Research Article

BID CHASER WEB APPLICATION FOR ONLINE AUCTION OF SEIZED VEHICLES IN PUBLIC SECTOR

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A R T I C L E   I N F O

A B S T R A C T

The main objective of this concept proposal is to discuss what changes can be made to the existing traditional auction system in the public sector and how it can be managed and improved better. The current form of the auction that takes place in today's market involves the sale or auction of vehicles seized by government officials that are outdated. Vehicles seized due to smuggling or engaging in other illegal activities are sold by holding an auction at a specific place and time. As a result, attendance was low and only a few people knew about the auction. This document proposes a web application called "Bid Chaser" written in PHP language where users can participate in tenders under direct government supervision and thus eliminating middlemen. The arrival of this new web application can bring about a big change in the current market.

INTRODUCTION

Online auctions have become one of the fastest-growing forms of e-business on the internet. Around the world, people have started participating in online auctions to bid on products or services that interest them. [1] Some of the first online auction platforms were Ebay.com and Onsale.com, where anyone could participate in auctions. The only difference is that the Onsale website acts as a seller while Ebay.com becomes the first auction site to support person-to-person transactions. As a result, Ebay.com gained popularity and became one of the largest e-commerce platforms in the late 2000s. The idea of creating an online platform arose when it was observed that the government was selling confiscated cars through intermediaries resulting in a delayed process and time. Hence, the companies mainly claim the main profit from trading. [2,3] The auction took place also not under direct government supervision.[7] Governments of states like Tamil Nadu and Kerala have held live auctions in different parts of the districts, but participants have to pay a small fee to view the auction. Details like location or occasion, date, vehicle, etc. are published in newspapers or magazines and therefore reach a very low audience.

Existing System

The existing system of government selling seized vehicles has not yet changed to online bidding. The bid date, vehicles, and other details are published in newspapers and also online but it is not maintained properly. The process taken to sell the bid vehicles through the third party companies is very slow and a major profit is taken by the company itself. These companies are also not under the direct observation of the government. The chances of happening corruption are really high. The participation of bidders is also quite low in the existing system as the public reach is really low.

Proposed System

The existing system of government selling seized vehicles has not yet changed to online bidding. The bid date, vehicles, and other details are published in newspapers and also online but it is not maintained properly. The process taken to sell the bid vehicles through the third party companies is very slow and a major profit is taken by the company itself. These companies are also not under the direct observation of the government. The chances of happening corruption are really high. The participation of bidders is also quite low in the existing system as the public reach is really low.

LITERATURE SURVEY

[4] Online auctions are becoming more and more popular in e-commerce (EC). It has become a major method of inter-consumer (C2C) commerce, such as eBay. With the cooperation of the multi-dealer system, a common concept of stable cooperation and exchange can be formed, and the dealer can obtain the most general knowledge to complete the task. MAS member is supportive and self-serving. Online auction participant's corporation and competition Based on the analysis of, the concept of overtime and historical information are provided. Due to the incomplete information currently available, auctions will be inefficient without consideration of past information. This article proposes a MAS flow framework and a trading algorithm to assist auctioneers in auctions. Prices

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enter into negotiations honestly and aggressively. Increased efficiency and transparency for participants.

[5] Auctions are an efficient way to allocate goods or services to the highest-scoring bidders. The growth of auctions facilitated online transactions but posed new and distinctive challenges. Establishing trust between sellers, buyers and auctioneers is difficult without centralized auction sites or platforms that collect bids and produce auction results. However, these third parties may be unreliable and the seller or buyer may be malicious or may refuse to deliver or pay according to the protocol. In addition, the 's open and anonymous online environment may encourage auction participants to form collusion alliances to conduct auctions and obtain unfair profits. Multiple auction designs have been proposed to address these concerns, but they fail to achieve concurrent decentralization, trust-building, and practical implementation. The CReam is the first anti-collusion decentralized auction system deployed with smart contracts on the blockchain. With a crafted Smart Auction contract, untrusted and reasonable buyers and sellers are stimulated to function properly and thus transact securely without the need for a trusted third party Bidding mechanism in a smart contract can effectively prevent collusion of contractors and ensure honesty. We are implementing a fully functional CReam on the Ethereum network. Extensive testing results confirm that CReam can significantly reduce collision and achieve approximate optimal revenue with low contract execution costs.

[6] In recent years, the proliferation of the World Wide Web has led to an increase in the number of public auctions on the Internet. One of the characteristics of online auctions is that successful execution requires a large number of buyers and sellers on its website. Thus, high-traffic auction sites have an advantage over low-traffic sites. This leads to greater polarization of buyers and sellers towards a particular site. This is often referred to as the network effect in many web and telecommunications applications involving interactions between a large number of entities. Although this effect has been qualitatively known to increase the value of the entire network, its effect has never been rigorously modeled or studied. In this article, we build a Markov model to analyze the network effect in the web auction case. We show that the network effect is very strong for the online auction case and has could lead to a situation in which the auction could quickly overwhelm its competing sites. This leads to a situation where the stable natural equilibrium is that of a single online auctioneer for a given product and geographic location. Although the single-player structure is unlikely due to some approximate assumptions in the model, this trend seems to suggest the possibility of a single dominant player in the online auction space.

