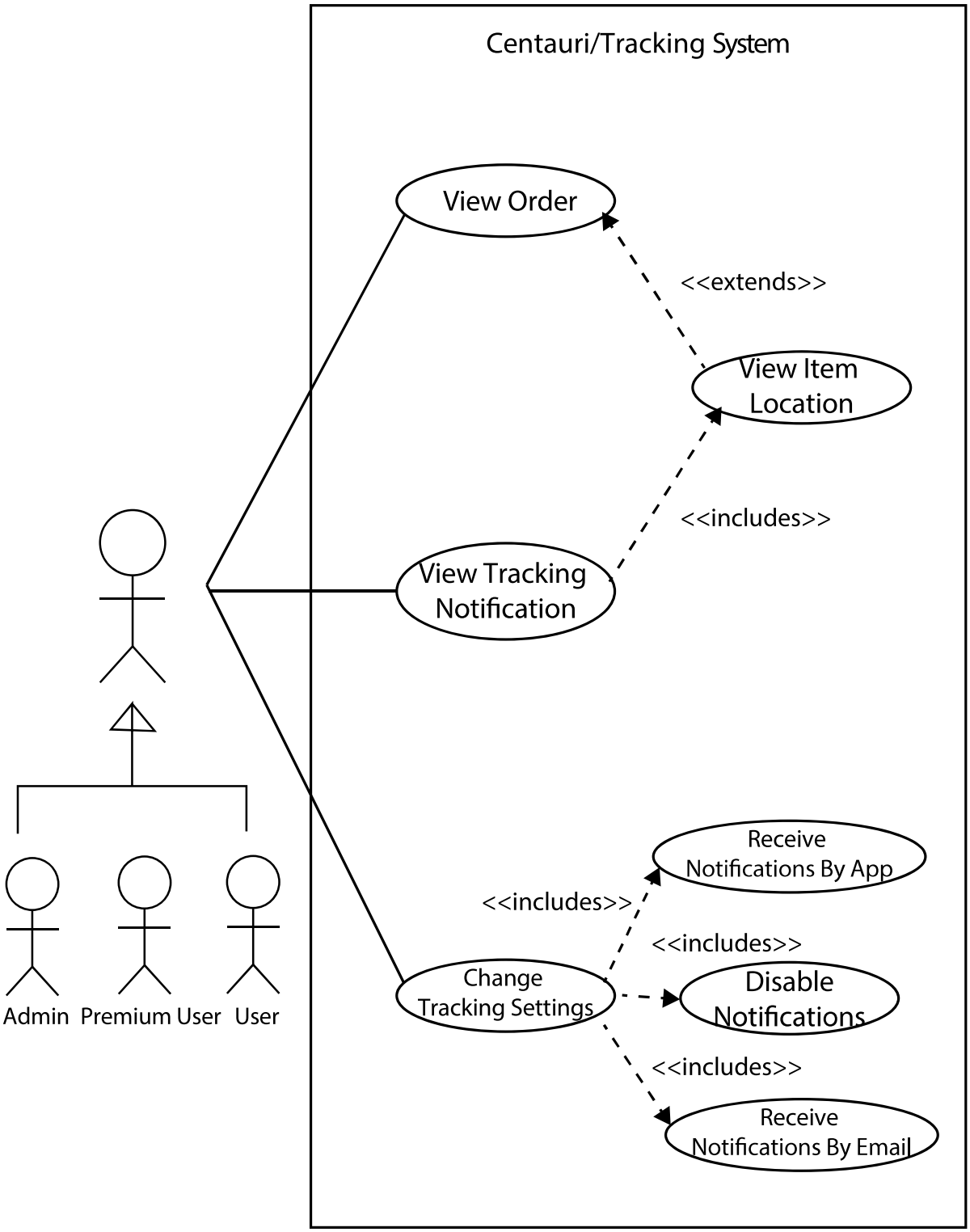

Centauri/Payment Methods System
Delete Payment Confirmation
<<includes>>
Delete Payment Method
<<includes>>
Select Payment Method
Display Order Review
<<extends>>
<<includes>>
Enter New Payment Method
Payment Confirmation
<<includes>>
<<includes>>
Save Payment Method
Saved Payment Notification
Admin
Premium User
User

