



Tribhuvan University
Faculty of Humanities and Social Sciences
Online Auction System

A PROJECT PROPOSAL

Submitted to
Department of Computer Application
Ratna RajyaLaxmi Campus, Kathmandu

In partial fulfilment of the requirements for the Bachelors in Computer Application

Submitted by:
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Under the Supervision of
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Supervisors' Recommendation

I hereby recommend that this project prepared under my supervision by Sonik Badal entitled “**Online Auction System**” in partial fulfilment of the requirements for the degree of Bachelor of Computer Application is recommended for the final evaluation.

Kriti Nemkul

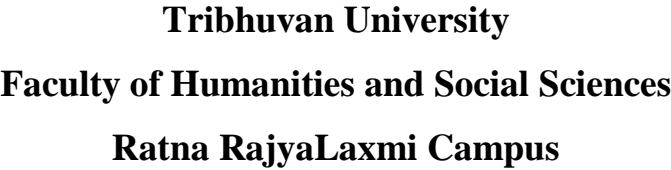
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This is to certify that this project prepared by **Sonik Badal** entitled “**Online Auction System**” in partial fulfilment of the requirements for the degree of Bachelor in Computer Application has been evaluated. In our opinion it is satisfactory in the scope and quality as a project for the required degree.

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Acknowledgement

The satisfaction that accompanies the successful completion of any task would be incomplete without the mention of people whose ceaseless cooperation made it possible, whose constant guidance and encouragement crown all efforts with success.

We are grateful to our project guide **Ms. Kriti Nemkul** mam for her guidance, inspiration, and constructive suggestions that helped us for preparing this project. I take this opportunity to express a deep sense of gratitude to every BCA teacher for their guidance, monitoring, and constant encouragement throughout which helped us in completing this task through various stages.

Abstract

The project entitled ‘**Online Auction System**’ is a web-based project. This project has designed and implemented an application that will be able to create auctions and place bid on them. This system can add users, create auctions, place bids, and stores them in a database. This system only provides authority to verify, delete users to the admin. In this system the backend is developed using PHP, the frontend using HTML, CSS, Bootstrap, and JavaScript. MYSQL is used as a database. This project will help users to post their product and get good value in return.

Keywords: -

Auction, Web-based application, HTML, CSS, PHP, Bootstrap, JavaScript, MySQL

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List of Abbreviations

CSS – Cascading Style Sheet

DFD – Data Flow Diagram

ER – Entity Relationship

HTML – HyperText Markup Language

HTTP: HyperText Transfer Protocol

JS – JavaScript

PHP – Personal Home Page

UI – User Interface

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Chapter 1: Introduction

1.1. Introduction

A world that loves to participate in real-time activities would certainly appreciate the idea of an online auction system that opens 24/7. Unlike the traditional auctioning method, this modern system brings together buyers and sellers from across the globe to a single location. Since the items are listed for a few days, bidders can think and study the deal before bidding. Since there are no geographical or time restrictions, the number of bids received will be more. The cost for conducting an auction online is less when compared to physical auction sales and the price of the items is also low. This way both parties the buyer and the seller benefit. Retailers, distributors, and liquidators can test new products, quickly sell off excess inventory and get new customers. Auctions taking place between customers, companies, and businesses have gained popularity.

A few decades down the line, auctions were carried out in auction houses and the bids were made with the auctioneer delegating the bids. This method required the physical presence of the bidders, thus it resulted in several limitations. This led to the use of online auctions, which allows for the auctions to be carried out over the internet from anywhere in the world. The advent of online auctions presented its own set of downsides due to the lack of proper evaluation techniques for the products and the sellers. The current systems do not allow for a proper description of the kinds of sellers and the kinds of products that they sell. These systems do not provide enough detailed information to evaluate the types of sellers and their products. This results in the buyers' uncertainty, thus resulting in the reduced effectiveness of online auctions and making people opt for offline auction markets. Most current auction systems do not fully provide product descriptions or fully evaluate the different types of sellers that participate in the auctioning process. Online systems come from a background where there is no full evaluation of the shilling activities that take place in different auction systems. The evaluation of shilling activities goes a long way in providing certainty about the different types of sellers. This can be achieved through the provision of skill scores or skill ratings for each seller in an auction system. By providing the sellers' skill rating, the different bidders can easily make choices for the different sellers when they decide to bid for their products.

Online auctions are very useful for businesses, regardless of their type and size. Founded in 1995, eBay takes the credit of being the major online auction host. Many businesses have

taken off because of the auction space offered by eBay. Bidders go through the product descriptions, shipping information, and images of the item before bidding. Advancements in technologies and the implementation of new features have made online auctioning simple than ever. From the initial development process to the integration of the online auction system, developers and software engineers encounter many challenges and difficulties. They think, plan, analyze, design, redesign, test, and correct errors to set up the most up-to-date online auction system for their clients.

Basic processes involved in the Online auction system are Registration for both seller and buyer, Identifying the auction type, auction rules, names, product information, prices, etc, Scheduling times for auction sessions including starting and closing time, Bidding that includes collecting bids and validating the collected bids, Closing the Auction and finally Trade Settlement.

There are also legit business people and store owners who have quality items in the locality of the auctioneer, but they do not meet for business because the auctioneer is not informed about the items available. This is a great frustration indeed!

This project shall handle this issue by creating an online platform where a user will be able to post items online for auction. The items will be accompanied by the item's name, selling price, and a picture presentation for the bidder to see.

The customers will be assured of getting the right products since they will take their time to analyze and compare a range of listed items and choose appropriately according to their needs or desires. This will save time that buyers take in searching for items, and therefore, they will save themselves from worsening of conditions, which may lead to wastage of time. This will also save money that is spent on traveling and bidding for undesired items. Bidders will, at the end of the day, have a reason to smile with this online system.

