

Project Report

on

Online Bidding System

A project report submitted in partial fulfilment of the requirement for the degree of

MASTER OF COMPUTER APPLICATION

in

COMPUTER SCIENCE AND ENGINEERING

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Submitted to:

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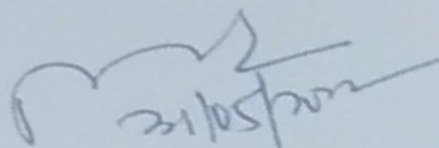
MAY-JUNE 2022

CERTIFICATE

This is certified that **Nikhil Thakur** (0901CA201038) has submitted the project report titled **Online Bidding System** under the mentorship of **Geeta Kakrani**, in partial fulfilment of the requirement for the award of degree of **Master of Computer Application of Computer Science and Engineering** from Madhav Institute of Technology and Science, Gwalior.



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Date: May 20, 2022

This is to certify that Mr. Nikhil Thakur MCA from Madhav Institute of Technology and Science successfully completed four months (Jan 15,2022 to May 15,2022) Project Training at this Organization.

During the period of his Project training program with us he had been exposed to different technologies like PHP, JavaScript and MySQL and make project "Online Bidding System", during this period he was found punctual, hardworking and inquisitive.

We wish him every success in his life and career.

Thank You in Anticipation

With best wishes, KANISHA

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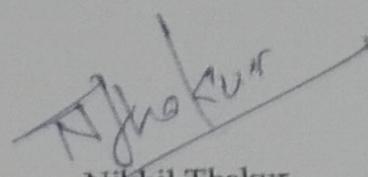
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DECLARATION

I hereby declare that the work being presented in this project report, for the partial fulfilment of requirement for the award of the degree of Master of Computer Application in Computer Science and Engineering at Madhav Institute of Technology & Science, Gwalior is an authenticated and original record of my work under the mentorship of **Geeta Kakrani**, Director, KANISHA I.T. PVT.LTD

I declare that I have not submitted the matter embodied in this report for the award of any degree or diploma anywhere else.



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2020-2022

Master of Computer Application,
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ABSTARCT

Nowadays, Online Bidding System has become the extremely popular component in the electronic marketplace. A practical case study will be introduced in this work to highlight the best practices for analysing and designing an online web-based auction system. The proposed Online Bidding System (OBS) was designed and implemented using the UML (in order to illustrate the architectural model), JavaScript, MySQL and PHP programming language. In the proposed OBS, the UML offering several diagrams to enable the new functions to be updated and added easily such as ER, DFD and user interfaces. The proposed OBS will help the bidders to bid in fast and increase his chances to make a successful bid by suggesting a bid price, and help the seller to achieve maximum profit. Along with the tools that have been used based on the analysis and implementation environment, the proposed OBS offers excellent advantages for the support of system development.

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LIST OF ABBRIVIATIONS

OBS	Online Bidding System
HTML	Hyper Text Markup Language
PHP	Hypertext Pre-processor
UCD	Use Case Diagram
ERD	Er-Diagram
DFD	Data Flow Diagram

CHAPTER - I

1 Introduction

1.1 Online Auction

Auction means Latin work, which means growth. Auction is a bid, a method of selling. Purchasing and providing services occur. The online auction system has many other names such as e-auction and electronic auction. The client can more accurately specify the need for online auctions or online bidding. Online bidding has become more widespread in all forms of industrial use. Not only does it have the product or goods it needs to sell; it also has the services it can offer. Due to their low cost, this spread caused the system to thrive. Preferred bidders can manage and monitor the same database. The user's data may be maintained confidentially for the validity and integrity of the contract documentation. Multiple bidders can communicate very easily. This system allows multiple bids by single users. Developing a user-friendly auction site where any product can be bid and providing value-added services to bidders and sellers. The world of online auctions Marketplaces allow buyers and sellers to cross geographical limits and purchase products from anywhere over the Internet. The online auction market offers consumers lower prices, greater product selectivity and greater efficiency compared to traditional online markets (Ghose et al., 2001). Seller's choice and the product they produce make greater buyer certainty. It consists of three components: seller rating scores and seller's shipping operations. Certifications, description of product characteristics, product usage and book value. It seeks to ensure buyers product accuracy. Decision Assistance tool also provides seller ratings by using Feedback Scores. These feedbacks give previous winning bidders and evaluate online auction product vendors. These bidders give detailed seller ratings of all aspects of the seller, and give scores for how accurate the description of the item is, how satisfied they are with the seller's communication, and how quickly the seller is shipped to them.