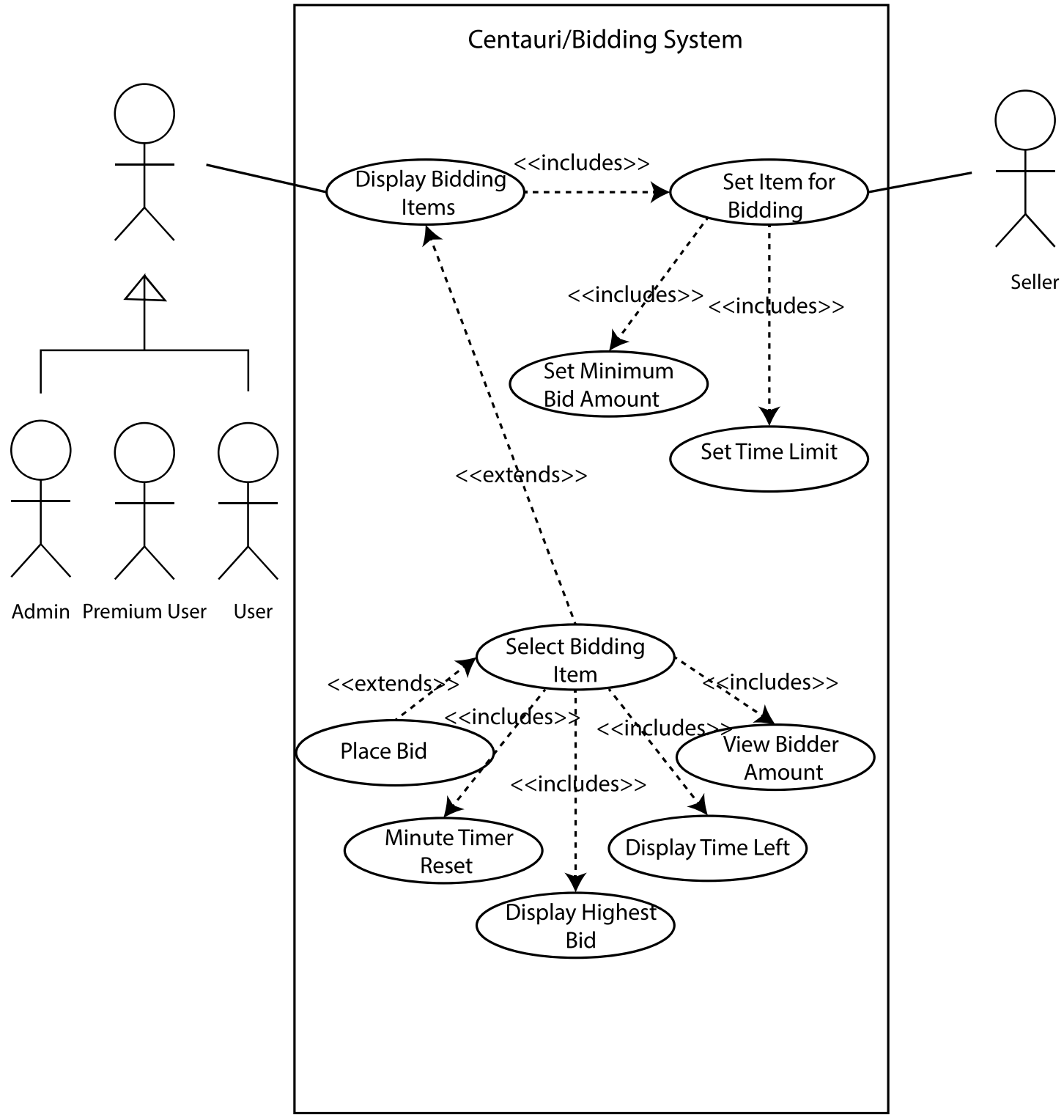

Centauri/Purchase History System
Search History
<<extends>>
<<extends>>
Filter History
View History
<<extends>>
View Item
<<extends>>
Cancel Item
<<includes>>
<<includes>>
Initiate Refund
Initiate Return
Admin
Premium User
User

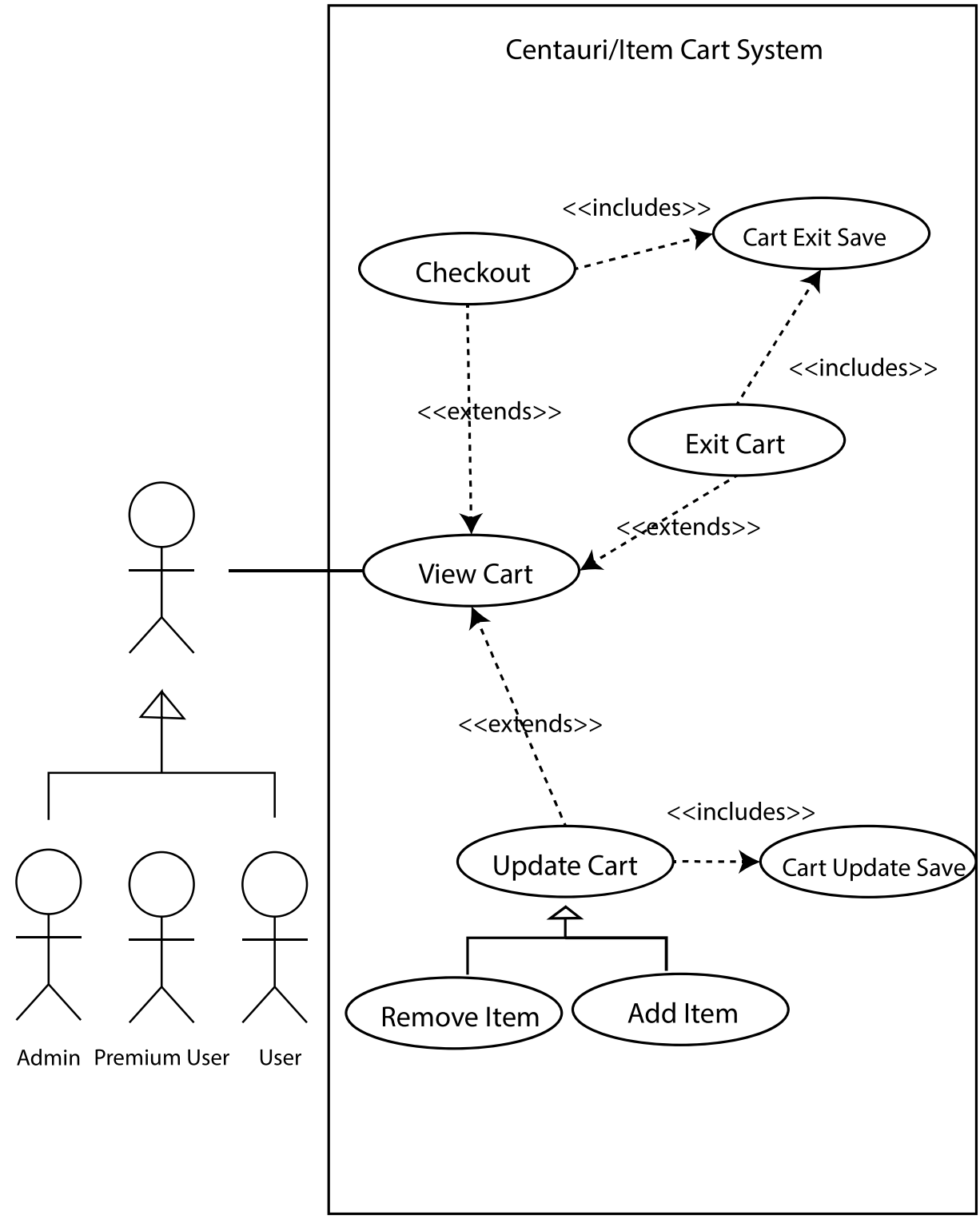

Centauri/Recommendations System
View Recommendations
Disable Recommendations
<<includes>>
Configure Settings
<<includes>>
Enable Recommendations
Admin
Premium User
User