This system will run on the internet because of the dynamic nature of the internet, and anybody can access it from smartphones, computers, personal digital assistants, and many more digital gadgets. This is a sure promise that the system will serve many people in the country, and in the future, it will reach out to the whole world.

1.2. Problem Statement

The problem that usually arises in the normal conventional auction is that their people will have to leave their homes to auction and this is a big risk that might lead to robbing and other various attacks after or before bidding. In the process of auctioning, at times dispute arises in the midst of the people which also leads to another problem in the house. People do not have enough time to sit for auctioning. The participation of the general public is also very limited. But despite the increased numerous the online auction, there are problems that are still present in some online auction and bidding systems out there. In the context of Nepal there are no any auction sites for general public to use and create an auction. Sites like PPMO, Kathmandu Online Auction cannot be used by general public to start an auction.

1.3. Objectives

The objectives of Online Auction System are:

1. Create an online system where sellers can create an auction for their products.
2. To help bidders bid in the auctions created by the seller.
3. To show every placed bids and bidding user details in created auction.

1.4. Scope and Limitation

This system is designed to save everyone time by being able to create auction from anywhere, anytime. This system also provides users access to place bid on auctions. User can also edit their profile. Users can also view the list of users who have placed bids and their bid amount.

However, this system won't be useful if there is no network connection. This system is also developed only as a web application. This system also doesn't alert anyone via email. This system also provides no any guarantee that seller is going to sell or bidder is going to buy the product.

1.5. Development Methodology

This system is made following waterfall model. The Waterfall methodology follows a chronological process and works based on fixed dates, requirements, and outcomes. The waterfall model is one of the earliest models of software development in which tasks are executed in a sequence manner where we start from the top with feasibility and flow down through various tasks with implementation into the live environment. Requirements flow into the design, which in turn flow into building or implementation and finally on into tests.[1]

1.6. Report Organization

Chapter 1 consists of introduction, problem statements, objectives, scope and limitations regarding the project.

Chapter 2 contains background study and literature review. It shows the analyses done to an existing system in brief

Chapter 3 consists of requirement analysis which includes function and non-functional requirement, feasibility study includes technical, economical, operation and schedule feasibility, data modelling includes ER diagram, process modelling includes DFD diagrams.

Chapter 4 summarize on implementing and testing, tools used for preparation of the project. Testing includes unit testing and system testing.

Chapter 5 includes lesson learnt/outcome, conclusion and future recommendation.

Chapter 2: Background Study and Literature Review

2.1. Background Study

Globally, there are many such types of systems like eBay, eBid, Webstore, etc., yet none are helpful in the context of Nepal. Here in Nepal, the transaction between the buyer and the seller is carried out conventionally; meaning that people will offer their highest prices and the seller will sell to the one giving the highest value, which is a tedious way of bidding for products. This process will also be affected by the influence of personalities from bigger societies.

One of the concepts that online auctions started with was the idea that people could police themselves. But those with the intent to take advantage of others have found a way to bypass this mild safeguard as well. It was envisioned that with the opportunity to give "feedback" on each other as buyers and sellers, honesty would remain intact. However, some have found a way to inflate their ratings, which makes them appear trustworthy to do business with.

2.2. Literature Review

An auction is one type of economic activity that is done by several people every day. But auctions also have a long history that covers many areas of activity. For example, the U.S. government uses auctions to sell Treasury bills and timber and oil leases. The Indian government uses auctions for selling the "Telecom spectrum". One more example is to sell rights for mines, which also uses auctions [2].

Auction system are divided into four major categories based on their work and the way it was held. English auctions are carried out in real-time interaction. That is bidders who are physically or virtually present at the auction. The seller gradually raises the price; bidders drop out until finally, only one bidder remains, and that bidder wins the object at this final price. Oral auctions in which bidders shout out prices or submit them electronically are forms of ascending-bid auctions. [3] Dutch Auction is also an interactive auction format in which the seller gradually lowers the price from its high initial value to a low price until the first moment when some bidder accepts and pays the current price. That bidder wins the object. In this process, the seller or auctioneer shouts out the price, which gradually reduces. These auctions are called "Dutch auctions" because flowers have long been sold in the Netherlands using this procedure. [4] First Price Sealed Bid Auction is a kind of auction where bidders submit simultaneous "sealed bids" to the seller. The terminology

comes from the original format for such auctions, in which bids were written down and provided in sealed envelopes to the seller, who would then open them all together. The highest bidder wins the object and pays the value of that bid. [5] Second Price Sealed Bid Auction For in an auction where bidders submit simultaneously sealed bids to the sellers. The highest bidder wins the object. But the difference between the first bid and the second bid is that the winner of the highest bid has to pay the value of the second-highest bid. These auctions are called Vickrey auctions in honor of William Vickrey, who wrote the first game-theoretic analysis of auctions. Vickrey won the Nobel Memorial Prize in Economics in 1996 for this body of work.[6]

The earliest Internet auctions appeared in 1993, with auctions based on Internet newsgroups (Lucking-Reiley 2000). In 1995, the first Internet auction websites opened, with OnSale (www.onsale.com) and eBay (www.ebay.com) starting operations. Today, there are hundreds of websites available for online auctions. An incredible variety of goods and services are being auctioned on the Internet. Collectibles like stamps and coins, computers, cars, and even locomotives and machine tools are also found on auction sites. [7]

Chapter 3: System Analysis and Design

This project **Online Auction System** is developed following **Waterfall model** which is based on a linear sequential flow. This means that any phase in the development process begins only if the previous phase is complete. In this waterfall model, the phases do not overlap. [8]

3.1. System Analysis

This system provides good features for creating auction and placing bids. This system gives the right to admin only for approving and deleting the users.

