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E-BIDDER (Bidding is now on your fingers)

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ABSTRACT

Online auction is a platform where a seller can sell its good to a buyer who will bid more for the product auctioned virtually. In Online Auction the physical appearance is not required at all. As in the world of internet Online Auction can be the best emerging technology and a prominent solution for the buyers as it excludes the physical appearance. At this time as the pandemic of Covid-19 is there, online auction can be a good option in terms of digitalization where the physical appearance and gathering is not required and the payment will also be contactless. This E-Bidder work is based on study of some issue of e-auction websites designs which faces some challenges while making.

Keywords : E-auction, Bidding, shill bidding, Bid Listing, Future scope.

I. INTRODUCTION

The auction mainly focused on the sale of goods where people made high and high bids of each product until it is sold to the highest payer, called the auction. Basically, it requires vendors, bidders and auctioneers who must make auctions by accepting bids and announcing goods sold. We are in the process of digitalization of world where everything seems to be online, viewing the condition of the pandemic of covid-19 that is forcing all of us to do the innovation that follows new normal. We came up with the idea of e-bidding, in which we will provide an online platform where people, government and private companies can auction their products online and can get the highest bid price of the product.

The online auction will give the world a new face on selling and buying the products at a superior rate. The online auction will give the users a way of decision making. They can individually decide that they should buy the product or not, from a given auction. After buying a product from a given auction the buyer can write a review for the product as well as for the seller also. In an online auction two parties would be their buyers and sellers, we are going to provide full verified information to the buyers about the product so they should get a verified product and seller get more than the market price of their products. e-auction will give us a secure and paperless work for the user. At the time of the user registration a data entry for PAN Card is also available there by which we will reduce the chances of fraud. A secured auction will help people to believe on us. As in the process of digitalization and the government started make in India scheme idea of e-auction came in mind. If we can buy a product from an e-commerce website, then why we cannot sell a product online at a good price. As OLX is for buy and selling the product online but it is an e-commerce website. And we

wanted a website where we sell a product on highest bid. The base price of the product will be set by the customer and while the auction is happening who so ever will bid the highest amount the product will be sold to that person.

After using an app Step-Set-Go I have seen that the app also uses auction system inside it to sell the product based on highest bid of the coins collected in this. But there was a con in that whenever a high traffic enters in a live auction it sometimes crashes as a lot of people tries to participate in it. So, we will try to overcome that in our website by using a traffic limit in our website.

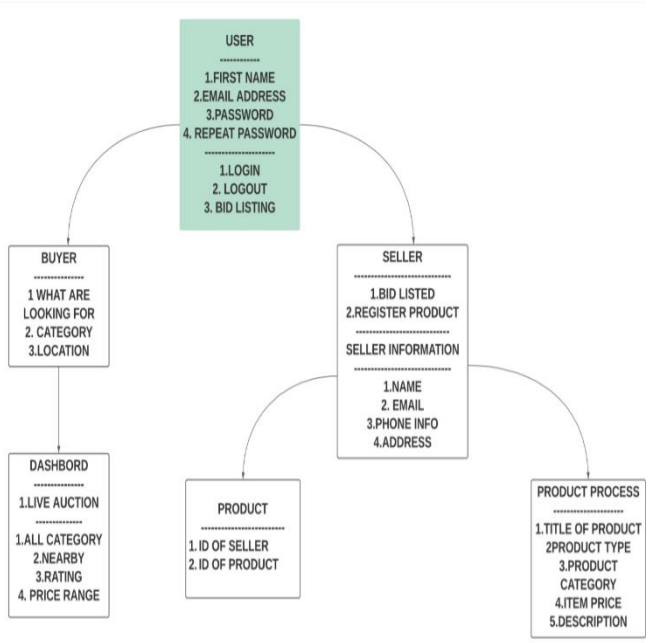

Fig 1. Flow Chart of Ebidder

As in e-auction cloud storage will also play a very important role. As it will help store and retrieve the auctioned data. Cloud computing has been widely accepted categories of cloud users to remotely access computer resources to cloud providers like Amazon EC2 and Microsoft Azure. Price strategies are very important in the cloud providers. Most cloud providers have accepted a fixed price site. A fixed price is a strategy where a price point is present established for a long time. As a result, the total payment amount is determined by unit price, number of purchased VMs and duration.[13]

The live auction will be opened for only a limited number of people. Paperless auction will help in the manner that no more paper documents are required for the verification and there is nothing to worry about the keeping the papers safe and secure. e-auction will help to keep the user's profile and data secure as well as the auction will also be secured from the fraud. The e-Bidder's user interface will help the user to navigate easily throughout the auction process and the user verification will also be easy.