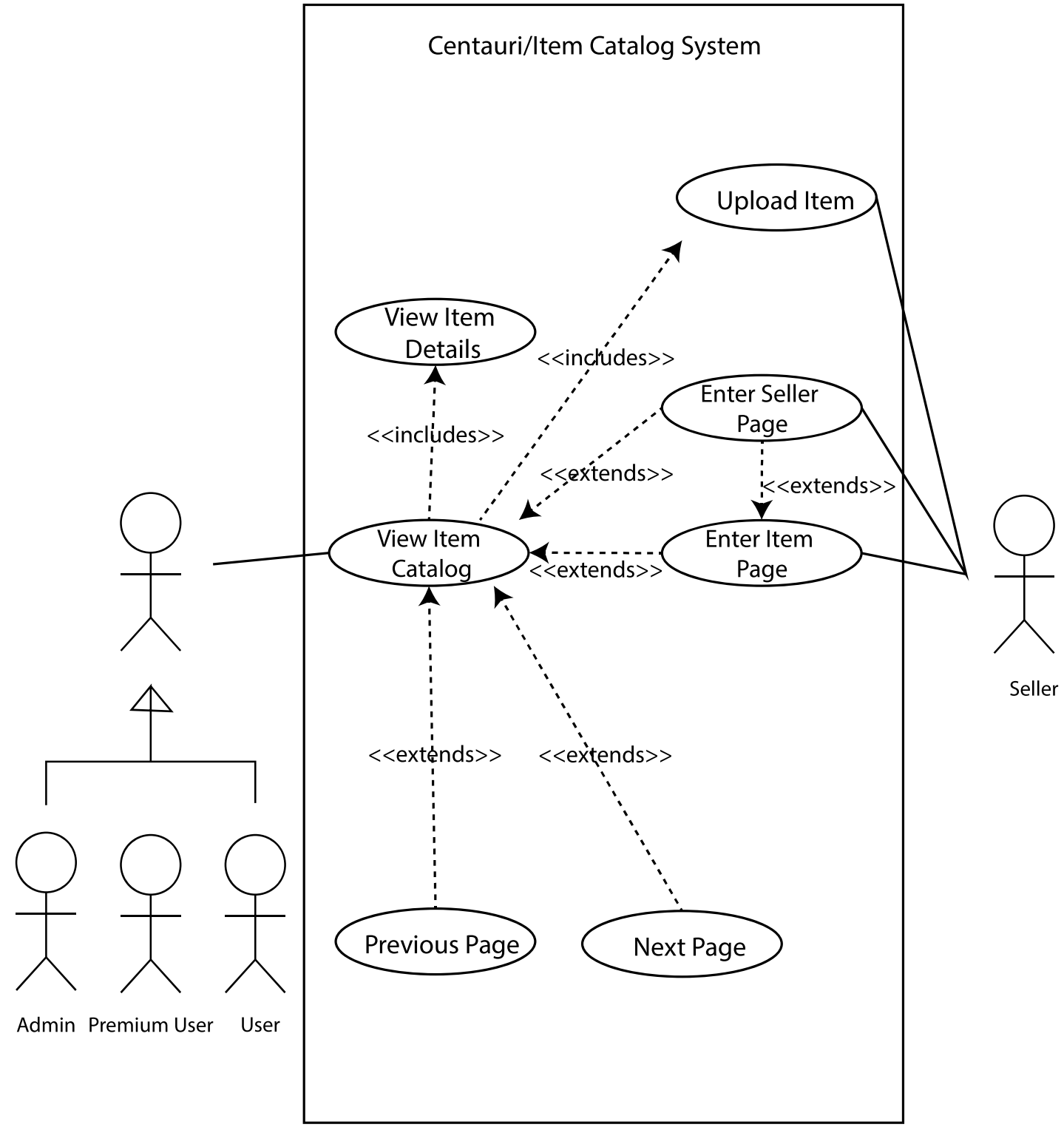

Centauri/Search System
Search Keyword
<<includes>>
View Search
<<extends>>
List by Popularity
<<extends>>
List by Rating
<<extends>>
List by Price
<<extends>>
Filter Search
<<includes>>
Filter by Rating
<<includes>>
Filter by Price
User
Admin
Premium User
<<includes>>
Perform Premium Search
List by Relevance
<<extends>>
Use Advanced Filters