3.1.1. Requirement Analysis

i. Functional Requirements

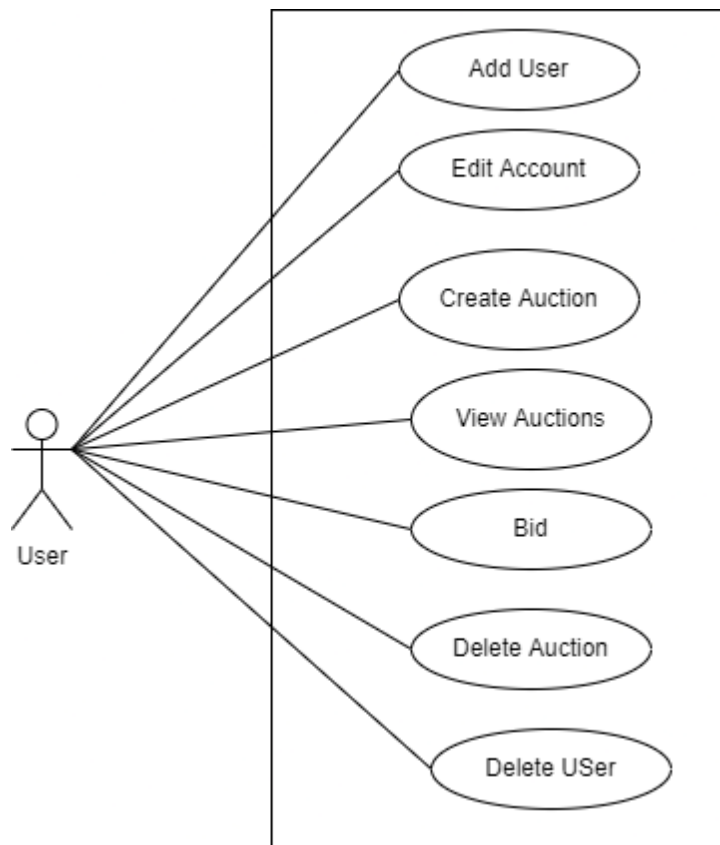


Figure 1: USE-CASE Diagram of Online Auction System

Figure 1 shows the case diagram of this project. There is only one actor called user. User is allowed to create or edit account. They can also create an auction, view auctions and place bids. They can also delete auction, undo bidding and delete an account.

ii. Non Functional Requirements

Availability:

This system is developed as a web application and can be used online.

Security:

This system is secure, and no information will be available outside of the system for everyone's privacy.

Performance:

This system is designed for smooth performance with optimization and good response.

Reliability:

This system has good privacy features and is reliable for users.

3.1.2. Feasibility Analysis

A feasibility study, as the name suggests, is designed to reveal whether a project/plan is feasible. It is an assessment of the practicality of a proposed project/plan. Feasibility of a new system means ensuring that the new system, which we implemented, is efficient and affordable. There are various types of feasibility to be determined.

i. Technical

The technical requirement for the system is economic, and it does not use any other additional hardware and software. This system can be operated by users with simple knowledge regarding the required technologies.

ii. Operational

The system working is easy to use and learn due to its simple but attractive interface. The user requires only basic training to operate this system.

iii. Economic

The system is economically feasible as most of the tools and resources required are cheap and easily available.

iv. Schedule

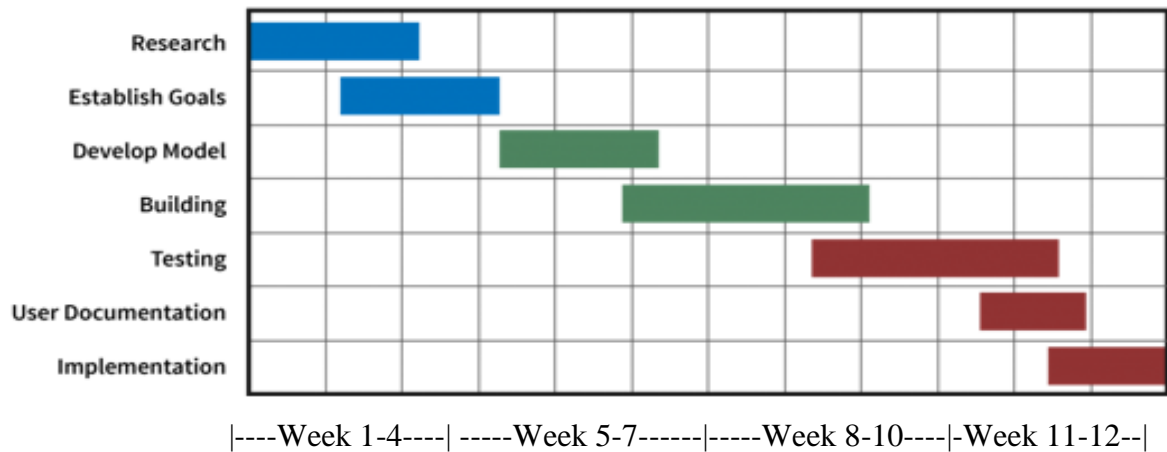


Figure 2: Gantt chart of Online Auction System

This project is completed realistically and achieved under a deadline. It was developed within a time limit. Hence, it is feasible in the respective schedule.