II. LITERATURE REVIEW

A. Manasi et al. (2001), has published the paper, in that paper they have mentioned how the long run of auctions is simply commencing to get smart with online auctions, and that we area unit just within the early stages. With principally all of us having net and a sensible portable, for the millennials and therefore the next generation to return, it will be habit for them to bid online for auctions. Auctions are not a final resort any longer for marketing, particularly currently with the assistance of online auctions. Some used things that sell for brand spanking new costs embody artwork, sports record, and antique things that area unit currently marketing for brand spanking new records because of on-line auctions. patrons and seller's area unit additional educated and knowledgeable on values nowadays than they need ever been, that means you are aiming to be less ready to "get a decent deal" any longer. What I am telling is, the dealer worth and auction worth area unit coming back nearer along as a result of their area unit values out there for anyone willing to try and do a Google search on just about everything that is sold.[1]

B. Raphael Manduna et al. (2006), has published the paper, in that paper it is believed that as day by day the world is moving towards digitalization, e-auction is also being a part of digitalization. As before e-auction the auctions were conducted in

auction house. And the physical presence of seller and buyer was must at that time. But in online auction there is no physical presence required and hence made the auctions easy as anyone can participate from anywhere in the world. But there is a con also of online auction system as the buyer cannot check the product physically. The product is auctioned online and showed online before the auction. Consumer uncertainty about the product and the seller makes it difficult for consumers to distinguish between good and bad sellers. e-auction systems are a major component of the electronic marketplace that allow users at any site to sell and buy products.[2]

C. Didwania et al. (2007), has published the paper in that paper it is talked about that Auction is a way of collecting items, from creative to handmade art, one can find in the market. Online auctions are designed to attract a lot of people the number of bidders in a location far from the auction site by giving everyone an equal chance of this participate in the auction, with the click of a mouse only. Despite the popularity, e-auction programs have faced some threats. For example, of course it is almost impossible to determine whether the items on such auction systems are stolen or not. In that case, in which case, there may be a possibility that the buyer or auctioneer must pay a fee in cash or even legal and systematic punishment. To achieve this the policy is that all assets are given a unique ID number and property relationship with its stage has been established. This can help both the payer and the seller in the bidding process as well offers more options for website visitors compared to the auction sites specific to the product, they are considering one property.[3]

D. Sawant et al., has published the paper, in that paper the auction system requires information provided by the seller of the item to include machine learning algorithms so that prices can be accurately predicted. These algorithms apply to products with complex features or specifications such as speed, memory size, etc. But "soft" products such as clothing items differ in their characteristics that used to compare different types of items. Factors such as size, equipment and colour are present, but they are not the type of labels that "define" a product style. This problem can be solved by first removing the product attributes from the free descriptions of products available online (in stores or on auction websites), and then using these attributes as part of the learning process. Proposed accompanying art that predicts the final bid value to obtain a shill bid. Once the final price has been predicted, this price can be used relative to the bid set by the buyer over a given period.[4]

E. This research paper has problem focused on build an online auction system that will allow sellers to meet and engage with customers while also allowing them to sell goods to potential bidders. Bidders will be able to communicate with individual sellers through this online auction management system, who will supply them with required details and assist them in selling their products. The aim of this application is to provide a user-friendly auctioning platform where users can auction off any product that is available locally or globally. The use of an online auction management system would make it easier for auctioneers to hold auctions while still saving time.[5]

F. Candra et al. (2013), has published the paper in that paper it is talked about the E-auction. E-auction is an online system where buyers bid on auctioned goods according to their own choice based on the specifications. The number of people interacting with the world of internet is increasing day by day; so, it will make it easier to run electronic auction system from an online auction perspective understanding can be divided into two categories such as privacy and security. In the study it was found that there are certain features in the e-auction system that you consider to be features of ambiguity because they indicate fraud or cheating. It does not have clarity and have fraud or cheating factors. Significance of this research is to overcome the risk of online auction system problem and improve the security of the online auction features. It can also create a good impact for developing e-auction system in order to gain more trust from the customers.[6]