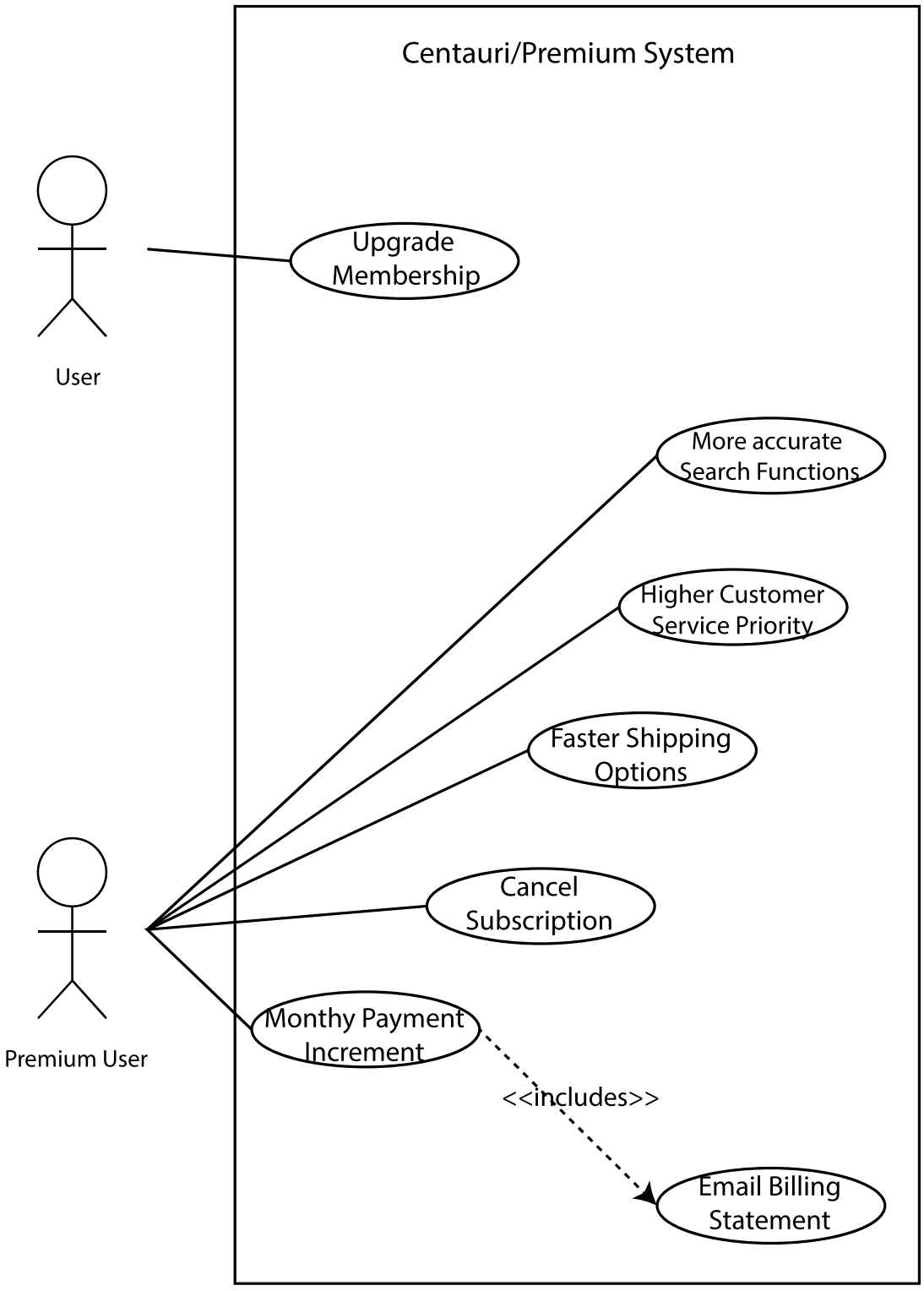

Centauri/Signup System
Continue As Guest
Unregistered User
Personal Information input
<<includes>>
Account Varification
Create Account
<<includes>>
Buyer Account
Seller Account

