# Auction System

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#### 0.1 Introduction

An Auction system is a program which will help users to buy Listed items. Registered users will will be able to bid for products that are available in the program. The highest bidder will receive the item. The item will be listed for a limited time only, starting with a base price set by the seller. Projects like these bring a great impact in the fluidity and bring economical benefit by putting pressure on reducing the prices on goods and services and making sure goods and services are sold for their true value.

## 0.2 Background(Research and Evaluation)

For this project we started hovering on the internet to get unique ideas and plans to make our final project. We took help from our teacher and lab instructors and shared our ideas with them to take their experience and execute the project. So in this whole process we came through the Website known as EBAY which is an online platform for auction(buying and selling). So we tried to take up that idea and replicated it in our own project by using those fundamental aspects and concepts used by EBAY. EBAY allows users to either sell their items or lets them buy products by bidding on a specific product, if no one, other than the bidder bids higher than the previous bidder

then the bidder with highest bid gets to purchase that item. Once bid is accepted the bid cannot be lower than the previous one and the bid placed is visible by everyone who wants to check the price of that object.

## 0.3 Problem Analysis

In today's world digitization and technology is recommended in every aspect of life. By taking a look around we can find many important and fundamental issues which are still not addressed the way it should be.

When it comes to auctions and bid, the old methodology is getting your products appraised by a professional and only then your products are placed in an auction house which takes time and also causes you to loose a lot of money since they take up a huge percentage. Online Auction systems remove all these issues by giving its users full control on how they want to set their prices of the products and users can bid for the products in private without letting other people know. This provide anonymity and the freedom to sell and bid on whatever. So this problem was addressed by our project through the aspect of building up an auction program which will help people to get on a single page and resolve issues regarding it.

## 0.4 Methodology

This program will give an overview of how an item can be bid on, what happens after a bid has been placed, what happens after a bid has been accepted or rejected, and specifically how a transaction is carried out.

## 0.5 Implementation

Our Program starts of by Asking user to either sign up and log in, If its users first time then user should select the sign up option where he will be entering his details such as username, first name, last name, password and DOB upon which accepted (the system makes sure that the username isn't already taken if so user has to input a new username, and the system makes sure the password is 6 characters or more to increase the strength of the password) the user is taken to the Auctioning system. The way the system identifies if the username already exists is through file handling and pointers. the program opens the file where all the usernames exists (username.txt) and reads line by line using fscanf(), then storing the the retrieved data into an array and comparing to see if it matches, all the way to the end of fill feof(),

if it doesn't exists then the value is accepted. Same technique is placed in the Log in section where once the username is entered, the program opens the username.txt file and checks if the entered username exists if so the pointer called \*counter stores the line number on which the username is stored at, this counter is used to going to that specific line in the password file (password.txt) and making sure that username correlates to the password of that username, this way the system can identify that user hasn't entered the username of someone else by accident, because it is very unlikely that someone would use same password for that very username. Once all the verifying process has taken place, the user is taken to the auctioning section.

In the auctioning section, the user has the option to view, bid or close (this will take the user the the checkout section). user can look up the available items ready for bidding with its starting price beside it. Once the user has thought of the product he would like to purchase, the user is given the option to enter the product number and then asked to bid the amount, making sure that the bid is higher, the system makes sure that the bid is higher, once the bid is made, the system checks weather the bid was higher or lower than the price of the actual product (this is done by getting the price of the object stored in the file and comparing it), if its higher then the bid price is set as the new price of the object. the prices of the object is stored in the file, when the user enters the product number, the system then knows where the prices of that specific item is stored, then relieves t, stores it in the array and then compares to make sure the entered bid is higher.

Once selected 'close', the user is taken to the checkout page where the user is displayed its selection of the items he bid on, and his total price. user is asked to enter his billing address information, and is given the option to pay either cash or credit.

#### 0.5.1 Overview of the program

System will allow the user to login or User can Create an New account.

System will verify the user name and password.

System will not allow user to login with invalid username or password.

System will be able to remember username and password.

## Once This Stage is completed the user is directed to the Auctioning Page.

System will allow user to View products that are available for auction.

System will allow the bidder to bid on desired product.

System will allow users view their active bids/updated price of the products. Once at the checkout page, he can see all the products he bid on and check

his total.

#### 0.5.2 Complexities

Complexities that arose while implementing the system was how to tell the system the prices of the chosen product and to update the prices accordingly. they way we overcame them was was the method of copying the data into another file and renaming the file to the original file, this saved us from creating multiple temporary files which would have been hard for the system to identify which files to use later on in the program, since the updated file were used to do further comparisons later on if more bids were made.

#### 0.6 Results and Conclusions

End Result of this project is a functioning auction system which will allow registered users to bid and purchase the listed items in a set time frame. Items could be of any category depending on the seller. With the advancement in computers and communication technologies, almost every house has a PC. Traditional buying and selling of merchandise took a new step due to this advancement. Before, people had to go to stores, retailer shops to buy stuff. To sell the stuff it used to be even more difficult as you can't find the appropriate buyer in your geographical region. Buyers can also find new or used items for a lot cheaper price than the commercial market. Auctioning has been particularly useful for prospective buyers looking for used merchandise. As the used merchandise is tough to find at stores and they are usually available at cheaper price. With the increase in the number of issues, other issues had to be addressed. These issues include reliability, scalability of the application to handle large number of users, providing security for the transactions.