**SYNOPSIS**

**Report on**

**E-AUCTION SYSTEM**

**by**

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( 2023- 2024)**ABSTRACT**

An online auction is an auction which is held over the internet. It is a popular method for buying and selling products and services. Online Auction System s helps to customer to sell and buy product in best price. It is developed with the objective of making the system reliable, easier and fast. This application is used to sell the anything on the website from house. This application is used to sell the anything on the website from house. It developed with the objective of making the system reliable, easier and fast. The application is made as simple as surfing a website. There by non-technical persons can also interact with the processing on the application easily.

Keyword: Auction, python, chatting interface, Dijango framework

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**ONLINE AUCTION SYSTEM using Python**

***Introduction***

The global reach of online auction market places allows for the buyers and sellers to overcome geographical constraints and purchase products anytime from anywhere over the internet. The online auction market provides the consumers with great advantages of low prices, greater product selection and greater efficiency compared to the usual traditional online markets. The use of online auction system makes use of the decision-making assistance tool that results in greater buyers’ certainty towards their choice of the sellers and product that they make. The decision-making assistance tool consists of three parts that is the product information signals, sellers rating scores and sellers shilling activities. The product information signals seek to fully describe the product through the use of textual and visuals, the use of third party product certifications, description of the product characteristics, the product usage and book value. This strives to ensure the buyers product certainty. The decision-making assistance tool also provides for sellers ratings by making use of the feedback scores. These feedbacks are given by previous winning bidders and they evaluate the online auction product sellers. These bidders give detailed seller ratings of all aspects of the seller and giving scores for example giving scores of how accurate was the items description, how satisfied they were with the sellers communication and how quickly were the products transported to them by the seller.

***Project Objective***

In current many organizations or companies make business related to sell-buy online. Normally, the online auction is a field which can increase the economic between auctioneers and bidders. To make an advancement in the mentioned field, we have introduced an Online Auction System using Python.

Our system is designed for the user so that they can easily take part in the bidding conducted online. The bidding takes place in a normal form way the people interested to buy the things placed in the auction are supposed to bid for the particular product in a particular period. The person placing the highest bid gets the right to own the item at the end of the bid. A bid is the exact amount of money offered on an item in the auction by the seller. The buyer with the highest bid is the one who finalizes the purchase of the item with the seller of the item.

***LITERATURE REVIEW***

The field of online auction systems has been extensively studied, with researchers focusing on various aspects such as system architecture, security, usability, and performance. This section provides an overview of existing literature and research related to online auction systems, highlighting the challenges and areas of focus in the field. Security in Online Auction Systems: Security is a critical aspect of online auction systems to ensure the integrity of transactions and protect user information. Several studies have proposed techniques and mechanisms to enhance the security of these systems. Zhang and Zhuang (2017)[1] proposed a secure multi-party computation framework for online auctions, ensuring privacy and preventing collusion among participants. Additionally, authentication mechanisms, encryption techniques, and secure communication protocols are commonly employed to safeguard user data and prevent fraudulent activities. Usability and User Experience: The usability of an online auction system plays a crucial role in attracting and retaining users. Research has focused on designing intuitive user interfaces, simplifying the bidding process, and providing effective search and filtering capabilities. The work by Hong et al. (2018) [2]emphasized the importance of user-centered design principles in creating user-friendly auction platforms. Usability studies and user feedback have been used to improve the overall user experience and increase user satisfaction.

Performance and Scalability: Online auction systems need to handle a large volume of users and transactions simultaneously. Ensuring high performance and scalability is essential to provide a seamless experience to users. Research has explored techniques such as load balancing, caching, and database optimization to improve system performance and handle increasing user loads. Additionally, the adoption of scalable cloud infrastructures and distributed computing technologies has been investigated to enhance the scalability of online auction systems. Trust and Reputation Management: Establishing trust among buyers and sellers is crucial in online auction systems. Trust mechanisms and reputation systems have been studied to mitigate the risks associated with dishonest behavior. Research by Wang et al. (2017) [3] proposed a reputation-based trust model to evaluate and predict the trustworthiness of auction participants. Trust factors such as seller ratings, buyer reviews, and dispute resolution mechanisms contribute to building trust in online auction environments.

The existing literature provides valuable insights into the design, implementation, and evaluation of online auction systems. However, there is still room for further research in areas such as privacy-preserving auction protocols, blockchain-based auction systems, and artificial intelligence techniques for bid prediction and optimization. This research aims to contribute to the existing body of knowledge by developing an online auction system using the Python Django framework and addressing the challenges and considerations identified in the literature.