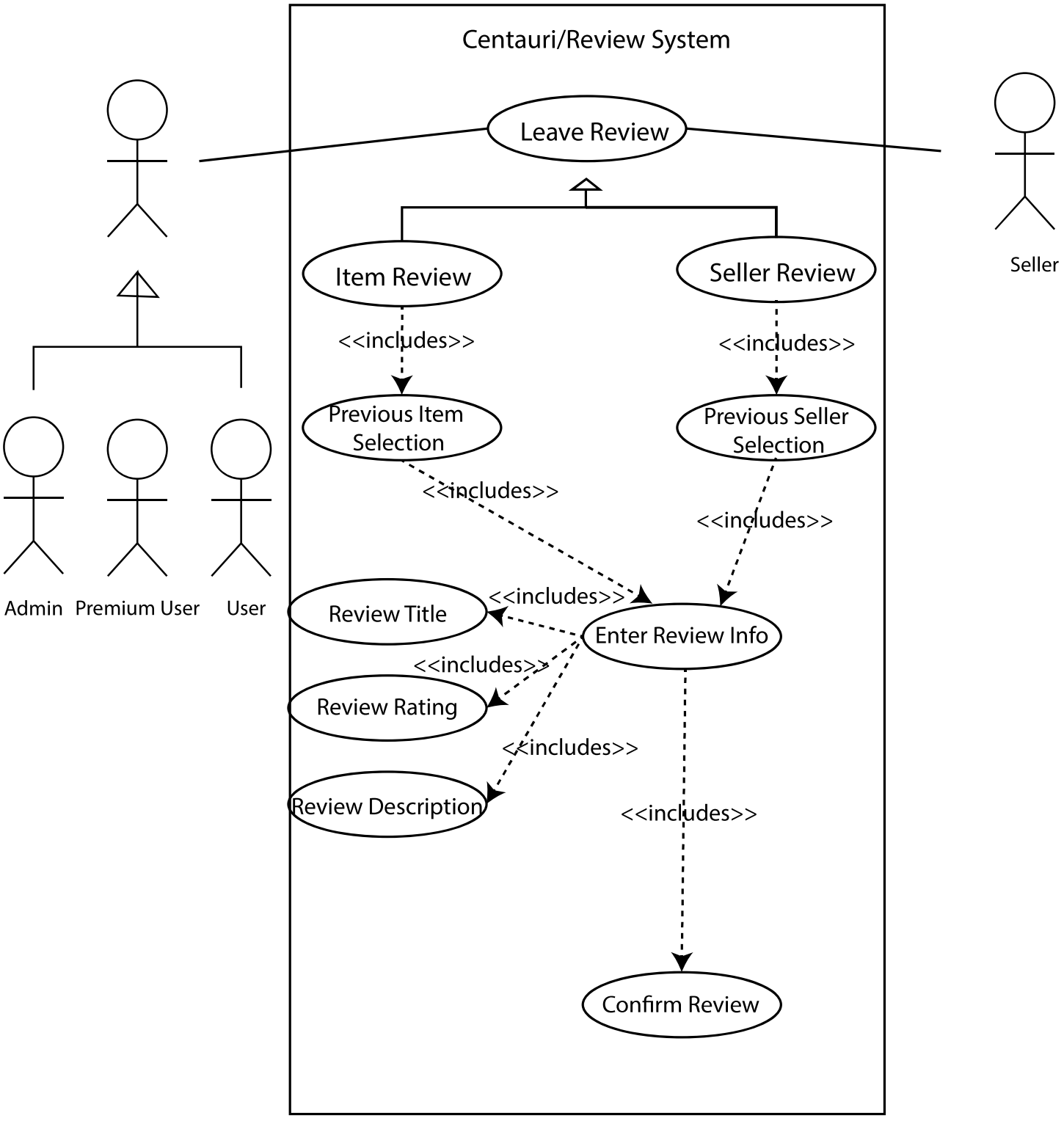

Centauri/Tracking System
View Order
<<extends>>
View Item Location
<<includes>>
View Tracking Notification
Receive Notifications By App
<<includes>>
<<includes>>
Change Tracking Settings
Disable Notifications
<<includes>>
Receive Notifications By Email
Admin
Premium User
User


Centauri/Bidding System
Seller
Admin
Premium User
User
Display Bidding Items
<<includes>>
Set Item for Bidding
<<includes>>
<<includes>>
Set Minimum Bid Amount
Set Time Limit
<<extends>>
Select Bidding Item
<<extends>>
<<includes>>
<<includes>>
<<includes>>
Place Bid
View Bidder Amount
<<includes>>
Minute Timer Reset
Display Time Left
Display Highest Bid


Centauri/Item Cart System
<<includes>>
Cart Exit Save
Checkout
<<includes>>
<<extends>>
Exit Cart
<<extends>>
View Cart
<<extends>>
<<includes>>
Update Cart
Cart Update Save
Remove Item
Add Item
Admin
Premium User
User


Centauri/Item Catalog System
Upload Item
View Item Details
<<includes>>
Enter Seller Page
<<includes>>
<<extends>>
<<extends>>
View Item Catalog
Enter Item Page
<<extends>>
Seller
<<extends>>
<<extends>>
Previous Page
Next Page
Admin
Premium User
User


Centauri/Premium System
User
Upgrade Membership
Premium User
More accurate Search Functions
Higher Customer Service Priority
Faster Shipping Options
Cancel Subscription
Monthy Payment Increment
<<includes>>
Email Billing Statement


Centauri/Review System
Leave Review
Item Review
Seller Review
<<includes>>
<<includes>>
Previous Item Selection
Previous Seller Selection
<<includes>>
<<includes>>
<<includes>>
Review Title
Enter Review Info
<<includes>>
Review Rating
<<includes>>
Review Description
<<includes>>
Confirm Review
Admin
Premium User
User
Seller

Title	Add Item
ID	UC-IC-1
Relevant User Stories	FR-CART-1, FR-CART-8
Description	This use case describes the process for adding an item to the user cart.
System Under Design	Centauri/Item Cart System
Primary Actor	General User.
Participants	Admin user, Premium User, Non-Premium User
Goal	To successfully add an item to the user cart.
Following Use Cases	Remove Item, checkout.
Invariant	No invariant.
Precondition	User is signed into a user account.
Success Postcondition	The system saves the item to the users cart.

STEPS	ALTERNATIVE
1. User selects "add to cart" button on a purchasable item.	3a. Item is no longer in stock.
2. System directs user to their cart.	3b. System displays message to user that the item is no longer in stock.
3. System saves item in the user's cart.	

Title	Ban Account
ID	UC-ADM-1
Relevant User Stories	FR-ADM-1
Description	This use case describes the steps banning an account that violates the Terms of Service.
System Under Design	Administration System
Primary Actor	Admin User
Participants	Offending User
Goal	Remove user account from the system.
Following Use Cases	Provide Reason for Ban
Invariant	None
Precondition	The user must have administrative permissions.
Success Postcondition	The account violating terms is barred access to the app.

STEPS	ALTERNATIVE

STEPS	ALTERNATIVE
1. The admin user navigates to the profile of the offending user.	1a. The admin user views a report on an offending user.
2. The system displays the page of the offending user.	1b. The admin clicks on the link to the offending user. (Go to step 2.)
3. The admin user clicks on the button to ban the account.	
4. The system directs the admin user to a page requesting reason for a ban.	
5. The admin user enters information into the form.	
6. The admin user clicks the button concluding the ban.	
7. The system sends a notification to the offending user's email inbox indicating they have been banned.	
8. The system displays a message indicating they have been banned upon an attempt to sign in by the offending user.	
9. The system locks the account down.	

Title	Cancel Premium Subscription
ID	UC-PR-1
Relevant User Stories	FR-ACC-5, FR-PAY-1
Description	This use case describes the process of cancelling a premium subscription and downgrading to a regular account.
System Under Design	Centauri/Premium System
Primary Actor	Premium User.
Participants	None
Goal	To successfully downgrade a user account to a non-premium one.
Following Use Cases	None
Invariant	User has a valid user account.
Precondition	User is a premium member.
Success Postcondition	User becomes a regular user.