G. Ginocchio et al. (2006), has published the paper in that paper it is talked about how Auction theory has

remarkable influential in the design of electronic market mechanisms. Some of the foundations of auction theory are presented for

the single-object auctions. According to this paper, it provides an empirical, theoretical, and experimental overview of an auction system. single-object auction, only one indivisible object is for sale. There are four single-object auction types, which: The ascending-price auction, the descending-price auction, the first price sealed-bid auction, and the second price sealed-bid auction. There are also two standard models of how bidders value an item: First is the secret value and the standard value model. In the standalone model, each bidder knows the value of the item, but different bidders may have different values and secondly in the standard value model, the value of the item is the same for all bidders, but bidders have different details about what the real value is. However, the most direct way for a seller is to set a price that is commensurate with his or her willingness to accept and announce the start of the auction, while the reserve allows the seller to end up with the final sale. The seller can choose a reserve-price that prevents low-revenue sales and stimulates competition, in addition to the initial choice of auction mechanism.[7]

H. Saibharath et al. (2016), has published the paper, in this paper review it is talked about developing a user-friendly online e-bidding site where any kind of items can be auctioned and value-added services to the bidders and sellers, in this paper, we found that a lot of fraud happening surrounding us, so we have long maintainers their Vitality adapting to change in the legal and business environment through judicial and legislative understanding and intervention. And this review paper talked about some problems. auctions are used to sell many things like antique sculpture and ancient art, all around the globe there are auctions of multi-item like an imported cigar, good quality tobacco, racehorses and just above anything elsewhere there is a market of multiple people whereas want to buy the same object and taking turns offering bids on the items. the right to buy that item will go to the highest bidder. The auction system is highly scalable and capable of supporting huge numbers of buyers.[8]

I. Roger et al. (2009), has published the paper, in this paper review is talked about Bidder Satisfaction, as we know online auction websites that attract billions of users around the world to sell and buy anything from Rolex watch to toilet paper if we are talking about one of the most popular online auction website eBay this company alone 14.87 billion US$ was transacted in 2002. Online auction websites provide a virtual marketplace where bidders can be geographically Broken apart completely to close the deal on auctioned items listed by sellers. The popularity of online auctions is rapidly increasing. As we know buying and selling is a very basic part of human nature. According to this research paper showed statistics that 80 % of highly satisfied consumers would shop again within two months and above 90 % of online consumers would recommend the websites to others. On the other hand, 87% of unsatisfied consumers would permanently leave their Internet merchants without registering any complaints.[9]

J. This paper review talked about how to Secure online sealed bid auction for good security and privacy major factor in e-auction design. In this time internet play a crucial role to provide a commercial environment for online auction, a review paper is talked about sealed bid auction, In this bid process bidder submit their own bid amount to the auctioneer secretly, till the end of bidding, after completion of the bid time auctioneer reveal the highest-paid bidder by clearing the bid price of the winner .there are typically two types of bidding auction first is open and second is sealed, In sealed bid auction other people don't know about other bidder bid details including bid price, English auction is the open bid auction in this all parties and bidder know all bidder details. This paper also talked about sealed bid cryptographic auction protocol in this bid auction protocol has a four-phase notification, bidding, opening, and winner selection and talking about security.[10]

K. Candale et al. (2006), has published the paper, this paper review is talked about the bidding strategies used in online auction for multiple items or bunch

of products. The problem is raised by the paper is computing of optimal bids because it is more complicated to compute to it, when it comes to multiple items. It has some simultaneous auction model on which multiple bidding strategies is going to tested in the term of efficiency, profit, and margin. The goal of this paper was to evaluate the relative performance of some existing algorithm based on marginal utility calculations and the relative performance.[11]

