Use-Case Glossary

Use Case Name	Description	Participating Actors
Setup an auction	This use case indicates that a seller is setting up an auction to sell his/her item.	Seller Management System Authentication System Database System
Set time range	This is the use case which administrator wants to set time of event auction.	Administrator Management System Authentication System
Search Items	This use case indicates that the bidder is searching items.	Bidder Database System
Join to the auction	This use case indicates that the bidder is joinning to the desired auction to buy item.	Bidder Authentication System Management system Server
Chat via chat box	This use case indicates the event of seller/bidder wants to communicate with the target user.	Seller/Bidder Server
Forward bidder to payment page	This use case is for the event of fordwarment of bidder to payment page to get the transaction done.	Bidder Management System Authentication System Database System
Display purchase	This is the use case for bidder displaying his/her purchase details.	Bidder Authentication System Database System

Use-Case Scenarios

Use case name:	Setup an auction
Use case story:	As a seller I want to setup an auction so that I can sell my items in the session.
Use case description:	User in the system clicks the button "Sell your goods" button indicating he/she wants to set up an auction to sell his/her goods.Management system checks if the user is logged in to the system or not. The authentication system validates the user's account details and management system sends an application form of the auction to fill up. User fills up the required areas and then enters the desired date and the time of the auction also uplods photos of the item lastly saves and confirms the changes.Management system checks if thhe form is filled up properly.Database system saves the photos and details about the item and auction. Management system sends notification to the administrator that an auction has been set up.
Primary actor(s):	Seller wants to set up an auction.
Supporting actor(s):	Management system sending application form to the seller and sending notification to the administrator. Authentication system validating seller's account details. Database system saving information to the database.
Triggers:	Seller indicates that he/she wants to set up an auction via "Sell your goods" button.
Preconditions:	Seller must be logged in to the system. Seller must fill the application form.

Postconditions:	Management system sends notification to the administrator that an auction has been set up.
Normal Flow:	1- Seller indicates that he/she wants to set up an auction via "Sell your goods" button. 2- Management system checks if the user is logged in to the system or not. 3- Authentication system validates the user. 4- Management system sends an application form. 5- User fills up the required inputs. 6- User confirms and sends the application form. 7- Management system checks if all required inputs are filled up or not. 8- Database system saves the details of auction and photos of the item. 9- Management system sends a notification to the administrator.
Alternate Flows:	(Alt-step 2)- If seller is not logged in to the system authentication system sends a request to the user to enter username and password. (Alt-step 2)- If the bidder has received the request and enters wrong id or password, authentication system sends an error message and sends the request again. (Alt-step 7)- If the application form is not filled up properly management system sends an error message to the user and sends the form again.
Business Rules:	Seller must be logged in to the system. Application form must be filled properly.

Use case name:	Set time range
Use case story:	As an administrator, I want to set time range of the auction, so that purchase can be done in the desired time.
Use case description:	Before auction starts administrator clicks the "manage auctions" button to select the upcoming auction to set a time range. Authentication system authorizers and sends the confirmation form to the administrator. Administrator enters his/her username and password. Authentication system validates. Administrator selects the desired upcoming auction and enter the time interval of the exact auction. Administration system validates the auction and updates the time interval for that auction.
Primary actor(s):	Administrator setting time of the upcoming auction.
Supporting actor(s):	Authentication system validating administrator's account details. Management system validating and updating the desired auction.
Triggers:	Administrator indicates that he/she wants to change an upcoming auction via "manage auction" button.
Preconditions:	Administrator must have permission to access the system. Auction must not be started.
Postconditions:	Auction's time interval must set to the administrator input time interval.
Normal Flow:	1- Administrator indicates that he/she wants to change an upcoming auction via "manage auction" button. 2- Authentication system authorizes and sends confirmation form to the administrator. 3- Administrator enters his/her username and password. 4- Authentication system validates and checks permissons.

	5- Administrator selects the upcoming auction via id. 6- Administration system checks if auction is started 7- Administrator enters the time interval for the auction. Administration system updates the time.
Alternate Flows:	(Alt-step3)- If username and password is incorrect system sends the form again and displays error message (Alt-step4)- If administrator has no permisson, system sends error message "access denied" (Alt-step5)-If id is incorrect, system sends the request again and displays error message "wrong id" (Alt-step6)- If auction has started, system sends error message "auction has started"
Business Rules:	Administrator must be logged in and must have permisson. Can't change time of an ongoing auction.

Use case name:	Search Items
Use case story:	As a bidder, I want to search through items that are available so that I can choose what items I can bid on.
Use case description:	Once the bidder choose option to search items, database system provides general page of random items before he inputs a keyword, if bidder pleases a keyword than bidder enters the keyword to the correct input area. System filters the items according to the keyword and provides the related items to the bidder.
Primary actor(s):	Bidder searching through items via related keyword.
Supporting actor(s):	Database system providing items that are related to the given keyword.
Triggers:	Bidder indicates that he/she wants to search items via choosing the correct input area and entering the pleased keyword.
Preconditions:	Bidder must fill the empty input area and click the search button.the related items should be available in the system.
Postconditions:	Related items will be provided to the bidder which are available at that exact moment with details.
Normal Flow:	1-Bidder must indicates that he wants to search via filling the search area. 2- Bidder should trigger system via search button. 3- Database system selects the related products. 4- Database system checks the items if they are available. 5-Database system provide the items to the bidder.
Alternate Flows:	(Alt-step1)- If bidder puts no input, then items are shown randomly. (Alt-step4)-If no item is available due to keyword, system sends error message informing no available item for the search.

Business Rules:	Items that are not available can not be shown.