STEPS	ALTERNATIVE
1. The user selects "Cancel My Subscription" button.	
2. The system directs the user to a new page to confirm if they are sure.	
3. The user selects the option "Yes".	3a. The user selects the option "No".

STEPS	ALTERNATIVE
4. The system downgrades the user to a regular account in the database.	3b. The system directs the user back to their account settings.
5. The system notifies the user in app of when their membership access will officially terminate.	
6. The system sends the user an email notifying them that they have successfully unsubscribed.	

Title	Create Account
ID	UC-ACC-1
Relevant User Stories	FR-ACC-4
Description	This use case describes the process of creating a user account.
System Under Design	Centauri/Signup System
Primary Actor	Unregistered User.
Participants	No Additional Participants.
Goal	The goal is to create a user account successfully.
Following Use Cases	login
Invariant	No Invariant
Precondition	User Selects "create account" button
Success Postcondition	User is able to login successfully with new account.

STEPS	ALTERNATIVE
1. User Selects "create account" button	5a. User chooses a username, password, or email that already exists for another account.
2. System displays dedicated account creation page	5b. System notifies user to select another username password, or email.
3. User chooses a standard account, a seller account, or both	
4. System requests the user to input a unique username, password, and email.	
5. User Inputs a unique username, password, and email.	
6. System sends email to the address listed by the user for confirmation.	
7. User confirms account through email	

Title	Edit Account Info

Title	Edit Account Info
ID	UC-ACC-2
Relevant User Stories	FR-ACC-6, FR-ACC-7, FR-ACC-8, FR-ACC-9
Description	This use case describes the process of editing the information associated with a user account.
System Under Design	Centauri/Account System.
Primary Actor	General User
Participants	Administrative user, premium user, non-premium user, seller user.
Goal	To successfully edit the information associated with a user account.
Following Use Cases	Change Username, change password, change email
Invariant	No Invariant.
Precondition	User is signed into a valid account.
Success Postcondition	No postcondition.

STEPS	ALTERNATIVE
1. User selects "Edit account information" page.	3a. The inputed information matches an existing account.
2. System prompts user to enter a new username, password, or email.	3b. The system prompts the user to input a different username password or email.
3. User enters a new username, password, or email.	5a. The inputed information does not match the initial input.
4. System prompts user to re-enter the new username, password, or email.	5b. The system informs the user that the inputs do not match.
5. User re-enters new username, password, or email.	
6. User selects the "confirm" button.	
7. System saves new information to account database.	

Title	Enter Item Page
ID	UC-CAT-1
Relevant User Stories	FR-CAT-1, FR-CAT-2, FR-CAT-3
Description	This use case describes the process opening navigating to the item information page.
System Under Design	Centauri/Item Catalog System
Primary Actor	General User
Participants	Admin User, Premium User, Non-Premium User, Seller.
Goal	To successfully display the contents of the item information page.
Following Use Cases	Add to cart, Enter Seller Page.

Title	Enter Item Page
Invariant	None
Precondition	User must view item in the item catalog.
Success Postcondition	System will display the contents of the item information page.

STEPS	ALTERNATIVE
1. User views item in the item catalog.	
2. System highlights the item, allowing user to click on it.	
3. User clicks on item.	
4. System brings user to the item page.	

Title	Enter New Payment Method
ID	UC-PAY-1
Relevant User Stories	FR-PAY-3
Description	This use case describes the process of entering a new payment method.
System Under Design	Centauri/Payment Methods System.
Primary Actor	General User.
Participants	Administrative user, premium user, non-premium user, seller user.
Goal	To successfully enter a new payment method into the system.
Following Use Cases	Save Payment Method, Saved Payment Notification
Invariant	None
Precondition	User must be checking out or user must have a registered account.
Success Postcondition	Payment method is saved temporarily for the current order, or if entering the new payment in settings using a registered account, payment is saved to the account.

STEPS	ALTERNATIVE
1. User selects the button to enter a new payment method.	
2. The system opens an input box for user to input their new payment method.	
3. The user types in their credit card information.	
4. The user clicks on a button to confirm their payment details.	

STEPS	ALTERNATIVE
5. The system confirms that the payment method is valid.	5a. The system can not confirm that the payment method is valid.
6. The system temporarily saves the payment method for the current order.	5b. The system prompts the user to enter the correct payment details.
	6a. The system saves the payment method to the registered account, if the payment method is entered in the account payment settings.

Title	Filter Search
ID	UC-SER-1
Relevant User Stories	FR-SER-6
Description	This use case describes the steps for filtering through the results of a search.
System Under Design	Search System
Primary Actor	General User
Participants	Admin User, Premium User, Non-Premium User
Goal	Display list of items relevant to the search after filtering.
Following Use Cases	Filter by Rating, Filter by Price
Invariant	None
Precondition	User must first initiate a search.
Success Postcondition	System will return a list of items that matches the search after filtering, or if nothing is left, system will return a message saying no items matched their search.

STEPS	ALTERNATIVE
1. User enters keyword(s) into the search bar.	1a. User filters an existing search. (Go to Step 4)
2. The system fetches listings that contain the keyword(s) in the title, description, or tags.	2a. System is unable to fetch listings that match the search.
3. The system displays a list of items that matches the keyword(s).	2b. System returns a message stating No Items Found.
4. User selects desired filters for narrow down search.	
5. User clicks the button to initiate a filtered search.	
6. The system filters out listings that do not match the search.	6a. System filters out every listing.
7. The system displays a list of items that matches the search.	6b. System returns a message stating No Items Found.