3.1.3. Data Modelling (ER-Diagram)

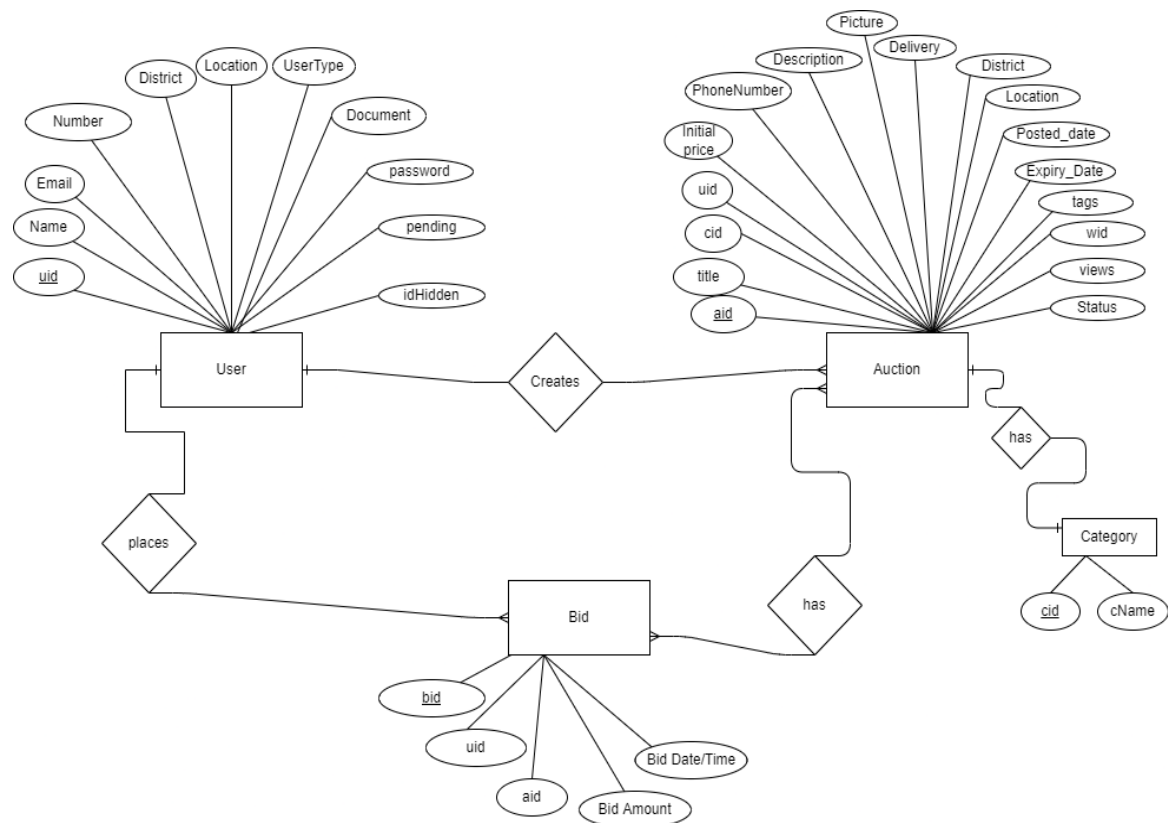


Figure 3: ER Diagram of Online Auction System

Figure 3 shows ER diagram of this system named **Online Auction System**. This diagram shows four entities named Users, Auction, Category and Bid.

3.1.4. Process Modelling (DFD)

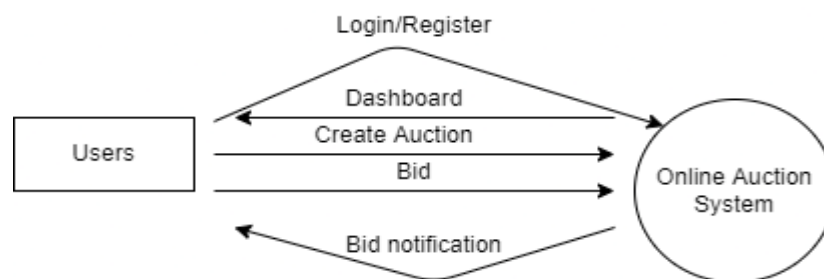


Figure 4: Context Diagram of Online Auction System

Figure 4 shows context of this system named Online Auction System. This diagram shows one entity. Here user first login, then system provides them dashboard, the user can then create auction or place bid.

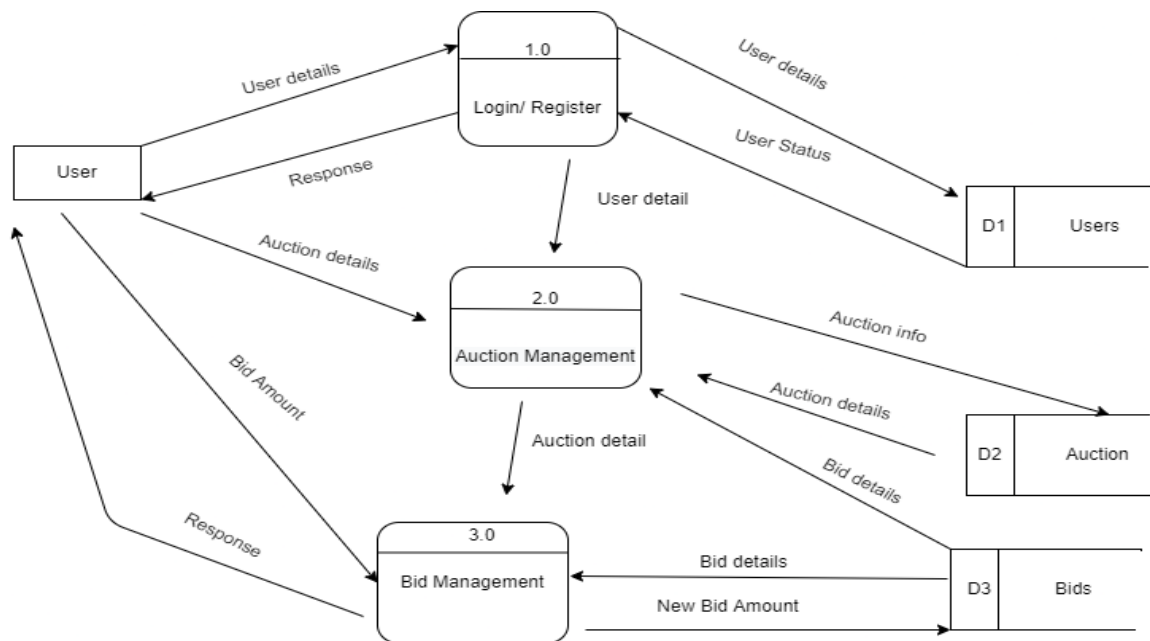


Figure 5: Level- 1 DFD of Online Auction System

Figure 5 shows level-1 DFD of the Online Auction System. It shows one external entity called user. It also shows three data-store named Users, Auction, and Bids. Three different processes are also defined respectively, and the data-flow symbol is showing how every one of them is linked.