L. Zhang et al. (2007), has published the paper, This paper review is talked about the popularization of the internet and its impact on an online auction system and this paper also talked about some issues like a huge number of customers and items, information overloading, enhance and retain customer loyalty.it tells about the e-commerce recommender system, this system help to improve the site and goods quality for the customer, recommending system rebuilt the relation between customer and company. Recommendation systems have multiple techniques like recommending by Email, recent visiting records, rating, and feedback it's all help to maintain site and customer needs. Also talked about some service-related problems like lack of personalized recommendation, low automation, the low performance of the recommendation technique and some specific method for a recommendation.[12]

M. Balingit et al. (2009), has published the paper, this paper is about analysing the bidding trend in online Auction. In this paper it is told that how the world's biggest online service eBay is becoming more popular every day. In this paper it is referred that how the online auction came in trends, how the people started utilizing the online auction resources. However, it also told that online and offline auction have so many similarities and differences also. As in the world of internet it also seen that world is preferring e-commerce more at the place of offline shopping.

In this paper they present the definitions of a good auction from the viewpoint of an auctioneer like seller, buyer, etc. [14]

Reviewing the above research papers, it is found that the security is the one the most important and common point above all. In some of the papers the traffic control limits are not required as a result as much as people can take part in the auction who are registered on that website. Seeing the security as one on the major concern we are going to use Pan Card Verification. The user needs to provide the Pan Card details at the time of the registration that will help us in providing a safe conduct of an auction. The verification concern and then the most important concern that which seller is good. It will we going done through the review and rating system in on the paper which is a good step. It will help a buyer to take decisions about buying the product from the that seller. It will also help to conduct a smooth auction. As the seller will be reviewed the chances of fraud will be reduced as every seller will try to get a good review from the buyer so that he can take part in further auction for selling his goods.

III. PROPOSED SYSTEMS

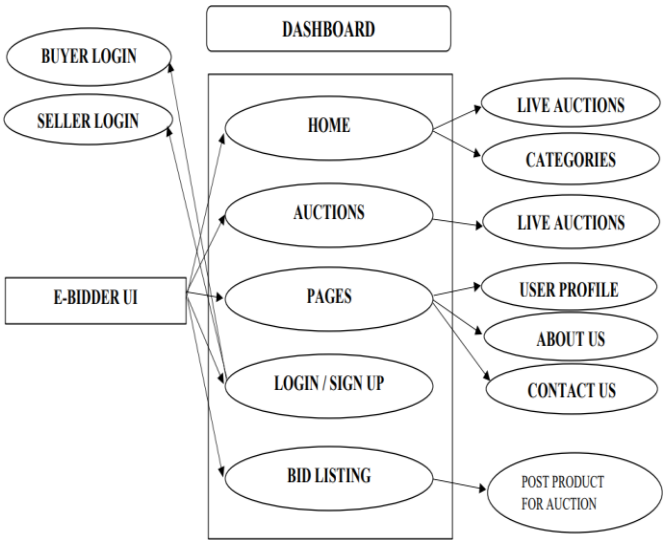

Fig 2. System Architecture

Diagram of cases used is a type of moral diagram defined by UML and created from system architecture analysis. Its purpose is to introduce a clear view of everything operating system provided by the website, usage cases, and any dependencies between those system architectures.[15] In this new website design of e-bidder contains some following activities, which gives the user an easy and comfortable interface in which a user can easily navigate through it. The system will provide the user a secured registration and profile management. At the time of registration, the user must

give the PAN number also for the verification purpose. The seller will be allowed to post the product for the auction through bid listing option on the home page, in which he can give the brief description and can set the base price of the product for the auction. User can navigate through interested categories in the given list, and he can also the check the product which is going to auction.