Title	Leave Review
ID	UC-REV-1
Relevant User Stories	FR-REV-1, FR-REV-2
Description	This use case describes the process for leaving a review on an item or seller.
System Under Design	Centauri/Review System
Primary Actor	General User.
Participants	Admin user, Premium User, Non-Premium User, Seller account.
Goal	To successfully leave a review on an item or a seller.
Following Use Cases	None.
Invariant	User is signed into a valid user account.
Precondition	User has interacted with the item or seller in question previously.
Success Postcondition	User successfully leaves a review on a item or seller.

STEPS	ALTERNATIVE
1. User selects "leave review" button.	3a. User chooses to leave review of a seller.
2. System prompts user to pick either an item review or a seller review.	3b. System displays the previous sellers that the user has bought from.
3. User chooses to leave a review of an item.	3c. User selects seller to review.
4. System displays the previous items that the user has bought.	3d. System prompts user to write a review title, seller rating, and the written review itself.
5. User selects item to review.	3e. User provides this information.
6. System prompts user to write a review title, product rating, and the written review itself.	3f. User selects the "confirm review" button.
7. User provides this information.	3g. System attaches the review to the selected seller.
8. User selects the "confirm review" button.	7a. User does not fill out all 3 sections.
9. System attaches the review to the selected item.	7b. System prompts user to fill in remaining sections.

Title	Login
ID	UC-ACC-3
Relevant User Stories	FR-ACC-1
Description	This use case describes the process of loging into a user account.
System Under Design	Centauri/Account System.

Title	Login
Primary Actor	General User
Participants	Administrative user, premium user, non-premium user, seller user.
Goal	To successfully login to a user account
Following Use Cases	Edit account info, upgrade account, view cart, view item catalog, leave review, view bidding page, view purchase history, view recommendations, search function, chat function.
Invariant	Account being logged into exists.
Precondition	User selects "login" button.
Success Postcondition	System loads Centauri home page.

STEPS	ALTERNATIVE
1. User enters username and password.	3a. Entered username or password do not match any reference in the account database.
2. User selects "login" button.	3b. System alerts user that username or password are incorrect.
3. System cross references entered username and password with account database	3c. System prompts user to enter a different username and password.
4. System loads Centauri home page	3d. User selects "forgot username or password.
5.	3e. System prompts user to enter connected email address.
6.	3f. User enters connected email address.
7.	3g. System sends user email to reset username or password.
8.	3h. User changes username or password.

Title	Logout
ID	UC-ACC-4
Relevant User Stories	FR-ACC-2, FR-ACC-3
Description	This use case describes the process of logging out of a user account.
System Under Design	Centauri/Account System
Primary Actor	General User
Participants	Administrative user, premium user, non-premium user, seller user.
Goal	To successfully logout of a user profile.
Following Use Cases	No following use cases.
Invariant	No Invariant.
Precondition	User is signed into a user account.

Title	Logout
Success Postcondition	User is successfully logged out of the user profile.

STEPS	ALTERNATIVE
1. User selects "logout" button.	3a. User selects "all connected devices".
2. System prompts user to log out of current device or all connected devices.	3b. System removes user access to the account from all connected devices.
3. User selects "current device".	
4. System removes user access to the account from the current device.	

Title	Place Bid
ID	UC-BID-1
Relevant User Stories	FR-BID-1
Description	This use case describes the process of placing a bid on a biddable item.
System Under Design	Centauri/Bidding System
Primary Actor	General User
Participants	Admin User, Premium User, Non-Premium User, Seller.
Goal	To successfully place a bid on a biddable item.
Following Use Cases	None
Invariant	User is signed into a valid user account.
Precondition	User views the item in the bidding menu.
Success Postcondition	User successfully places a bid on an item.

STEPS	ALTERNATIVE
1. System displays the available items to bid on.	5a. Another user places a higher bid
2. User selects the item to bid on.	5b. User has the option to place another bid.
3. System displays the current highest bid, time left to bid, and the number of bidders.	5c. System resets the timer back to one minute if a bid is made within one minute from t he time limit.
4. User places bid at a minimal interval set by the seller.	
5. User wins at the end of the time limit with the highest bid.	

Title	Remove Item
ID	UC-CART-2

Title	Remove Item
Relevant User Stories	FR-CART-2, FR-CART-3, FR-CART-6, FR-CART-7
Description	This use case describes the process for removing an item from the user cart.
System Under Design	Centauri/Item Cart System
Primary Actor	General User.
Participants	Admin user, Premium User, Non-Premium User
Goal	To successfully remove an item from the user cart.
Following Use Cases	Add Item, checkout.
Invariant	No invariant.
Precondition	User is signed into a user account.
Success Postcondition	The system updates the current state of the user's cart.

STEPS	ALTERNATIVE
1. The user clicks on the Cart icon.	
2. The system directs the user to their cart.	
3. The user clicks on the quantity number of an item in their cart.	3a. The user clicks on the 'X' icon next to the item to remove an item. (Go to step 5.)
4. The user changes the quantity of the item to zero.	
5. The system removes the item from their cart.	
6. The system displays the updated cart upon the user refreshing or revisiting the cart.	

Title	Remove Product
ID	UC-ADM-2
Relevant User Stories	FR-ADM-2
Description	This use case describes the steps to removing listings from the app.
System Under Design	Administration System
Primary Actor	Admin User
Participants	N/A
Goal	Remove listing from the system.
Following Use Cases	Provide Reason for Removal
Invariant	None
Precondition	The user must have administrative permissions.

Title	Remove Product
Success Postcondition	The system no longer lists the item listing on the app.

STEPS	ALTERNATIVE
1. The admin user navigates to the profile of the seller.	
2. The system displays the seller profile.	
3. The admin user clicks on a button to remove products.	
4. The system displays a list of current listings with the ability to check/uncheck listings.	
5. The admin user checks on the items that they wish to remove.	
6. The admin user clicks on a button confirming removal of the items.	
7. The system directs the admin user to a form requesting information on reason for removal.	
8. The admin user fills out the form.	
9. The admin user clicks on a button submitting the form.	
10. The system sends a notification to the seller's email inbox and app messages indicating listings have been removed.	
11. The system deletes the listings from the database.	