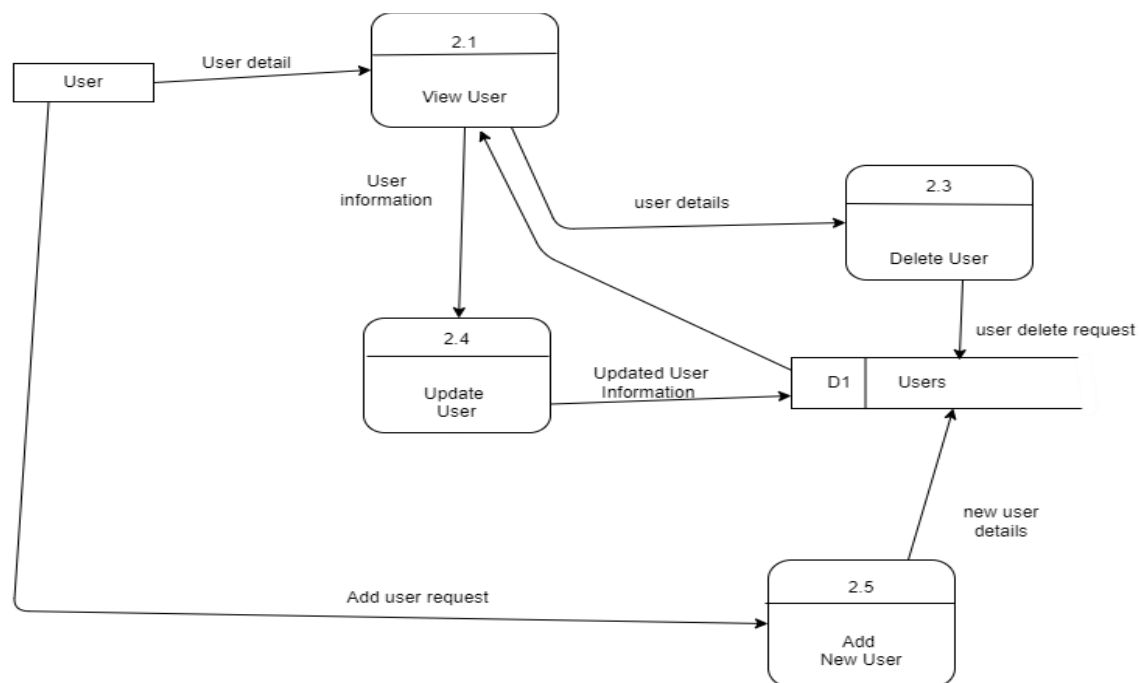


Figure 6: Level-2 DFD of Patient Management in Online Auction System

Figure 6 shows the level 2 DFD diagram of the Auction Management process. It shows users can view and update details. He/she can also add or delete patients in the system.

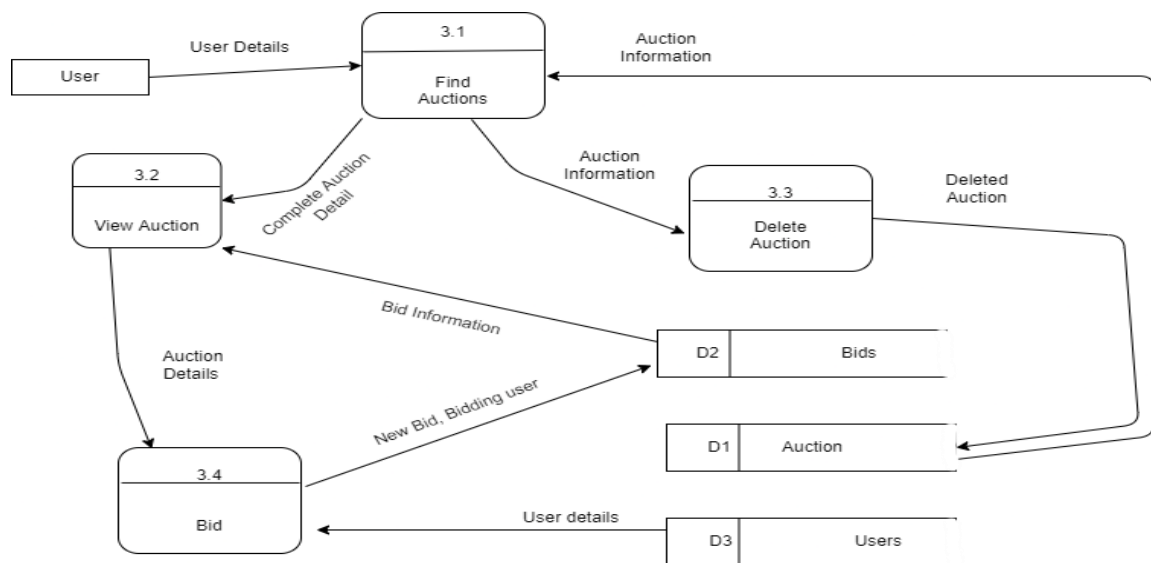


Figure 7: Level-2 DFD of Report Management in Online Auction System

Figure 7 shows the level 2 DFD diagram of the Bid Management Process. It shows users can search and view or delete auctions. He/she can also place bid in them.