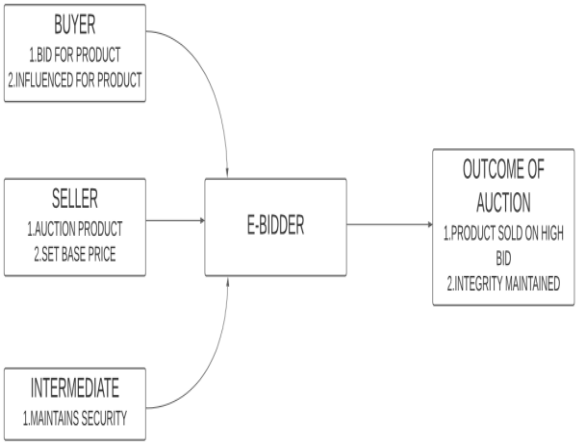

Fig 3. Ebidder's Description

A. METHODOLOGY

More Secured using Unique ID, at the time of creating a new account and after data verification the user will get a Unique id, that will help in a secured auction and to identify a particular user when it is needed. Data verification is needed for a user either he is a buyer or a seller, because without verification the user cannot participate in the auction. The data verification is needed at the time of creating account. Traffic limit Control is going to be implemented in this project so that the ongoing auction does not crashes due to excess number of participants. Only a certain number of participants are allowed in the auction as per first come first serve basis to participate in an auction. For user verification we can use Pan card API keys so no one can create fake account for a particular auction. We will use authorised gateway for secure payment. We are going to use limit rate so for a particular auction only certain number of users is allowed at a time.

B. ADVANTAGES

- Paperless auction.
- Time Efficient
- Secured
- Easy to Navigate
- No Additional Expenses

IV. IMPLEMENTATION

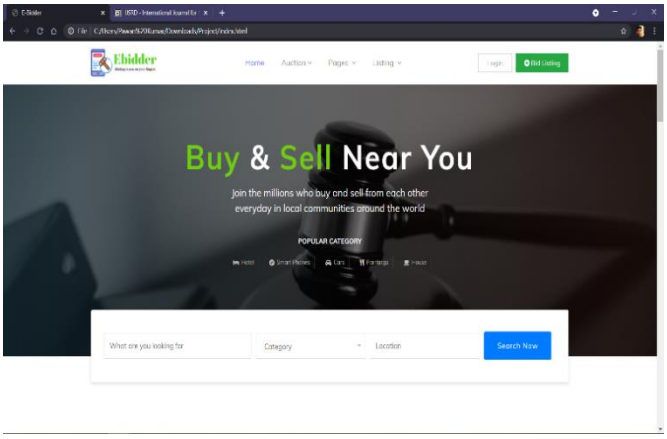

Fig 4. Home Page

Home page will show a user the different pages that a user can navigate through the whole website from here only.

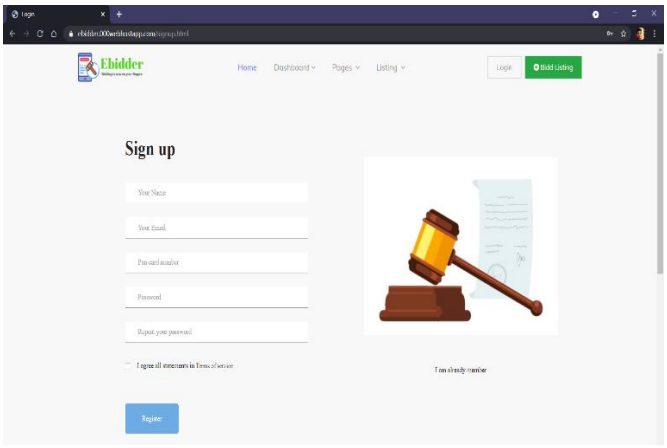

Fig 5. Sign Up Page

Sign Up page has added one more column for Pan Card Number which will help in terms of security. As fake accounts cannot be created as firstly it will be verified for pan card details.

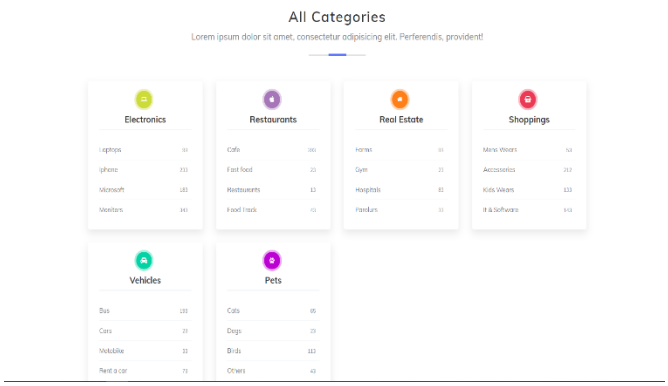

Fig 6. Product Categories

On this page the product will be shown category wise. For e.g., if a buyer wants to buy some electronics product, he can easily go to category electronics and he/she will be shown the electronics category.