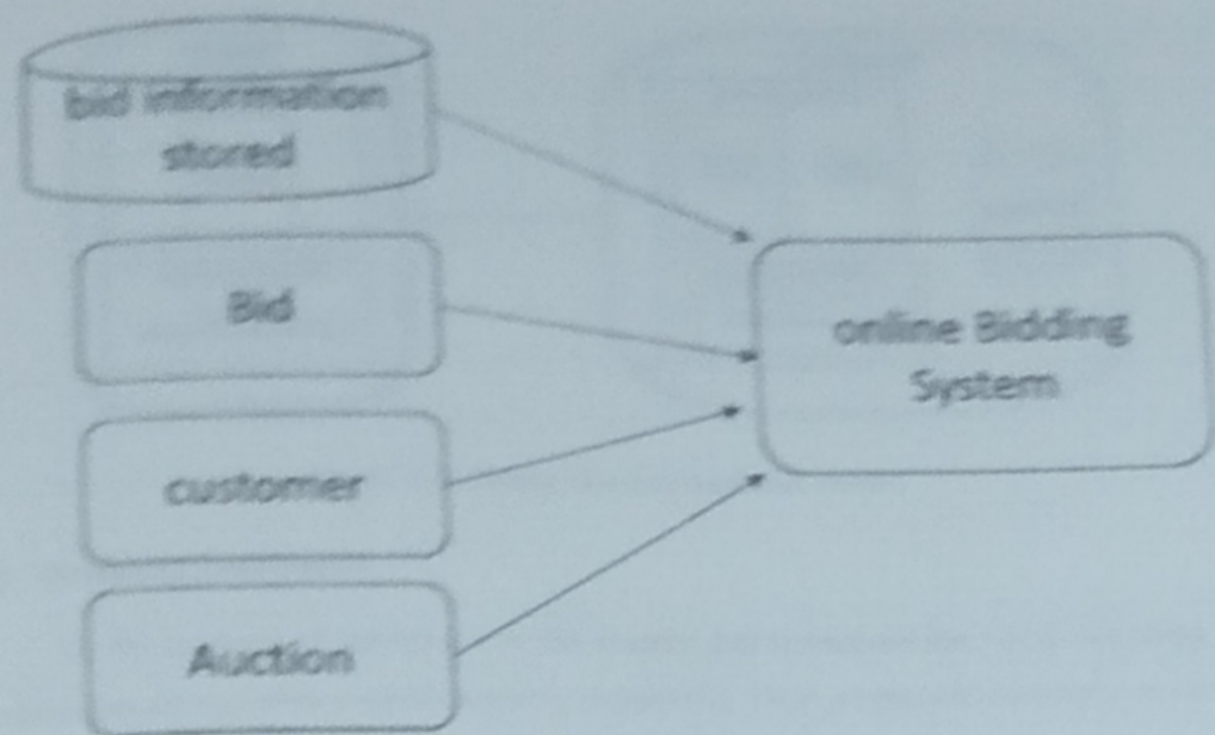


Figure 1.1: Architecture for the On-line Bidding System

1.1.1 Components of an Online Auction

Online auction technologies are changing the way we do business on the internet. Due to their uncooperative activity, large online auctioneers sometimes impede the growth of auction-related study & the establishment of novel auction security solutions. Because high-quality auction data & literature are scarce on the creation of online auction software, we developed our online auction server to aid in auction study.

Figure 1.1 illustrates a high-level software framework for conducting online auctions. A bidder and an auctioneer are the 2 key players. A communication connection connects the parties. A bidder may use one of two interfaces. The web interface is the first of them. This auction is for a human bidder. An HTML browser is used by the bidder to communicate with the auctioneer. For a software bidding agent, there is a second interface. An application programming interface is the means via which a bidder communicates with the auctioneer. The Auctioneer is composed of a web server, for example, Apache) and a scripting language, in this instance PHP. Every aspect of the auction is driven by a database. Every detail related to a certain action such as bid amounts and times) may be found in the database. A database transaction happens if a customer makes a bid or seeks a pricing quotation. By scripting language, the database creates dynamic websites in response to bidder action. (Trevathan, Read and Balingit, 2011).

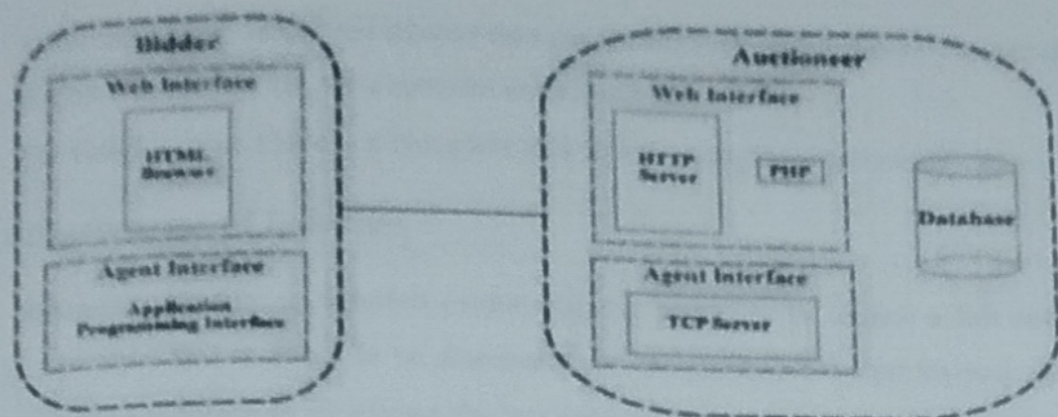


Figure 1.2: Online Auction Software Model

1.2 Problem Statement

To the majority of individuals in the country and throughout the world, searching for products has always been a mind-numbing experience. Most people are constantly on move, either to their renowned product supplier, a close market centre, or at times, to their neighbourhood hawkker. Whenever he can obtain the item the buyer desires, they primarily start by giving their hands to obtain the item the client desires, and that at times they become confused or bring fake as well as quarks deliver stolen and substandard goods. It is because untrained individuals deliver things to clients.

As commodities are involved in the process, it is essential to make a structure that provides the highest level of security. The system must grant buyers and sellers exclusive access to place products up for auction and bidding. A valid username and password must be used to verify the users' registration. Which can be traced in the event of a fraud case, as well as a mobile OTP sent at the time of registration.

1.3 Solution

To follow are the activities that be included in the development of this new system to create the whole web-application procedure whilst also keeping the database integrated approach in mind:

Users will be able to register as well as maintain their profiles in a safe and secure environment.

- Administrators would have the authority to allow the product to be advertised, and also establish auction dates as well as a minimum auction price.
- It before every bid, the user's mobile phone number would have to be validated and authorized.

- Users can bid on fields that interest them, and they must receive periodic message alerts if they win an auction for a specific item/product.
- For easier access, there is a complete search/site map of the entire site.

1.4 Effectiveness of Solution

Whenever it came to solution evaluation, the methods to review a full solution or a piece of a product that is about to be distributed or has already been performed are covered. The success of a solution in satisfying the business needs expressed by stakeholders, notably offering value to the customer, is measured by evaluation.

- **No physical location for this.**

It is not necessary to have a physical location to sell items at an online auction since the things are sold over the internet. Inventory management may be done online, and the goods can be physically carried after it has been sold, if necessary. Having more flexibility when organizing an online auction gives us a competitive advantage.

- **Convenience**

A buyer may compete in an online auction from any location and at any time by registering for the auction. There are no limits on who may run an online auction, when they can do so, or how they can do so. Bidders may participate in the auction from the comfort of their own homes or places of work by using the computer terminal.

- **Time and money are saved.**

Participation in an online auction might save you both money and energy. To attend an auction, no special arrangements must be made for travel time. Using the site enables consumers to participate in auctions without having to go to the auction place, which saves money on transportation costs.

- **Annoying Bidders**

Some bidders may be too pushy in their pursuit of a winning offer on an item. Competitors were subjected to name-calling as well as vulgar hand movements, as well as physical abuse in rare instances. Bidders in online auctions do not have the chance to get upset with one another as they do in traditional auctions.

- **Worldwide scale**

This is a fantastic advantage of participating in an online auction. It is possible to check at posts from different nations, place bids on them, perhaps ultimately win them. In most cases, foreign auctions are out of the question if a person has financial resources to go to other nations and appear auctions there in person. Visitors of the auction will like the online forum since it enables them to view products that they otherwise would not have the opportunity to see in reality.

1.5 Parent Organization

Kanishka IT Solutions Pvt. Ltd was founded in 2009 and provides comprehensive IT solutions. It ranges from large corporations to small firms and even entrepreneurial start-ups.