3.2. System Design

System design is the phase that bridges the gap between problem domain and the existing system in a manageable way. This phase focuses on the solution domain, i.e. "how to implement?" It is the phase where the SRS document is converted into a format that can be implemented and decides how the system will operate.

3.2.1. Architectural Design

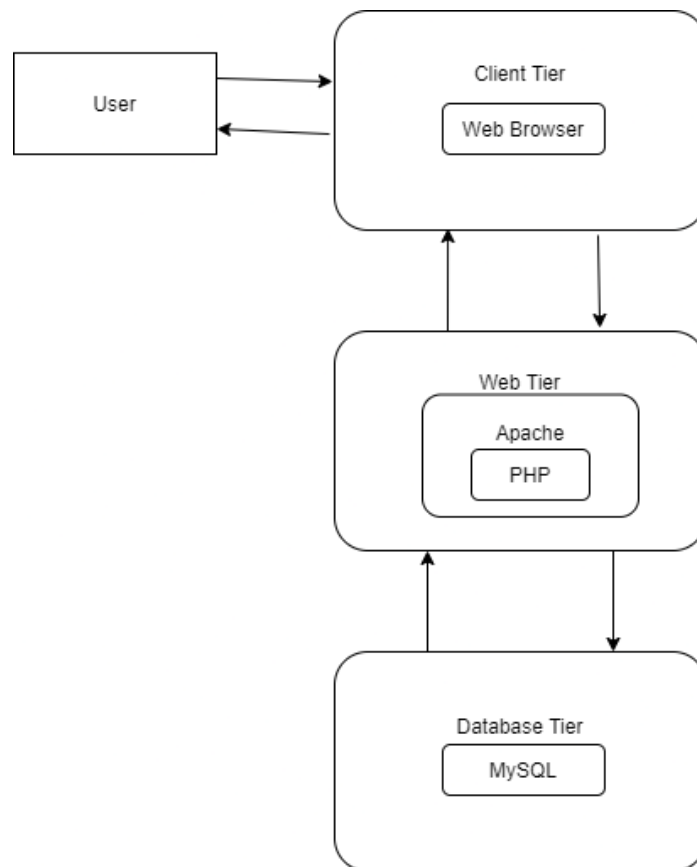


Figure 8: Architectural Design of Online Auction System

Figure 8 shows the architectural design of the Online Auction System. It shows three tiers called client, web, and database. The user interacts with the system from the client tier through the web browser. Web Tier, developed in PHP acts as a bridge between Client and Database tier. Database tier, developed using MySQL is used as a database.

3.2.2. Database Schema Design

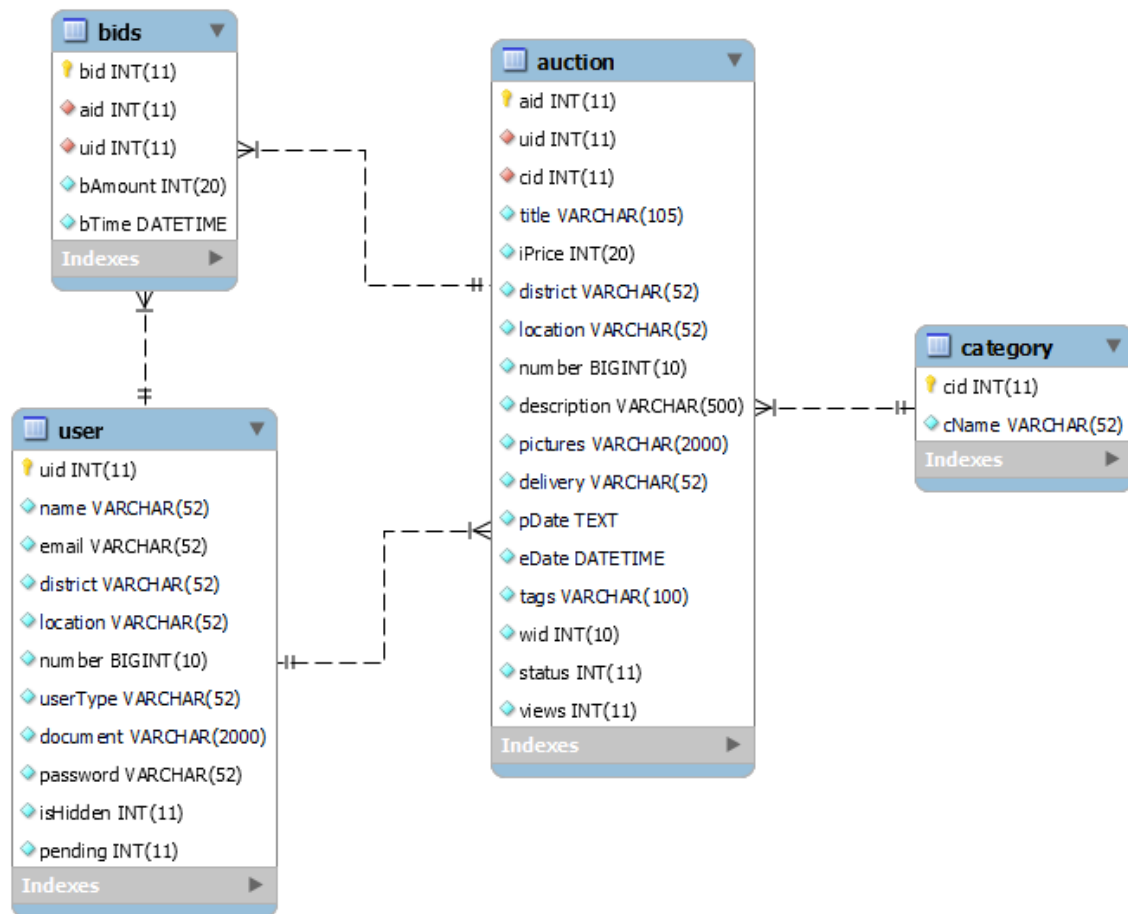


Figure 9: Schema Design of Online Auction System

Figure 9 shows the schema diagram of this developed system. It consists of four tables, also known as entities. Each table contains many attributes, also known as a column, having specific data types. Every table has a primary key named 'id' and every table is connected with one or more tables with the help of a foreign key.