***Project Flow***

1. ***Working of the System***

# The system comprises only 1 module: User.

# The user would require to register first to access the system. They can log in using their credentials after registering. They can manage their profile and change the password if they want. On the Home Page, the users can view the list of ongoing auctions both conducted by others and themselves.

# The user can view the list of all the ongoing auctions. They can view the product details and enter the bid. On My Application, the user can view the list of auctions on which they have made a bid. They can check the product details. They can even check the bids and their status. On My Auction, they can add, update, delete and view auctions. The user can choose the winner of their auction.

# In the system, the front end involves PYTHON and in the database it uses mysql.

1. ***Advantages***

* The system will help users conduct auctions securely.
* The users can bid on auctions from the comfort of their homes.
* It helps to save time and money that is wasted on the physical setting.
* The user can also be the bidder

1. ***System Description***

The system comprises 1 major module with their sub-modules as follows:

* **User:**
* Register:
* The user would require to register first to access the system.
* Login:
* They can log in using their credentials.
* Profile:
* They can manage their profile.
* Change Password:
* They can change their password if they want.
* Home:
* On the Home Page, the user can view the count of all the ongoing auctions.
* They can also view the count of the ongoing auctions conducted by them.
* Auctions:

1. Auctions:

* The user can view the list of all the ongoing auctions.
* They can view the product details.
* They can enter the bid here.

2. My Application:

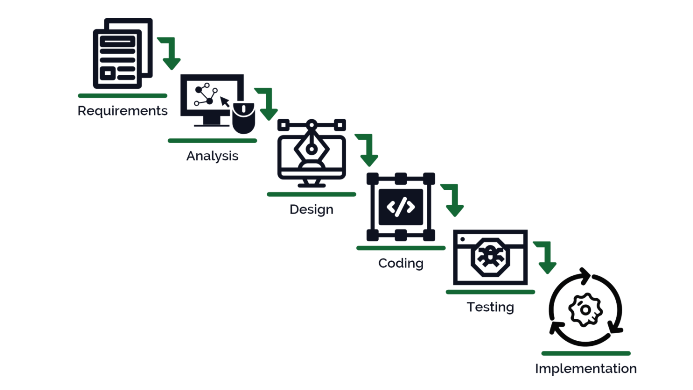
* The user can view the list of auctions on which they have made a bid.
* They can view the product details.
* They can view the bid and its status.

•My Auctions:

* The user can add, update, delete and view an auction for their product.
* The user can view the list of bids made by others and their details.
* They can choose a winner.

1. ***Project Life Cycle***

The waterfall model is a classical model used in the system development life cycle to create a system with a linear and sequential approach. It is termed a waterfall because the model develops systematically from one phase to another in a downward fashion. The waterfall approach does not define the process to go back to the previous phase to handle changes in requirements. The waterfall approach is the earliest approach that was used for software development.



***Fig 1.0[software development life cycle]***

1. ***System Requirements***
2. ***Hardware Requirement***
3. **Laptop or PC**

* Windows 7 or higher
* I3 processor system or higher
* 4 GB RAM or higher
* 100 GB ROM or higher

1. ***Software Requirement***
2. **Laptop or PC**

* Python
* Sublime Text Editor
* XAMP Server

1. ***Limitations/Disadvantages***

* The system poses a security risk.
* The user would also require to enter correct data otherwise it will lead to faulty results.

1. ***Project Outcome {Application}***

* Our Online Auction System helps users conduct auctions online easily from the comfort of their homes.

***Reference***

* Zhang and Zhuang (2017) from vol II
* Hong et al. (2018) from vol I
* Wang et al.(2017) from vol II
* [*http://14.99.188.242:8080/jspui/bitstream/123456789/13256/1/15vfsb7038.pdf*](http://14.99.188.242:8080/jspui/bitstream/123456789/13256/1/15vfsb7038.pdf)
* [*http://pro.unibz.it/library/thesis/00001270.pdf*](http://pro.unibz.it/library/thesis/00001270.pdf)
* [*https://www.academia.edu/9174592/ONLINE\_AUCTION\_MINI\_PROJECT\_REPORT*](https://www.academia.edu/9174592/ONLINE_AUCTION_MINI_PROJECT_REPORT)
* [*https://www.theseus.fi/bitstream/handle/10024/121504/Aljaf\_Begard.pdf;jsessionid=EA07BF8788489DF1923717D6E777D3BB?sequence=1*](https://www.theseus.fi/bitstream/handle/10024/121504/Aljaf_Begard.pdf;jsessionid=EA07BF8788489DF1923717D6E777D3BB?sequence=1)
* [*https://www.scribd.com/document/354561395/Using-an-Online-Auction-System-in-Open-Source-pdf#*](https://www.scribd.com/document/354561395/Using-an-Online-Auction-System-in-Open-Source-pdf)