

EUROPEAN UNIVERSITY OF LEFKE

FACULTY OF ENGINEERING

Graduation Project I

E-Commerce website

Online bidding System

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Abstract. Online Auction system held upon the internet. Time is really important in today's world. In Auction consumer served their time for bidding which kept effect of his daily's routine life. Then online auction introduced after keeping eye on this problem. Many companies already working and providing this platform. This project helps to Consumers they can easily sell and buy the items according to their needs through bidding. This bidding system works under the AI algorithm technique. This system is reliable for the consumer they can bid even with their usual routine task. This will be specially designed according to safety and security matters. So the consumer can exchange the online payment directly through the website.

Supervisor

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1. Introduction

Problem Definition:

The primary objective of this website is based on a bidding system. This bidding system is a website which consists of the seller, buyer, and consumer's products. . In today's modern world everything is computerized. And all humans are so busy in their daily routine's schedule. If someone wants to buy or sell anything through Auction. It was really hard to spend a time and carry that stuff with themself. Keeping this thing in mind many companies served their roles for people relief. And provide all things in a single platform with easy access. Already many website are occupied just for this purposes such as eBay,eBid etc. This project will allow the online bidding to sell and buy all kinds of things including vehicles, electronic items, technological units, etc., This website is beneficial in saving the time of Consumers. Through this website, users can save their time. Through this website, the seller will post the items with some short descriptions and with its detail. And the buyers will select the items accordingly what they need and will appear according to its bidding schedule and the bidding will have a specific time limit which will be set by sellers. the buyers will appear on an auction to following the schedule and this is the easy way for bidding which buyers can do with their usual routine work and as well as in their office hours too so which person comes with the highest bid at the end of the time, the item will be sold to that bidder. Bidder can share their experience with items and give a rating to the seller. This system will also recommend a price to the seller.

1.1. Literature survey:

Online auction is amid the most important E-business applications. The impact of trading is based on business to business, as well as in the business and the consumer to consumer and consumer's field. Auction is one type of economic activity in which is being performed by number of people's every day. But auctions also have a long history that covers many area of activity [1]. According to the survey, the use of Online Auction systems is increasing rapidly. Customers are moving and Accepting the way of the online system and to online Auction for purchasing and selling items. Quite a few companies have started projects of their own, trying to improve their purchasing and sales channels. The popularity of online auctions is likely to grow, as buying and selling is a very basic part of human nature. However, not every website has been able to attract the desired numbers of bidders into the auction process. Successful online auction website design can play a significant role in the overall marketing communication mix. Successful sites complement direct selling activities, present supplemental material to consumers, project a brand image, and provide basic company information and services to their global customers [2]. The methodology of auctions has found for many years, a lot of websites are currently supported by this Auction Based system. When it comes to the top of the auction sites online-based, it's clear to show that there are several contenders. Where some top bidding sites giving relief to their customer at other side some customer complaint such as when i started using eBay, it was all so new and different, like an online sale. I can't remember what my first purchases was, but after that initial transaction, i was hooked. [3]. Its mean it is not able to hold long term history. In summary, these websites offer a virtual marketplace to conduct selling and buying online through the auction mechanism. Most aspects of the transaction (e.g., shipping, payment) are the ultimate responsibility of the respective parties. And For their services in facilitating the sales, such websites generally charge a small fee to the sellers based on certain pricing rules and other specific rules for other purposes [4]. A lot of work has been already done on the recommendation of the bidding of items. In this list mostly working websites already contained on these all options which I want to implement in my project but some feature I will try to implement on my website after the survey. There is less work has done on price recommendation. According to the Survey, even eBay is not recommending the price [5]. And some of the websites that charge during the registration process and eBid is not providing the rating based option after the satisfaction of the Consumer [6] . I will try to implement these are facilities in a single platform. This Website will be based on free registration, price recommendation, and rating option after the satisfaction of the consumers. And I will try to implement some parts of artificial intelligence according to the need to check and find the serious bidders who are getting interest in the auction. They are on the top of the priority of the list of the auction. This Artificial intelligence can only detect some common objects; AI could be implemented for regular or more precise detection.

1.2. Goals:

This project aims to develop an Ecommerce Website. On this Website, User Enter themselves after registration and can easily sell and buy the items according to the bidding. In state it is called the online Auction system. The goal of this project is to allow people to easily bid on items. This Website will provide a rating of the products according to comments of different people. The rating will be honest. The application will also give a rating of the seller. This website will give the expected price of the items after judging the rating and description when the seller enters detail of his items. Our website will eliminate shill bidding by using some kind of algorithms. Shill bidding is when someone bids on an item it artificially increasing its price, desirability, or searching standards. In this project we have a plan to implement some parts of artificial intelligence according to the need to check and find the serious bidders and to avoid of shill bidders It will easily detect and try to avoid them who are just wasting a time and doing shill bidding just and it will find the bidders who are getting interested in the auction. They will come on the top of the priority of the list on the auction. Seller will upload the item for bid and enter the starting price. By using an algorithm the website will give the expected price of the item when the user enters details of his item. Working on this website is simple. The bidder will login to their account through the login form. The items are available for bidding will be displayed. They can choose the items and enter a bid. Other bidders available will also enter bids. The bidder who entered the highest amount will win the bid and the item will be delivered to him after payment and after the satisfaction of both parties.