3.2.3. Interface Design

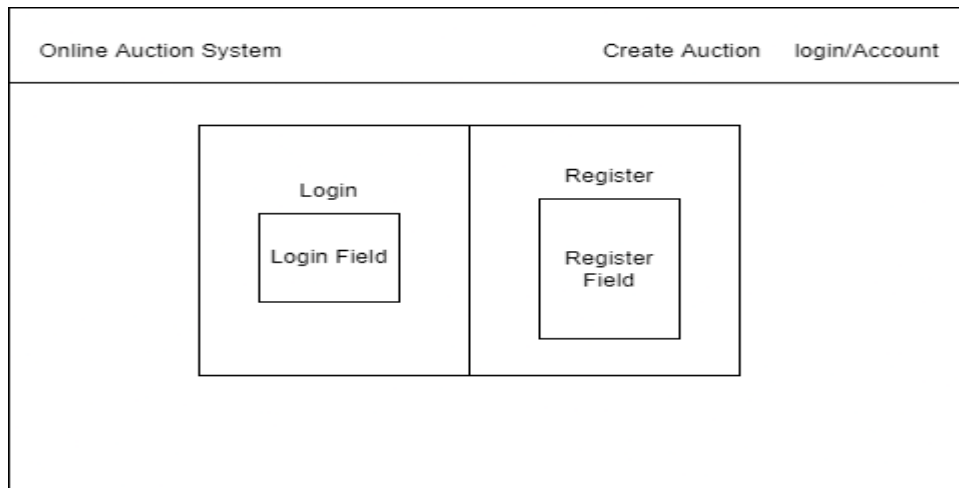


Figure 10: Login/Register Page Interface Diagram of Online Auction System

Figure 10 shows the Login/Register page interface of the Online Auction System. User can Login and register from same page.

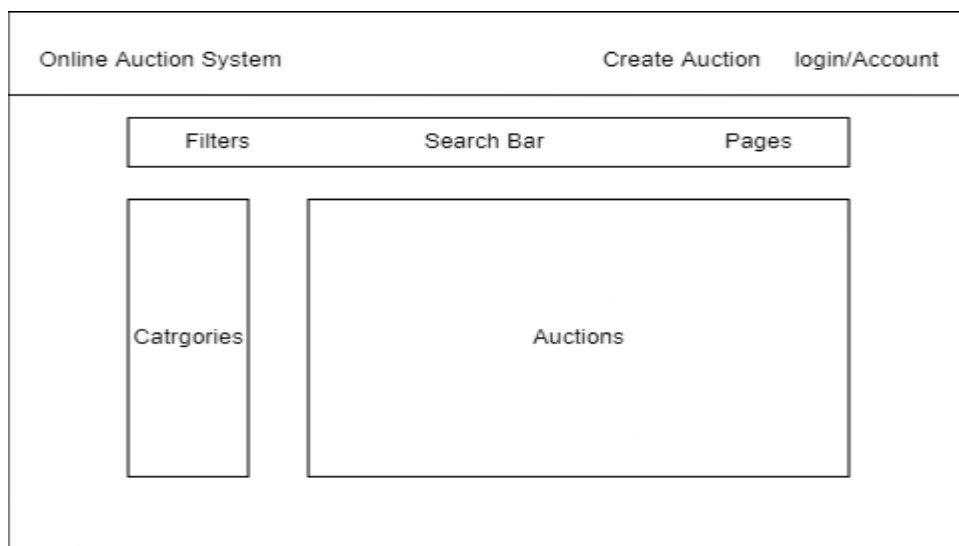


Figure 11: Index Page Interface Design of Online Auction System

Figure 11 shows the index page interface of the Online Auction System.

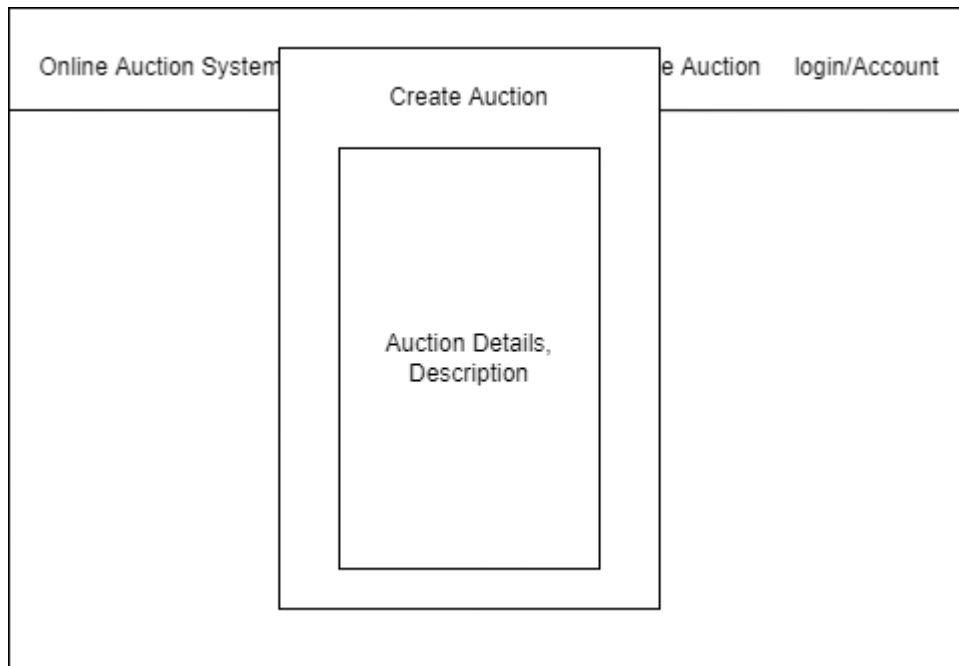


Figure 12: Create Auction Page Interface Design of Online Auction System

Figure 12 shows the create auction page interface of the Online Auction System. User can create an action via this page.