To support offshore development, we have a team of technically qualified and dedicated individuals, as well as cutting-edge facilities and infrastructure. We provide a virtual expansion of our clients' development environment as well as trustworthy services. By providing turnkey solutions, our highly skilled and experienced IT specialists provide your company with a multitude of perspectives as well as profitability.

Upper edge analysts, designers, application developers, and support professionals work hard to give the most effective solutions to consumers. Kanishka IT Solutions, one of India's top web design and development businesses, has four years of company experience and serves a diversified range of clients worldwide. As a comprehensive IT services provider, we provide strategic ideas in branding, websites, and online marketing solutions.

COMPANY SERVICES

- Web site design and development
- Software development and maintenance

MISSION OF THE COMPANY

We believe in providing exceptional training to the next generation of information and technology professionals. We teach our students technical skills so that they may compete in the world with their knowledge.

Knowledge denotes soundness in all aspects of technology; increased focus is placed on practical instruction on cutting-edge technologies such as laptop computers. We also give theoretical instruction to our students via projector slides and power point presentations. We should help to assure that our students have thorough awareness of the business world.

1.6 System Hardware Requirements

The following are the basic requirements for a dedicated application server:

- Any operating system preferred intel core i3
- Memory 2GB Ram DDR4
- Hard Disk 1 x 360 GB HDD SATA
- Ethernet Card 10/100/1000 Mbps.
- Microsoft Windows 7 or any other present in the market.

1.7 Software Requirements

Software requirements are classified into broader areas into the front end and back end.

1.7.1.1 Front end

The front end of the portal has been designed using HTML and CSS which allowed us to create a Real-time portal for auctioning. HTML tags and CSS formatting. Bootstrap has been used to customize the portal for a display of smaller or bigger size.

HTML's most often used tags include:

- Website branding, navigational elements, search forms, and other common features are commonly found in the <header> section of a web page, which serves to identify information that precedes the main content of the web page.
- The <div> element creates an arbitrary block of content that may be positioned and styled as if it were a single piece of content.
- The <form> element is used to build a web-based form in HTML. Instead of creating form fields, the <form> element is often applied as a container for form fields, like <input> also <textarea> elements, to be shown on the page.
- To divide a single browser window into numerous distinct browsing contexts, the <frame> element was employed.

1.7.1.2 Back end

MySQL has been utilized as the database and PHP has been used as the web server at the backend. It was necessary to write the queries in MySQL before importing them into PHP

or linking them to the front end of the application. A sophisticated database language, MySQL, allows you to store, organize, and straightforwardly retrieve data.

CHAPTER-2

2 System Analysis

After analysing several auctions of various types, one of which was a vehicle auction. A catalogue that listed the cars that were up for auction. The public could inspect the vehicles before the auction began. Ahead of the auction, the dealer reads out the vehicle details, and then the bidding begins. The auctioneer starts shouting out a starting price and reduces it until someone is satisfied and puts their hands up, and the price gradually increases, and people begin bidding, and the highest bidder drives away with their car.

The way auctions work is that a seller lists an item by having an opening bid reserve, which means that the seller can put a reserve first before bidding starts so the offer starts from 0 and if the bid hasn't matched or gone over the reserve price at the end of the auction, the item is not sold. Another method for a seller to list a product is to set the starting price so that the winning bid at the end of that period receives the prize. An ascending auction is the name given to this type of auction.

Not only did I search on auctions, but I also analysed the security of auction websites. Websites such as eBay use an HTTPS connection, which means that when passwords are saved, they are encrypted, making it difficult for hackers to steal passwords.

The data of all the auction buyers and sellers is difficult to keep track of because it was written down on paper. As a result, they could easily lose, destroy, or manipulate the bidder. Maintaining this was always a challenge for the auction authority.

2.1 Project Requirement

Project requirements are criteria or activities that must be accomplished for the project to be successful or to be finished on time.

2.1.1 Functional Requirements

Detailed functional requirements including specifications for the online auction system have been prepared to ensure that all of the system's functions and needs are met.

- Allow the user to log in

- Ensure that the username and password are correct.
- Allowing a user to log in with an invalid username or password is not permitted.
- Capable of remembering both the username and password.
- Enables users to create an account.
- Allows users to browse for products and goods of this cost that are up for Auction.
- Shall indicate the outcome.
- Permit the bidder to place a bid on the selected commodity till the bidding expiry date
- If the customer bid price is selected, then the customer can purchase the product at the bidding price.
- The organizer has to place the bidding product with details and the expiry date of the bid with a minimum amount.
- The system should have a price mention of the item.
- The system is capable of organizing the virtual Auction for bidding.

2.2 FEASIBILITY ANALYSIS

A Feasibility study is a test of a system proposal, according to its workability, impact on the organization, ability to meet user's need and effective use of the resources .

Its main task done during the feasibility study are:

- Meet user requirements.
- Best utilization of available resources.
- Develop a cost-effective system.
- Develop a technically feasible system.

2.2.1 Technical Feasibility:

This comprised evaluating at the function, performance, and constraints that may just limit the ability to create a workable system. For this feasibility study, we looked at all of the system's capabilities, as defined in SRS, and saw if it could be accomplished via several frontend and backend platforms.

The following are some of the technical issues that are frequently addressed during the initiation phase of an investigation:

1) Does the necessary technology exist to do what is suggested?

❖ Yes, there are other languages to choose from, but PHP is one of most popular.

2) Will the proposed system provide adequate response to inquiries, regardless of the number or Location of users?

❖ Yes, it is very efficient, as it can handle a large number of requests at once.

3) Can the system be upgraded if developed?

❖ Yes, as new features become available, the older one can be replaced.

4) Are there technical guarantees of accuracy, reliability, ease of access and data security?

❖ Yes, it is very accurate and consistent because it has a large user base and is relatively accessible and ensure security.

2.2.2 Behavioural Feasibility:

The phrase "behavioural feasibility" is used to characterise social attitudes regarding certain topics. It also examines how people behave to certain situations. We may state that the system is logistically practicable if it fits the needs of the clients and the administrator. The suggested system will be helpful primarily if it can be created and implemented into a system to meet the project's needs and has appropriate user support.

The feasibility analysis for users performs the following tasks:

- It determines whether or not the project is user-friendly.
- Its user experience ought to be simple enough for anybody to use;
- The suggested system would increase overall performance.
- The suggested system would be accessible to consumers all around the world, and it will create a better business for various users.

1.3.3 Economic Feasibility:

Issues to analyze here include whether or whether the new program is cost-effective. Because the hardware was implemented from the start, the hardware project cost is minimal. Similarly, the technology installed for this application was utilized for numerous additional applications once it was completed. The software cost was less than anticipated. Furthermore, because the technological needs were already in place, there was no need to spend money on software packages.