ER Diagram

[9] ER Diagram is a type of flowchart to represent how entities such as objects or people are related to each other within a system. They are mostly used in software engineering and other research areas to design databases etc. They also use a set of symbols such as rectangle, square, and oval to show the connection between the entities and their relationships.
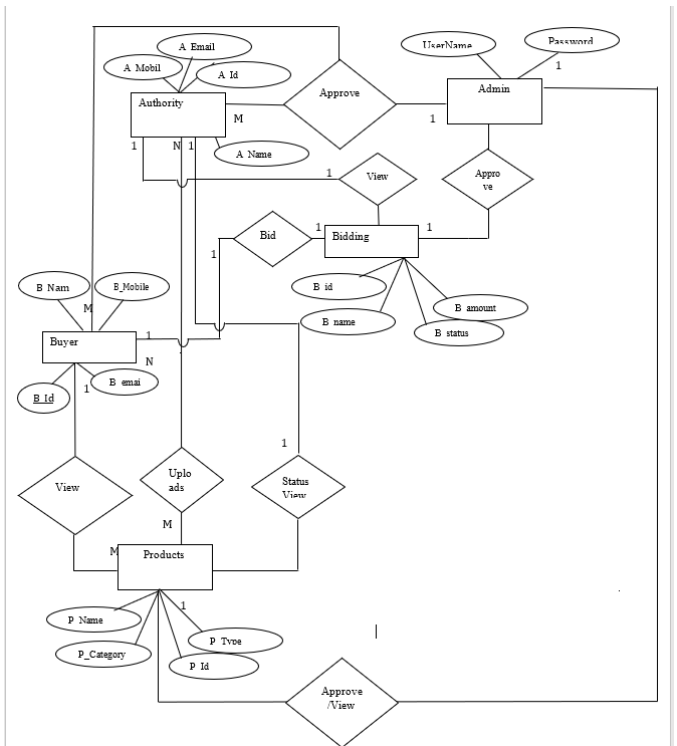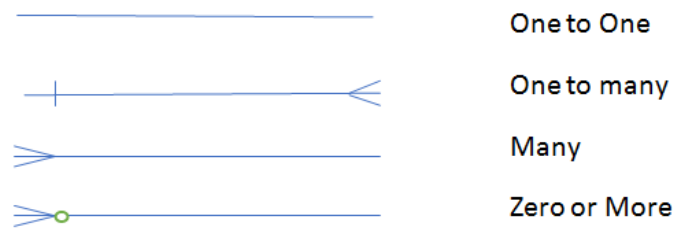

DFD Diagrams

[10] A Data Flow Diagram shows the flow of information for any system or a process in a graphical representation. It uses defined symbols such as rectangles, circles, and arrows, to display data entries, exits, and routes between each point. arrive. Data flowcharts can range from a simple, even hand-drawn, process overview, to an in-depth, multi-level DFD that gradually dives into how data is processed. They can be used to analyze an existing system or model a new system. Like all the best charts and graphs, DFDs can often "say" intuitive things that are hard to explain in words, and they work for both technical and non-technical audiences, from the developer to the tester. They are less applicable today for visualizing interactive, real-time, or database-driven software or systems.
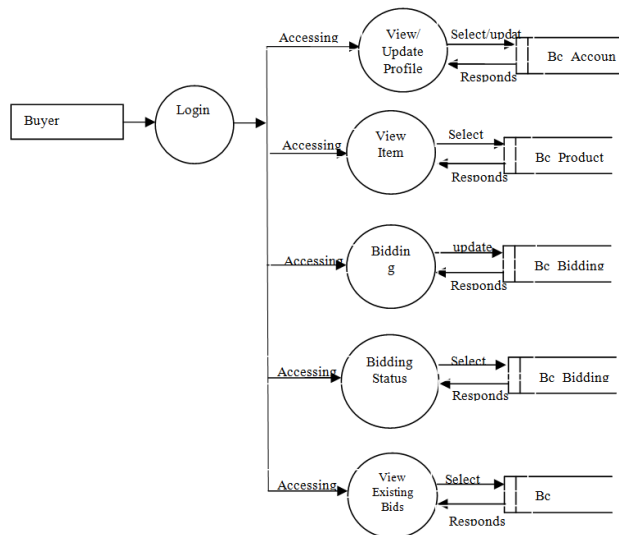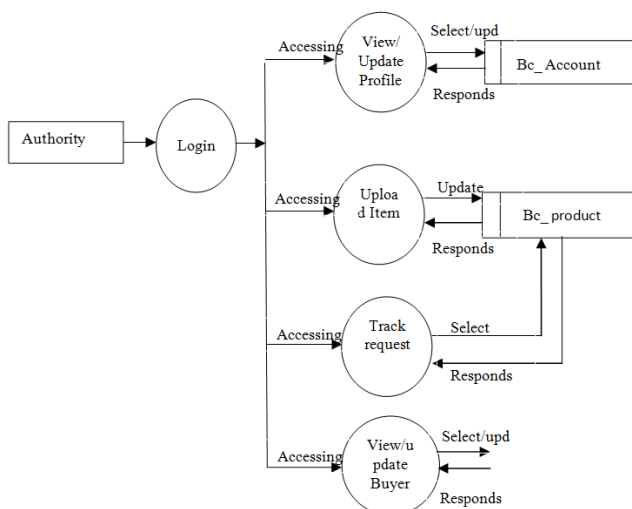
NOTATION	SYMBOL
External entity	
Process	
Data flow	

