

Reliability Improvement of Auction System

ASMITA MISHRA

SRM University, NCR Campus
Modinagar, Ghaziabad

INTRODUCTION:

Web-Auction system is the online based auctioning system. There are many types of auctioning system like First Bid Auction System, Bidding Fee Auction system etc. In this Web-Auction System we present software which provides the options for Auction and Battering features in it. According to which user can sell their goods or can exchange their goods on a very cheap price and in a very easy manner. In this software all the things are done in same manner as in traditional software.

KEYWORDS: Different types of Auction system, Security Requirements.

DIFFERENT TYPES OF AUCTION SYSTEM:

There are different types of Auction System like Open cry Auction System, Sealed Bid System, Online Auction System, Simulcast System, Hybrid System.

OPEN CRY SYSTEM:

In this system all bidders gather at one place make bids for the things, each bid is greater than the rival's bid and paid the highest bid for that thing.

SEALED BID SYSTEM:

In this the bidder makes the bid of the thing and seller keeps it secret till the end of the all procedure of selling.

ONLINE AUCTION SYSTEM:

All the bidding process is done on web.

HYBRID SYSTEM:

Hybrid Auctions simply include elements of the various programs listed above providing the seller with the optimum approach to create additional bids for their property.

AUCTION PROCESS:

1. BUYER AND SELLER REGISTRATION:

To sell or purchase anything in the bidding process the seller and buyer have register them for the bidding process.

2. SETTING UP OF AUCTION EVENT:

Particular Auction Event has to be organised for the auction describing details of the item to be sold and each and every details of the product and process.

3. SCHEDULING AND ADVERTISING OF PRODUCTS:

Proper Scheduling of Auction and advertising of products should be done to attract more no. buyers to the auctioning process.

4. BIDDING:

In this bidding of product is done by the bidder and highest bid of the product wins and buyer gets the product.

5. EVALUATION OF BIDS:

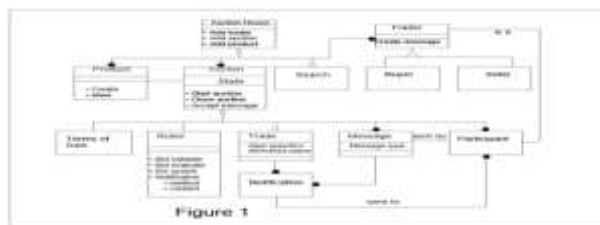
Bids are get evaluated and seller gives time to buyer to give the money within given time and seller sells the product.

SECURITY REQUIREMENTS:

The Auction House Policy and seller has to decide whether the auction is going to centralized or has to be individualized. Security mechanisms are needed to ensure that the site announcing the auction and the auction rules is not sabotaged by an outsider. This includes preventing unauthorized postings and alterations as well as preventing denial of service attacks.

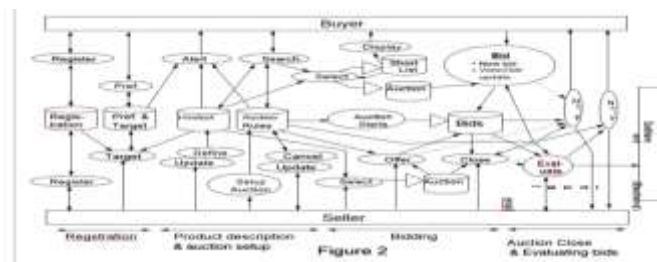
Cryptographic mechanisms that prove that a particular auction notice was posted and accessible during a certain time period will be very useful in government auctions. During the bidding phase cryptographic mechanisms are needed to ensure that a bid submitted is not tampered with, or disclosed to other bidders in violation of the auction rules. In open cry auctions spurious bids, injected by the seller or auctioneer to prompt the highest bidder to further increase his bids, must be prevented by establishing a verifiable connection from every bid to a known bidder. In the real world such unethical behaviour is called taking bids off the wall, or ceiling. A shell is a human agent deployed to inject spurious bids into an auction.

OBJECT MODEL OF AUCTION APPLICATION:



In figure-1, Auction House is a object consists of various traders, auctions and products. Trader is a participant in the system and it can be a seller or buyer. In the product object continuously updating is required of the product. There is a search option in the system to search for the particular product. In Auction object states has been defined like auction start, close auction, and accept requests. This auction object consists of having some terms and conditions which every trader has to follow. After all process done, at the end a notification is going to send to trader. The entire bid values have to be evaluated and all work are done according to that.

PROCESS FLOW DIAGRAM:



Within the figure you can see that seller and buyer has to register themselves first taking part in the auction by giving their required details asked in the registration process. The seller has to give the details of the product which he wants to sell with proper updating of the product being auctioned. Another user i.e. the buyer has to register him/her to be a part of the auction process and looks for the particular product available for auction according to the requirements and looks for bids that are already applied. If he wants to apply the bid for the product he simply register himself and make the bid he wants to apply.

At the end the sellers look for the highest bid and finalize that product to the highest bidder. The Auction application is fundamentally driven by the auction rules repository. It includes the schedule for the auctions, templates for creating the popular kinds of auctions, and the rules governing individual auctions. Different product in the product repository can be auctioned using different auction types

NOTIFICATION:

Currently two notification mechanisms are provided in the auction prototype. First one is the simple e-mail. The second one is through the message box mentioned in the previous paragraph. E-mail is necessary to communicate with buyers who are not looking at one of the auction site pages when a message needs to be delivered. Message box is more convenient for those who are on some auction site page when the message is to be delivered

BIDDING PROCESS:

1. What is the content of a bid, i.e., price and quantity for a regular auction or quantity only for a Dutch auction?
2. Under what conditions can a previously submitted bid be withdrawn.
3. The minimum bid, bid increments, and deposits required with bids.
4. The information sent back to the buyers and sellers in response to bids received. For example, in an open cry auction the notification to the buyers in response to a bid would be some subset of highest bids, and a subset of information from each bid. For example, the bidder's identity could be dropped. In a sealed bid auction only the bidder sending the bid will get a simple acknowledgment.
5. In open cry and Dutch auctions, which subset of the bidding history is accessible to the bidders?
6. How the notifications are sent back: e-mail, live sockets, etc.
7. Which subsets of buyers are eligible to submit bids?
8. Are bidders allowed to submit multiple bids when multiple items are on sale?

SELLER'S OPTIONS:

1. The seller's ability to modify the sell offer by lowering published price in a Dutch auction, or the inventory being auctioned.
2. Auction closing rules, i.e., whether the auction ends by seller's manual intervention, at a fixed time automatically, after a fixed period of bidder inactivity, or some combination of the three.
3. Under what conditions, if any, can the seller change the auction rules or withdraw the auction.
4. Rules for resolving tied bids, i.e., whether an earlier bid gets the priority or repeat customers are given higher priority.
5. Complex bid evaluation rules like giving weight to bids specifying large product quantities or prompt payment.

USABILITY:

Traditionally the buyers and the sellers in an auction have been seasoned professionals of an industry with intimate knowledge of the auction mechanism and of the relevant bidding strategies. However, Internet brings auctioning to the masses, and a typical participant may know very little about the often complex auction mechanisms. Thus the usability issues in the design of auction application are extremely important. Not only should the navigation within the application be simple and intuitive, as discussed in the previous section, help should be available on the finger tips on:

How to use the application software

Explanation of the auction mechanism deployed

Bidding options available to the buyer and strategic implications of each option

For sellers the auction mechanisms available and the implications of choosing one or the other

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