CHAPTER 3

CHAPTER-3

3 System Design

This section elaborates on where to look for information and how to perform research, as well as how to identify what's on the ground and how to come up with several answers. The researcher will examine numerous analytic approaches in-depth, as well as the system's specific and general design, which will offer a conceptual picture of how the solution is attained.

3.1 Design

Systems design is the practice of establishing the architectural, product development, components, connections, including data for a system to meet certain requirements. It is possible to consider system capabilities as an application of systems theory to the growth of the product. Complete detailed design of the system with module description with activity, data flow diagrams. The detailed design of the system is represented by the following-

- ER diagram
- Data Flow diagram

3.1.1 ER-Diagram (ERD)

It is prominent what type of data should be recorded in the database for the Online Bidding System. Because MySQL is a relational database, the ER modelling technique is highly effective for designing the database schema because it maps well to the relational model and the ER model structures can be simply translated into relational tables.

This is the ERD for the system's database.

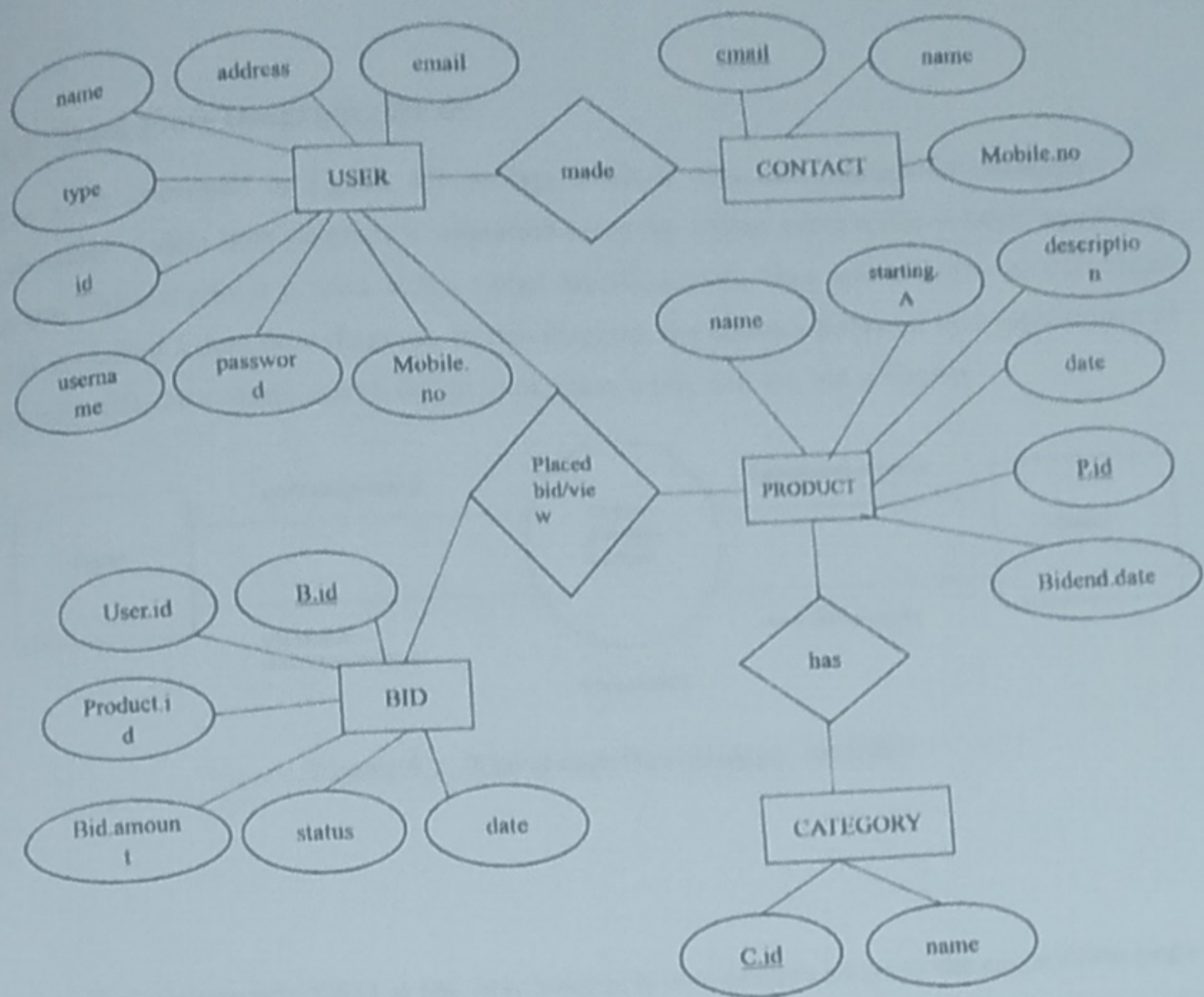


Figure 4.1: ERD for System's Database

3.2 Data Flow Diagram (DFD)

The DFD illustrated in Figure 4.2 depicts a whole flow of information throughout the procedure. A data flow diagram is important since the online auction site is made up of web pages, which is why it is used. It is a visual depiction of the flow and activities of web pages that are called a data flow diagram. In this diagram, the process followed by a typical user to register with the system, search for an item, place a bid, and log out is shown.

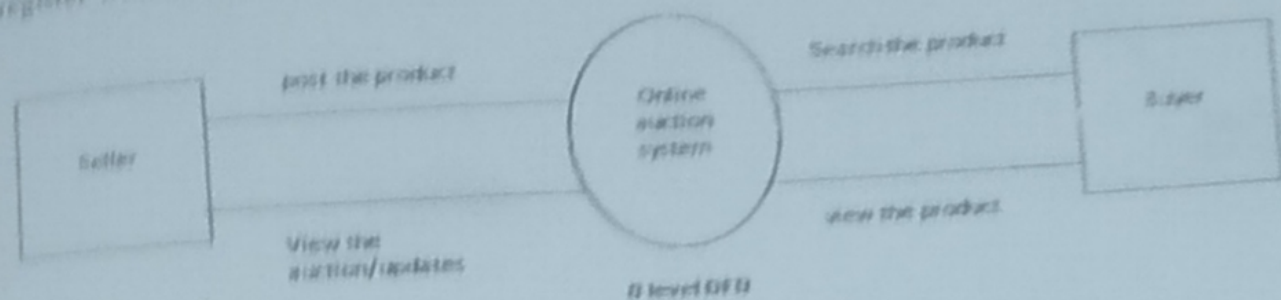


Figure 4.2: 0 level data flow diagram for OBS

The primary page of a DFD at the first level is It is necessary to go to the registration page as well as fill out the necessary information about the user. Upon successful completion of the data entry, the user will be led to a login page; otherwise, the user will be directed to an error page. It is also possible to log in using your username and password from the site and proceed to a search page to look for anything. The search results are displayed on another page, along with links to see the item's details or put a bid on it.