Use case name:	Join to the auction
Use case story:	As a bidder I want to participate in the auction so that I can bid on the item I want to buy.
Use case description:	In order to join auction, bidder indicates that he/she wants to join auction via join button of the desired auction. Management system checks if the bidder is signed in or not, and than authentication system validates the account details of the bidder and server connects the bidder to the auction session.
Primary actor(s):	Bidder who is joinning to the desired auction.
Supporting actor(s):	Management system checking the bidder if he/she is logged in, authentication system validating user's account details, server joining bidder to the auction session.
Triggers:	Bidder indicates that he/she wants to join auction via join button of the desired auction.
Preconditions:	Bidder must be logged in to the system. Auction must be ongoing or upcoming.
Postconditions:	Server forwards bidder to the session.
Normal Flow:	1- Bidder indicates that he/she wants to join auction via join button of the desired auction. 2- Management system checks if the user is logged in or not. 3- Authentication system validates the user's account details. 4- Management system checks if the auction has ended or not. 5- Server forwards the user to the desired session.
Alternate Flows:	(Alt-step2)- If the bidder is not logged in authentication system sends a request to the user to enter username and password.

	(Alt-step2)- If the bidder has received the request and enters wrong id or password, authentication system sends an error message and sends the request again. (Alt-step4)- If the auciton has ended management system sends an error message indicating that the auction has finished, and terminates.
Business Rules:	1- User must be logged in to the system. 2- No user can access auction after it ends.

Use case name:	Chat via chat box
Use case story:	As a bidder, I want to chat with seller, so that I can ask further details of the product I bid on.
Use case description:	Bidder selects the target seller to communicate and than clicks "begin chat" button, server validates that the target is available to receive message or is online at that very moment, after validation server send a notification to the target "accept or deny" to receive message from the sender. Server creates session and chatting starts.
Primary actor(s):	Bidder sending message to the seller via chatbox.
Supporting actor(s):	The server validating both ends and creating the session.
Triggers:	Bidder selects the target user and clicks the send message button.
Preconditions:	Target user must be online at that very moment. Target user must accept to begin session.
Postconditions:	Server has to create session with the communicating peer. Server provides a chatting area to the peer.
Normal Flow:	1-Bidder selects seller to begin chatting via "begin chat" button. 2-The server validates that the targets is available. 3-The server sends notification to the target 4-The server sends confirmation to the target. 5-Target accepts the request. 6-Server validates confirmation. 7-Server creates session 8-Server generates the chat box.
Alternate Flows:	(Alt-step6,7): If target denies request then server sends error message to the user, and terminates.

Business Rules:	1-Bidder only communicates with available target. 2-No user is forced to communicate.

Use case name:	Forward bidder to payment page
Use case story:	As a bidder, I shall be forwarded to the payment page so that I can get my transaction done.
Use case description:	When the time comes to an end for the auction, management system checks the winner bidder a message indicating item is sold to him/her. Database system provides account details of the bidder to the authentication system to get it checked again and management system sends a congratulation message and link of payment page in order to get him finish his/her transaction.
Primary actor(s):	Bidder who won the auction and finishing the transaction.
Supporting actor(s):	Management system checking who won auction and forwarding the winner bidder to finalize purchase, database system providing account details, authentication system validating the bidder's account details.
Triggers:	Management system is checking who is the winner of the auction when the auction comes to an end.
Preconditions:	Bidder must be verified as winner. Bidders account details need to be valid.
Postconditions:	Management system send a congratulation message to bidder including the link of the payment page.
Normal Flow:	1- When the auction ends, management system check who won the auction. 2- Database system provides the account details of the winner to the authentication system 3- Authentication system validates the account details. 4- System sends a congratulation message to the winner. 5- System sends a link of the payment page.

Alternate Flows:	(Alt-step 1)- If auction is still held, management system waits.
Business Rules:	1- No one is winner before the time expires. 2- Contact details of bidder must be valid.

Use case name:	Display purchase
Use case story:	As a bidder I want to display my purchase history, so that I can see the all details about my purchases.
Use case description:	Bidder selects the display purchase button in order to get purchase details about all purchases.Authentication system authorizes the bidder and send a confirmation form. Bidder provides account details to the system. Authentication system validates and, database system provides the purchase details to the bidder.
Primary actor(s):	Bidder displaying the purchase history.
Supporting actor(s):	Authentication system validating the bidder's account details. Database system providing purchase details to the bidder.
Triggers:	Bidder indicates that he/she wants to display purchase details via purchase history button.
Preconditions:	Bidder must be registered user.
Postconditions:	Purchase details are provided to the bidder with all the details.
Normal Flow:	1-Bidder indicates that he/she wants to display purchase details via "purchase history" button. 2-Authentication system authorizes user and sends confirmation form. 3-Bidder enters his/her username and password. 4-Authentication system validates the user. 5-Database system finds the purchase details for the exact user. 6-Database system provides the purchase details to the exact user.
Alternate Flows:	(Alt-step2)- If bidder does not have account, systems send registration form with the error message. (Alt-step3)- If username and password is incorrect, system sends error message and form again.

	(Alt-step5)- If there is no purchase for the user, system sends error message that no purchase has been done before.
Business Rules:	1- Bidder must be registered user in the system. 2- System must provide all details about the exact purchase.

Use-Case Diagram

Online Auction System

- setup auction
- set time range
- search items
- join to the auction
- chat via chat box
- forward bidder to payment page
- display purchase

<<Include>>
<<Include>>
<<Extend>>
<<Extend>>

Actors:
- Seller
- Bidder
- Administrator
- Server
- Authentication System
- Management System
- Database System