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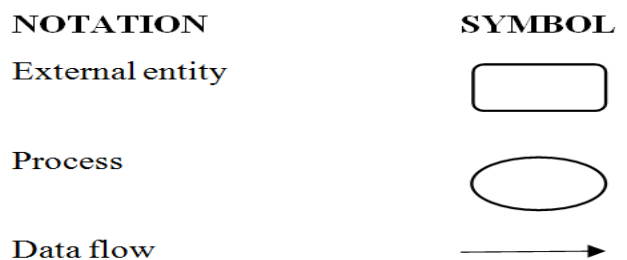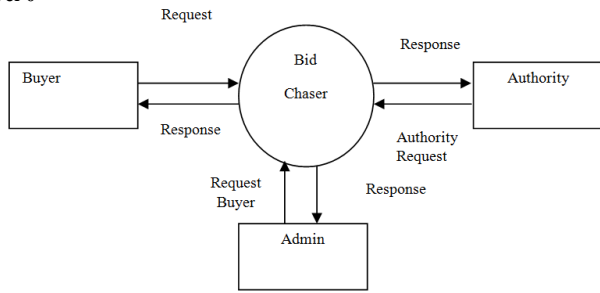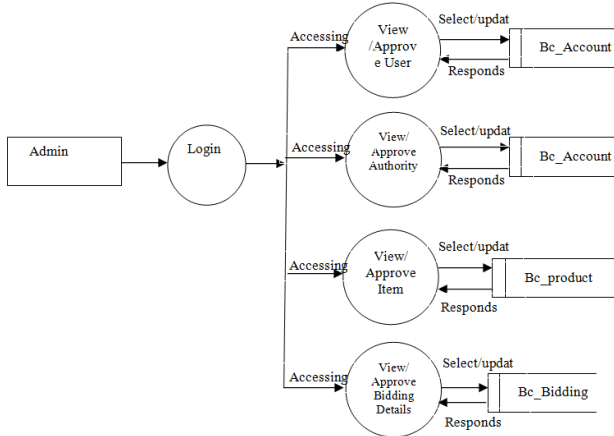
Level 0

Level 1

Level 2

Level 3

System Models

Admin Module

- They are the ones who control the website and post advertisements provided by the government authorities.
- They can grant permission to the user requesting for bid.
- They confirm the bid prices and let the authorities know about the bid prices.
- They approve the vehicles uploaded by the authority
- They can view all the complaints and details raised by the buyer and remarks made by the authority

Input-user id and password

Process-process of validation will occur

Output-They will maintain the database and perform the bidding process.

Authority Module

- They can upload the details of vehicles to be auctioned in the website.
- They can confirm the bid amount and bid date.
- They also confirm the payment of the user.
- They are also responsible for handling the complaints of the user.

Input - Login id and password
Process – Process of validation will occur
Output – provides the details of bidding vehicles , dates etc.

Buyer

- They are the users who wish to join the bid by signing up and bidding for different vehicles approved by the admin.
- Once the bid is done it will be in the queue of admin for their approval
- Once the admin approves the final bid the request will be in queue with authority.
- Once the authority confirms the payment, the transaction is done.
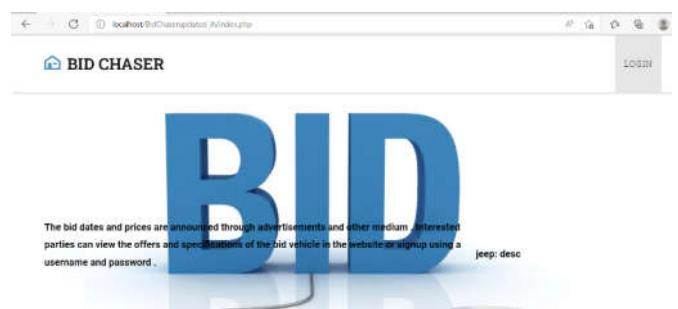- User can raise a complaint about the paid vehicle.

Input – user id and password

Process - process of validation will occur

Output - Only genuine users can access the services provided by the website.

RESULTS

Homepage

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Admin Login

User Registration

Bidding List

CONCLUSION

Online auctions have made great strides on the Internet over the past decade as it transcends the physical barriers and limitations of traditional auctions such as geographical, temporal, and spatial boundaries. A notable number of participants were observed in the online auction compared to the traditional auction. The idea behind selling vehicles seized by the government through a web-based application called Bid Chaser can help the government easily manage and overcome all the limitations encountered in the existing system.

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