This is the data flow for sending messages to other users, viewing auction items, or starting a new bid.

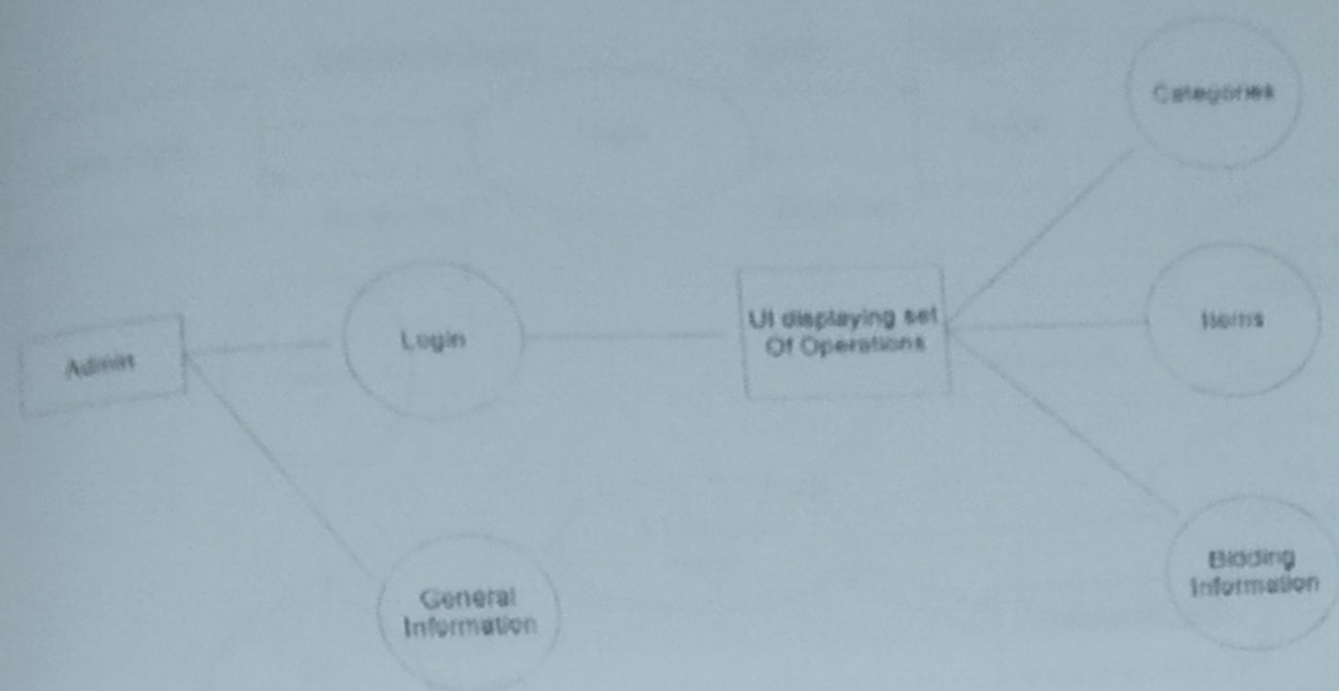


Figure 4.3: DATA FLOW DIAGRAM FOR LEVEL 1 ADMIN

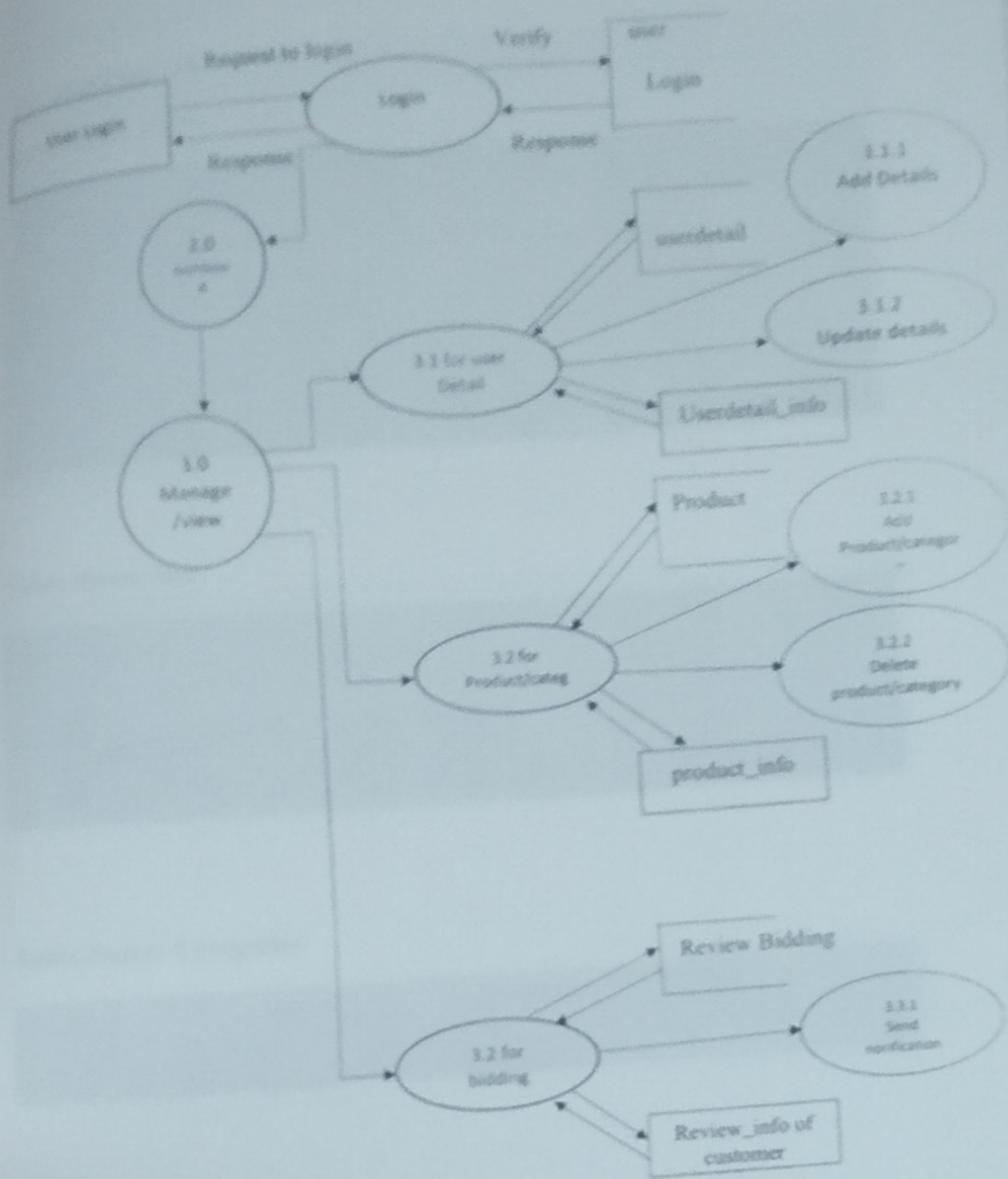


Figure 4.4: DATA FLOW DIAGRAM FOR LEVEL 2 ADMIN

3.1 SCHEMA DATABASE

Table Name: User

#	Name	Data-type	Key
1	User_ID	number	Primary
2	User_name	string	-
3	User_email	string	-
4	User_username	varchar	-
5	User_password	string	-
6	User_mobile	number	-
7	User_type	tinyint	-
8	User_date	Datetime	-

Table Name: Bid

#	Name	Data-type	Key
1	Bid_ID	int	Primary
2	User_ID	int	foreign
3	Product_ID	int	-
4	Bid_amount	float	-
5	Bid_status	tinyint	-

Table Name: Categories

#	Name	Data-type	Key
1	ID	int	Primary
2	name	varchar	-

Table Name: Products

#	Name	Data-type	Key
1	P_ID	number	Primary
2	Category_ID	string	foreign
3	P_name	string	-
4	P_desc	string	-
5	P_start_bid	number	-
6	P_regular_price	float	-
7	Bid_end_date	Datetime	-
8	P_date_created	Datetime	-

Table Name: Contact

#	Name	Data-type	key
1	Contact Id	number	primary
2	Contact name	string	-
3	Contact_email	string	-
4	Contact_mobile	string	-
5	Contact_address	string	-

CHAPTER-4

4. Coding & Testing

4.1 Testing of the Implementation

The importance of software testing in the software development life cycle cannot be overstated. The test phase is positioned directly before the system maintenance phase in the three water-fall model, and it is the essential measure that verifies the quality of software before it is provided to customers. Recently, there has been a tendency in software engineering that every phase of the software life cycle should contain testing to ensure that the current phase's outcome meets the target. Errors may be recognized and remedied at an early stage in this instance. If testing is not done early in the development process, problems may proliferate and the final result will be tough to test.

The logic of the developed system is checked during code testing. To do this, every module of the program is executed to hunt for faults. Testing specifications requires looking at the specifications that outline what a program should accomplish and how it ought to behave in different situations.

The modules in the developed framework are the first modules tested to identify any flaws. This allows for the detection of flaws in the code and logic confined just within that module. Those that arise as a result of module interaction are first avoided. Each module must be tested independently during the unit testing phase.

Test Case 1: The system's homepage validation

step	procedure	Result
1.	Go to <code>http:// http://localhost/onlineauction/</code>	Homepage is loading
2.	Move the cursor around the page and click on items.	Product description, price, date of the bid, highest bid all are visible and working.

Test Case 2: The system's User login page validation

step	procedure	Result
------	-----------	--------

1	Click on login button on page	Page is loaded
2	Enter- Username: Password:	
3	Click on "login" button	Empty fields, page reload with displaying empty. Needed to fill
4	Enter- Username: Xyz Password: Xyz	Able to login the page. With welcome connected to the user's name.

Test Case 3: User Try to bidding (process validation)

step	procedure	Result