2. Resources

2.1. Required software:

The project is a Web based. I will perform web development on Windows10. Laravel is supportive on windows 10 and it is a website framework of PHP that is a server-side programming language. This means that the Laravel framework is used for the backend side of web development. I will use the Laravel framework with PHP to make my tasks easily such as routing, authentication, sessions, and caching and for IDE I will use PHPSTORM. JSON could be use for 3rd party API. Bootstrap is also a good choice to use in my Website it is quickly designed and customizes the responsive tool. Bootstrap is the world's most popular front-end open-source and responsive grid system [7]. For designing the logo of my website I will go with Adobe Photoshop. I need to perform some tasks related to Artificial intelligence in this all the programming and code will be written in python which will have all necessary elements to run this project. Python have ability to lead informed, strategic decision-making and augment business performance by integrating key [8]. So I will use visual studio as my compiler. I need an FTP client for transferring my files to the server host. So for this purpose, I will go with FileZilla. The database management system is also most necessary for any application and website. I will use MySQL for my project. For online payment gateway, I will use third party API for this purpose which is more secure and reliable. Front-end design will perform with HTML & CSS. For this designing Website needs a Text editor. It also perceives and holds other coding languages such as PHP, and JavaScript [9]. For testing the WebPages web browser is necessary tool. There are many web browsers currently working on an internet but I will go with Google chrome

2.2. Other:

This project I am performing alone and it is a full-stack web. According to the need and requirement maybe I will add some software in the future.

3. Modules

3.1. Planning:

In this stage before starting to implement, first of all, have to look and decide and imagine how my website should be design according to the user requirement. What kind of properties I need to implement to fulfill user needs. And how should I implement these all on my website, such as what kind of software and programming/scripting languages I will use and how I will use it for what purposes. It should be specified all functional and non-function requirements and it is necessary to set the Goal for a specific time and declared how much time any task will take to perform any work. And set the project deadline to complete all the tasks.

So that the project deadline should be completed as scheduled

This module is expected to take about 10-12 days.

3.2. Designing and Programming:

Once the planning is done, the next stage is designing and implementing the required software in the project. This stage can be further divided into sub-stages e.g., the website based on front-end and back-end. Front-end is the graphical interface is what user interact with it. Everything that users see like when you are navigating around the internet including fonts and colors, drop-down menus, sliders, and everything that we see most probably based on HTML, CSS, and Javascript and these all controlled by computer's browser [10]. The back-end of the website based on a server, database, and code. How data stored in a database and where we store. What things make front-end possible. After the detection of these all, we implement the functionalities according to schedule.

And test these all in small parts and check is all functionalities working perfectly no errors or faults present in these functionalities.

.This module is expected to take about 6– 10 weeks.

3.3. Finalizing and Documentation

After the design and implementation of all necessary properties on a website. The website will be tested with different aspects and check the flaws and problems to prevent further happening. It will check all the functionalities of front-end and back-end too like all button, dropdown menu, reference with links and pages and is data is successfully transferred in a database and successfully getting from database. and will check is Artificial intelligence working perfectly and avoiding the shill bidding, and the website is giving expected price, etc, Including login and logout. After testing these all functionalities we need to write the documentation of all thoroughly with the precision. And every software and all kind of functionalities should detail and each piece of code with proves.

So that it will be helpful for others in the future who getting interested so that later they can use in the future in any other project

This module is expected to take between 2-3 weeks.

4. Risk Analysis:

This project, as it is common with all projects, comes with its issues and problems. The biggest issue which I think would have to face it probably be at artificial intelligence. As a programmer, it is a challenging step for me to detect the skill bidding and expected giving price after checking the user's rating on an item. These all I will do with some algorithms which will be based on the python programming language. And online payment should also be a risk issue because I should have to care about the online payment for this issue the security and safety matters in all aspects of an eCommerce business. That's why I will try to add one extra chapter related to safety and security in my documentation. In general, I don't suppose that the project has a high risk of failure in any aspect because it is not a new concept and a lot of websites based on these topics and currently working with these. I will add some functionalities but already some research has been going on since the 20th century.

A lot of companies already exist and keep updating their system with time to time as user need. So it is a real example I can keep avoiding my problems.

Therefore, I also have a couple of literature and research articles to guide through my project.

5. Conclusion

5.1. Benefits:

This website is working on Auction based system which is totally under artificial intelligence. This website developing for the comfort and relief of the people. The consumer could use this website after following some rules. Rule-based on the registration process and login through. This process considers according to safety and security. Because after successfully bidding the consumer personal account have personal detail of the user include his bank details as well. So this all will perform under the high-security platforms who keep their data safe from robbery and misuse.

A seller will upload his item with a short description and detail with its starting bid amount and bidding time. After analyzing detail and other consumers' rating the system will automatically be expected to give a price. And bidding will start on the fixed schedule as Seller wants. Eventually, this will help people who work and have short enough time that the consumer can come to that bidding and join with his usual routine work and can bid in his office hours too without any disturbance.

At the end of the bidding who will have the highest bid amount will be able to buy that item. And it will avoid shill bidding under the AI scanning technique. The consumer will be able to online payment on this platform. This online payment method will especially perform under the high-security platform who will keep the consumer's bank details and rest history if the consumer has on a website for more reliability.

5.2. Future works

Once this project completed up to its expectations, I will further develop on this project after my graduation and I will try to add some more functionalities and the codes written for its artificial intelligence.

Except for this, I have a plan to update this website not just for item's bidding. This platform will also help to buy and sell the land, house, and property on a commercial level. Through bidding it will also possible on a single platform. This project is a great way to increase my knowledge not just personally but commercially too.

6. References

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