Title	Select Payment Method
ID	UC-PAY-2
Relevant User Stories	FR-PAY-2
Description	This use case describes the process of selecting a payment method
System Under Design	Centauri/Payment Methods System.
Primary Actor	General User.
Participants	Administrative user, premium user, non-premium user, seller user, guest user.
Goal	To successfully select a payment method for an order.
Following Use Cases	Display Order Review, Payment Confirmation
Invariant	None
Precondition	The user must be checking out.
Success Postcondition	The user is able to pay with the payment method.

STEPS	ALTERNATIVE
1. The system displays the possible payment methods for the user.	
2. The user clicks on a saved payment method.	2a. The user inputs a new payment method.

STEPS	ALTERNATIVE
3. The user checks out with the selected payment method.	2b. The user clicks on a button to confirm the new payment method is to be used.
	2c. The system temporarily saves the payment method for the current order. (Go to step 3.)

Title	Send Message
ID	UC-CHAT-1
Relevant User Stories	FR-CHAT-1, FR-CHAT-2, FR-CHAT-3, FR-CHAT-4
Description	This use case describes the steps for sending a message to another user on the platform.
System Under Design	Centauri/Chat System
Primary Actor	General User
Participants	Admin user, Premium User, Non-Premium User
Goal	Successfully deliver a message to another Centauri user.
Following Use Cases	None
Invariant	None
Precondition	User must be registered. The message must not be an empty message.
Success Postcondition	Message is delivered and shows up in the chat of both parties.

STEPS	ALTERNATIVE
1. User clicks on the button to chat.	1a. User navigates to the page of seller/buyer/customer service.
2. System opens up a chat box.	1b. User clicks on the button on their page to chat. (Go to step 4.)
3. User selects the recipient within the chat box.	
4. User types in a message.	
5. User clicks on the button to send message.	
6. App checks if message input is valid.	6a. System recognizes the message is invalid.
7. System delivers message to recipient.	6b. System notifies the user that they have entered an empty message.
8. Recipient user receives a message notification.	

Title	Upgrade Membership
ID	UC-PR-2
Relevant User Stories	FR-PAY-1, FR-ACC-5

Title	Upgrade Membership
Description	This use case describes the process of upgrading a user account to a premium account.
System Under Design	Centauri/Premium System
Primary Actor	Non-Premium User.
Participants	None
Goal	To successfully upgrade a user account to a premium one.
Following Use Cases	More accurate search functions, higher customer service priority, faster shipping options, cancel subscription.
Invariant	User has a valid user account.
Precondition	User is not already a premium member.
Success Postcondition	User becomes a premium user.

STEPS	ALTERNATIVE
1. User selects "upgrade account" button.	4a. User has not saved a payment method.
2. System loads upgrade account page.	4b. System prompts user to enter payment information.
3. System prompts user to select payment method.	
4. User selects saved payment method.	
5. System now designates account as premium account.	
6. System sends user a billing statement to their email.	

Title	View Item Location
ID	UC-TRK-1
Relevant User Stories	FR-TRK-1, FR-TRK-2, FR-TRK-3
Description	This use case describes the steps for viewing the current location of an order.
System Under Design	Tracking System
Primary Actor	General User
Participants	Admin User, Premium User, Non-Premium User
Goal	Display the current location of an order.
Following Use Cases	None
Invariant	None
Precondition	There must be an order that has been placed.
Success Postcondition	The system will display the current status and/or location of an order.

STEPS	ALTERNATIVE
1. The user clicks on the button to view their order.	1a. The user clicks on a notification of a tracking update. (Go to step 4)
2. The system redirects the user to the page of an order.	
3. The user clicks on the button to view the tracking of an order.	
4. The system fetches the current and previous statuses of an order.	
5. The system returns a page displaying the current location, current status, and previous statuses of an order.	5a. The system displays that the current status of the item is not yet available.

Title	View Purchase History
ID	UC-PHI-1
Relevant User Stories	FR-PHI-1, FR-PHI-2, FR-PHI-3, FR-PHI-6
Description	This use case describes the steps for viewing an account's purchase history.
System Under Design	Centauri/Purchase History System
Primary Actor	General User
Participants	Admin user, Premium User, Non-Premium User
Goal	Successfully display a list of all purchases made on the account.
Following Use Cases	Search History, Filter History, View Item
Invariant	The user must be logged in.
Precondition	The user must have an account in the system.
Success Postcondition	The system displays the list of all purchases made on the account, if any.

STEPS	ALTERNATIVE
1. User clicks on the button to view their purchase history.	
2. System directs them to the page with their purchases.	
3. System displays list of purchases in order of most recent.	3a. System displays a message saying there has been no purchases made yet.

Title	View Search
ID	UC-SER-2
Relevant User Stories	FR-SER-1, FR-SER-2, FR-SER-3, FR-SER-4, FR-SER-5
Description	This use case describes the steps for viewing the results of a search.

Title	View Search
System Under Design	Search System
Primary Actor	General User
Participants	Admin User, Premium User, Non-Premium User
Goal	Display list of items relevant to the search.
Following Use Cases	List by Popularity, List by Rating, List by Price, Filter Search
Invariant	None
Precondition	At least one keyword must be entered into the search box.
Success Postcondition	System will return a list of items that matches the search, or if nothing matches, system will return a message saying no items matched their search.

STEPS	ALTERNATIVE
1. User enters keyword(s) into the search bar.	
2. The system fetches listings that contain the keyword(s) in the title, description, or tags.	2a. System is unable to fetch listings that match the search.
3. The system displays a list of items that matches the keyword(s).	2b. System returns a message stating No Items Found.