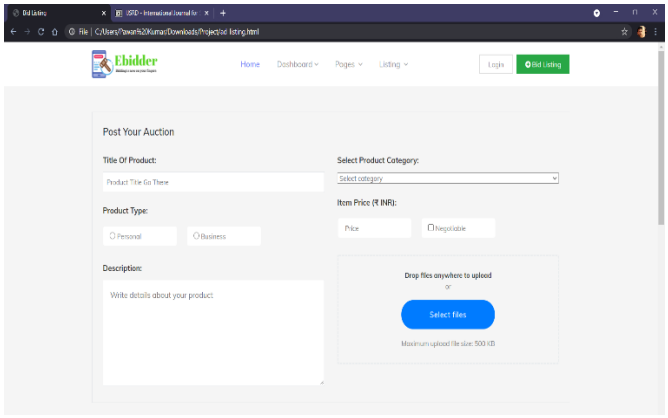

Fig 7. Bid Listing

This page will help a seller to list his product for the auction. The product posted from here only will help the seller to list the product for the Auction.

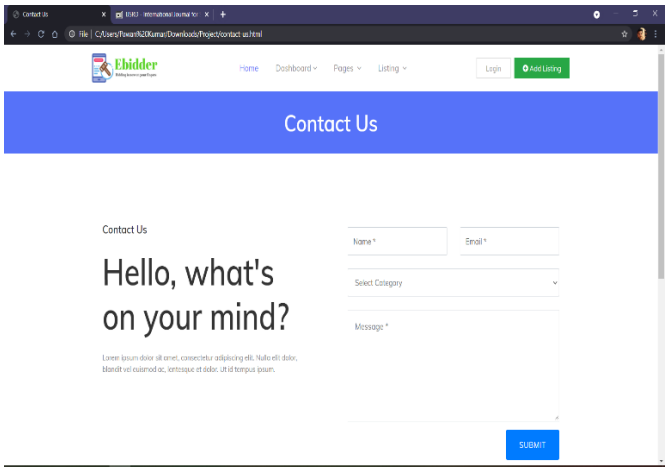

Fig 8. Contact Us Page

Contact us Page will be for the users who are facing any issue or having any query they can contact us through this page.

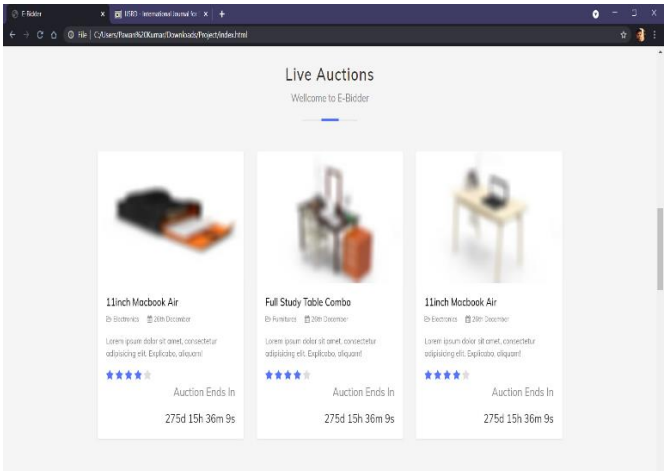

Fig 9. Live Auction Page

The Live Auction Page will show the live auction going on or the Auction which is going to start in a specific time.

V. CONCLUSIONS AND FUTURE SCOPE

Online Auction has made the bidding system so easy and comfortable in our day-to-day life. As seeing the condition of the pandemic, it has come out as the best option it the field of virtualization. We do not even need to be present physically. E-bidder has made the auctioning just at the fingertips only. At the time of digitalization and virtualization it will play a very important role in someone's day to life. Rapid growth of science is changing the world and E-auction is also from one of them. Thanks to world of internet where the things are now easy. An easy auction system behavior will increase the number of users towards it as they will feel more secured and will try to purchase things online. As the internet is growing its users are also growing day by day and that will help in increasing the daily consumers. In future it is going to be used effectively. As we can see that due to COVID-19 pandemic the world is forced towards the virtualization. Internet is helping effectively in the terms of digitalization of world. As a result, this e-auction system will be also a part of it. Physical presence is not required at all and people around anywhere in the world can connect through it easily.

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