1	Click on the product	Side bar appear with product description and bid input box.
2	Put the price in box	If the price is low than the current bid alert appears with "put higher bid than current". If bid higher current bid change with user higher bid with msg "highest bid is yours".

Test Case 4: The system's Admin homepage validation

step	procedure	Result
1.	Go to http://localhost/onlineauction/admin	Index page is loading
2.	Enter- Username: Password:	Failed to login, page re-appeared
3.	Enter- Username: xyz Password: xyz	Login successful Move to the dashboard, with msg "welcome administrator".

Test Case 5: The system's Admin putting product on bid (process validation)

step	procedure	Result
------	-----------	--------

1.	Click on the product in the side navbar	Product page appeared.
2.	Click on the new entry	Product desc. Box appear
3.	Fill all the fields (product name, product category, product desc Product Bid date, regular price, starting amount, image)	
4.	Click on "ok" button	Msg appear "entry successful" product visible for bid on system homepage of user.

CHAPTER 5

5 Implementation

The project has already been thoroughly tested, and the user has given it his acceptance. To support the intentional functional areas, the Project will be installed on the company's server soon. The project's results are in line with our expectations, which were set during the planning stage. This project does not mandate any memorizing for the user because the site has a very basic interface that can be easily understood by any user who is familiar with social media sites or websites on the internet, implying that any user with a basic understanding of how to use a website can use it.

5.1 PLATFORM CHOICE

To write down the code ATOM was used in the project which is one of the most code editor out there in the market. ATOM is made with JavaScript so it easily read and find error in the code, which help during the Designing phase of the project.

To install atom in the system-

- Step 1: On Windows, click the button to download the exe file.
- Step 2: Run the exe package to install Atom on the Windows operating system.

For Backend programming language PHP is used as it is one of the most popular and powerful language out there. Php also not very hard to code in i.e. its prefer for the project.

PHP Installation

- Step 1: Save the PHP files to your computer. The PHP Windows setup.exe is needed.
- Step 2: Open the files and extract them.
- Step 3: Configure PHP.
- Step 4: Change the path environment variable to C/
- step 5: Config PHP as an Xampp module.
- Step 6: Put a PHP file to the test.

To run the PHP code as mention Xampp server was used in the system as its provide the local host and MYSQL, both so don't need to install them separately.

The XAMPP Server Installation

Step 1. Browse the "Apache Friends" website throughout your browser to download the XAMPP server.

Step 2. Choose "XAMPP for Windows." The file will be downloaded automatically after you navigate to the downloading location.

Step 3. To launch the XAMPP installer, double-click the downloaded file.

Step 4. The "Configuration" screen will appear on screen. Then press the "Next" button.

Step 5. Select the components you would like to install and press the "Next" click.

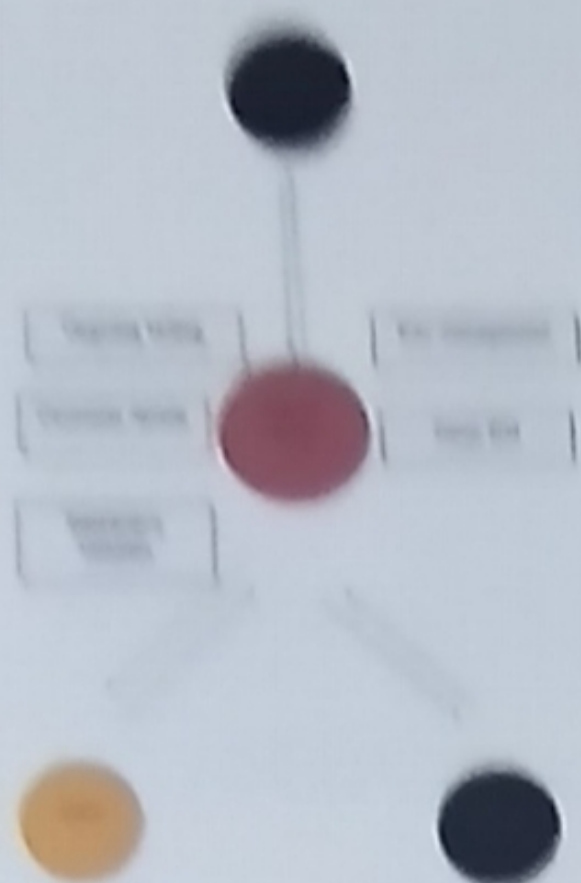
Step 6. Select a folder in which to install XAMPP and click the "Next" button.

Step 7. Disable the "Learn further about Bitnami for XAMPP" checkbox and press the "Next" icon.

Step 8. When the "Ready to Install" window appears on the screen, click the "Next" icon.

5.2 Design and Backend

JIFF stands for JavaScript Implementation of Federated Functionalities. The JavaScript library was designed to make it simple to implement the Multi-Party Computation concept in a secure manner for web-based application development. The JIFF (Javascript Application of Federated Functionalities) framework is an MPC framework that addresses the issues listed above. JIFF is written in JavaScript in order to support MPC applications.

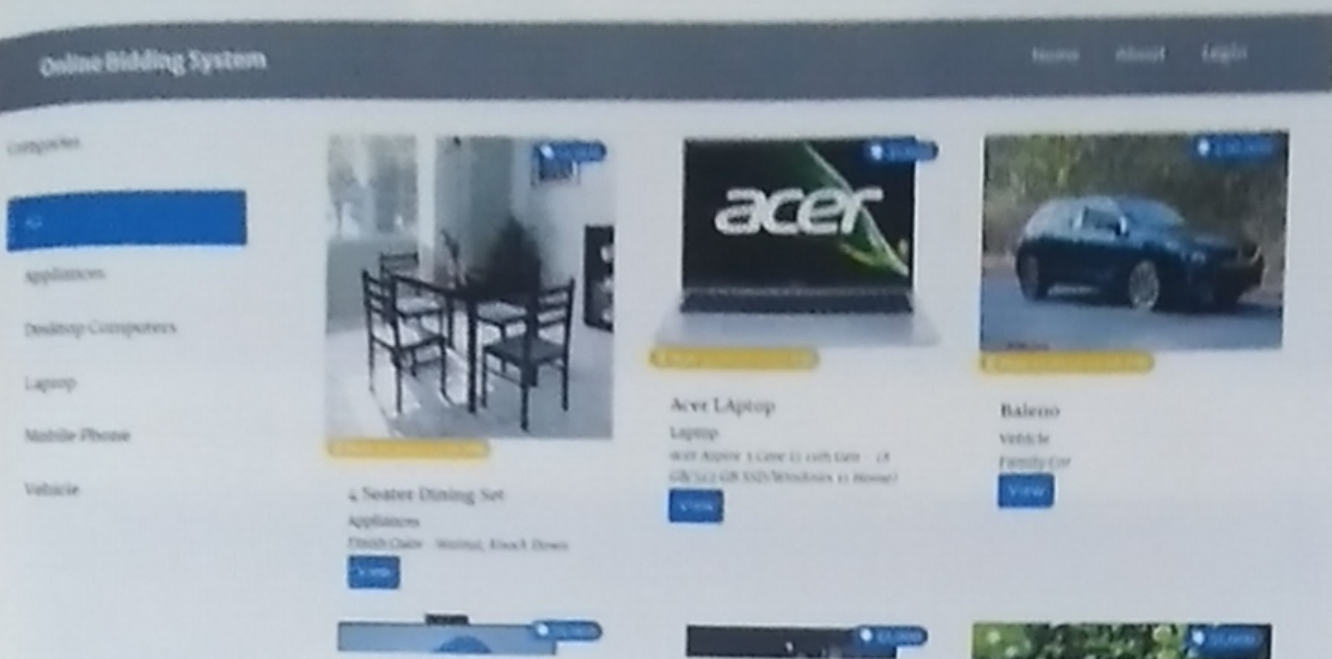


CHAPTER-6

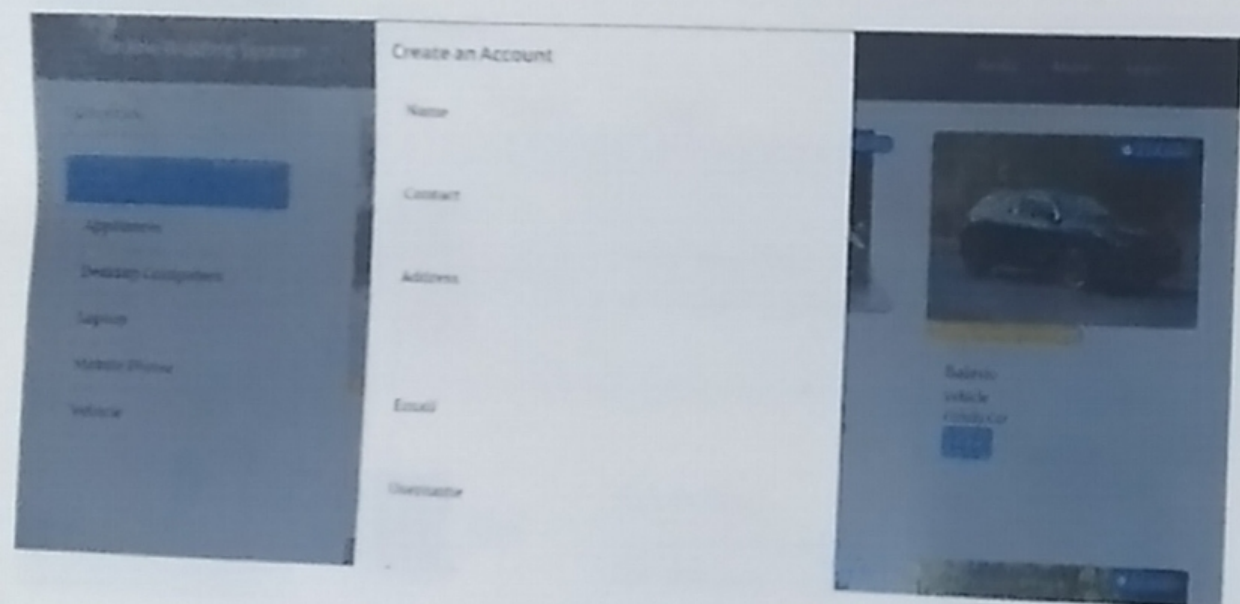
6 Sample Forms & Report

6.1 System Modules

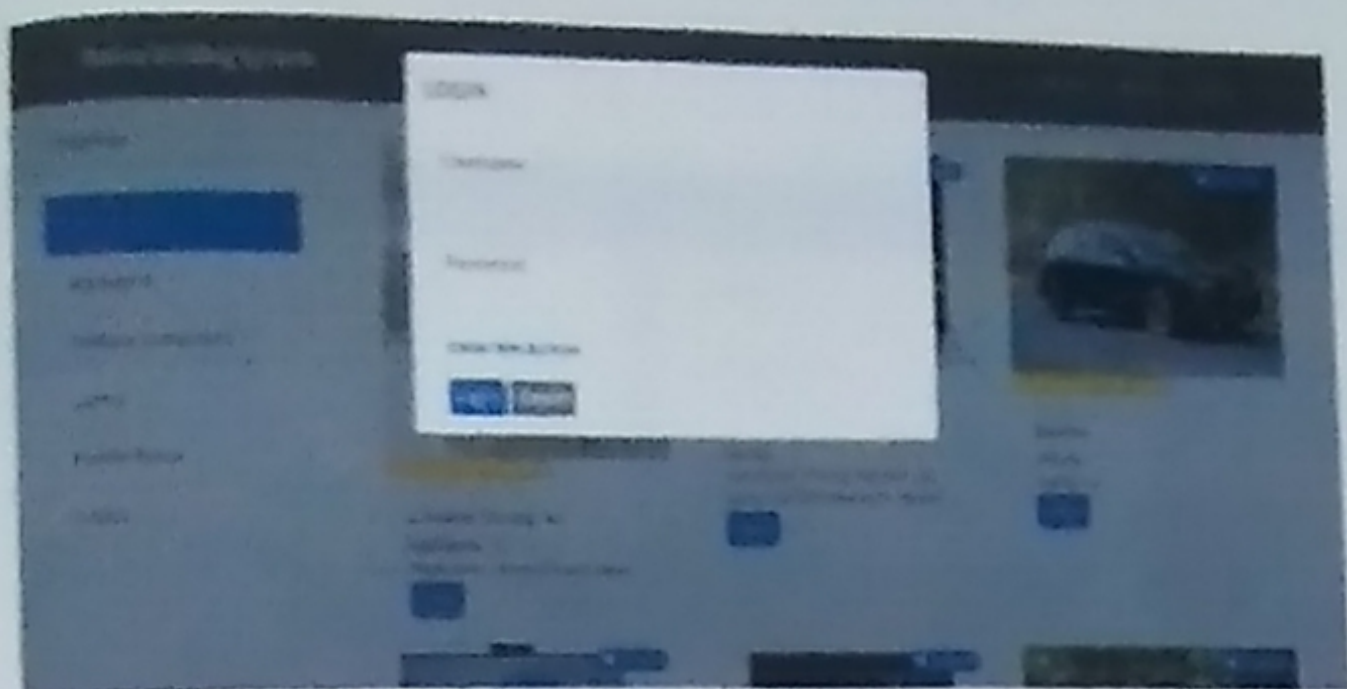
1) Home page



2) Register



3) Login Page



4) Product Information

Home

Categories

Products

Info

Users

System Setting

List of Products Refresh

Show 10 entries Search

#	img	Category	Product	Other Info	Action
1		Dining Set	Name: 4 Seater Dining Set Description: Wood table - Walnut, Glass Top	Regular Price: 15,000.00 Sale Price: 11,000.00 Unit Cost Price: 8,000.00 21,000.00 / 19.99 Highest Bid: 10,000.00 Available: 10 items	View Edit
2		Laptop	Name: Acer Laptop Description: Acer Aspire 5 (AMD Ryzen 5) - 15.6" (39.62 cm) Full HD IPS Display (1920 x 1080) Laptop	Regular Price: 2,000.00 Sale Price: 1,500.00 Unit Cost Price: 800.00 21,000.00 / 19.99 Highest Bid: 10,000.00	View Edit

The screenshot shows a web application interface. On the left is a dark sidebar with navigation icons. The main content area is light gray and contains a 'Category List' table. Above the table is a search bar with the text 'Search:'. Below the table, it says 'Showing 1 to 5 of 5 entries'. At the bottom right of the table area are 'Previous' and 'Next' navigation buttons.

ID	Category	Action
1	Vehicle	View Delete
2	Appliances	View Delete
3	Desktop Computers	View Delete
4	Laptop	View Delete
5	Mobile Phone	View Delete

CHAPTER-7

7 Conclusions

Potential bidders no longer have to physically attend auctions due to the availability of online auctions. The auction website has a large selection of items for sale online, giving buyers a lot of options from which to choose. The items are properly classified and organised. For instance, this makes it easier to find and identify the product required on the website. Bidders are identified solely by their e-mail addresses because the online auction is not conducted in person. At the time of the auction, the auctioneers will be unable to keep track of who is bidding. Shill bidding may occur as a result of potential buyers being unable to be identified. It is able to determine a product's end-bid price while keeping it hidden from bidders; then, bids can be compared to the projected price or range of prices, and if any uncertain and unpredictable bidding occurs, the relevant bid can be considered shilled or outright fraud and dropped.

7.1 Future Work

It is impossible to create a system that meets all of the user's criteria. As the system is used, the needs of the users change. The following are some of the prospective upgrades that can be made to this system:

The system may be upgraded and adapted to the required environment as new technology becomes available. Future modifications are simple to implement because it is based on object-oriented design. Based on future security problems, security could be improved using developing technology. A sub-admin module can be added to the system. A built-in web browser is a possibility. The long-term goal of the project is to improve the design, implementation, and texts so that it can be used by anyone to improve their performance. We'll make the website more dynamic and make sure the database is up to date. In order to improve the project, we will add the following module: A more secure system with a more user-friendly interface.

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