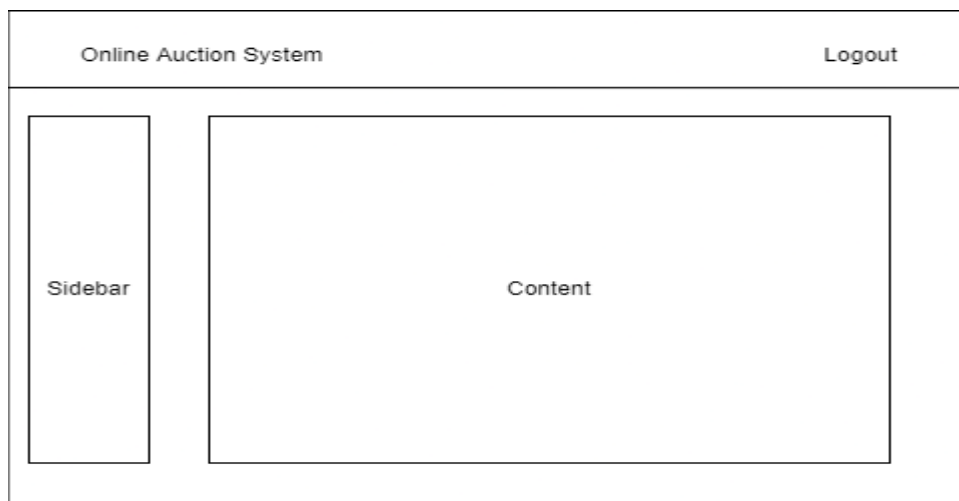


Figure 13: Dashboard Interface Design of Online Auction System

Figure 13 shows the dashboard page interface of the Online Auction System. User can perform different activities via dashboard.

3.2.4. Physical DFD

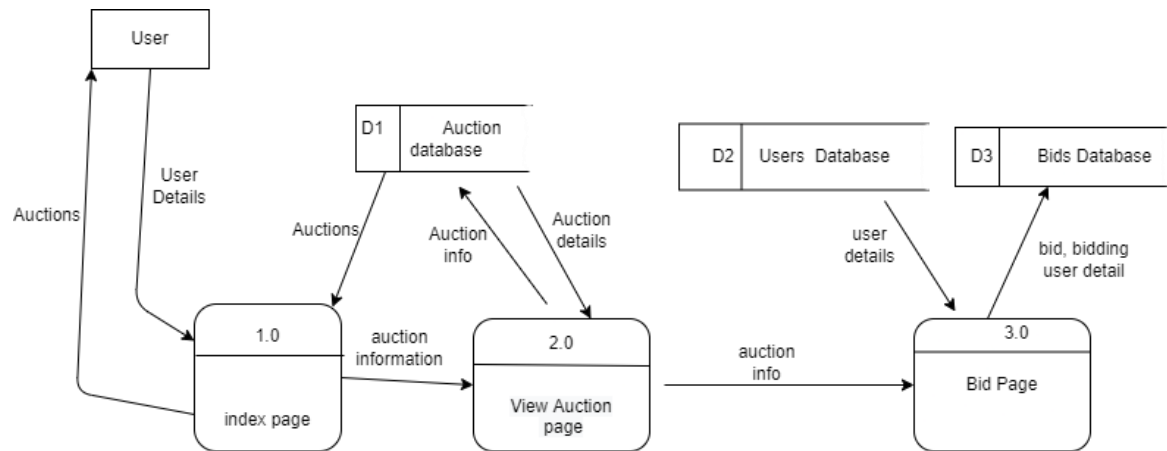


Figure 14: Physical DFD of Online Auction System

Figure 10 shows the physical DFD of the Online Auction System. It shows one external entity called the user. User first goes into the index page. The user can then view or create an auction. The user can also place bid in an auction.

3.3. Algorithm details

Item based recommendations is one kind of recommendation method which looks for similar items based on the items users interact with. How it works is that it suggests an item similar to the item the user is looking and recommends accordingly. This solely depends on the choice of the users themselves, and the recommendations are made based on the items the user are viewing. If the similar items found are less than the items needed the algorithm suggest the items with the highest views.

Let's understand this with an example. Suppose our user Ram wants to bid for something. Our job is to recommend him items related to the item he is currently looking. We will first know the item he is looking, let us call this item 'A'. Next, we will search for other items similar to this item. Suppose we found out that item 'B', 'C' and 'D' are highly similar to 'A', therefore, there is a highly likely chance that Ram will also like item 'B', 'C' or 'D' because it is similar to one Ram is watching. Hence, we will suggest the item 'B', 'C' and 'D' to Ram. But if there is no any similar items as 'A' than we will suggest the items with highest views.

Algorithm:

Step-1: Start

Step-2: Set similarItems=0, A = Item user is viewing.

Step-3: similarItems += items similar to the A within same category as A.

Step-4: if similarItems >= 4, go to step-10

Step-5: similarItems += items similar to the A outside of category as A

Step-6: if similarItems >= 4, go to step-10

Step-7: similarItems += items with highest views within same category as A.

Step-8: if similarItems >= 4, go to step-10

Step-9: similarItems += items with highest views outside of category as A

Step-10: Recommend similar items

Step-11: End

Source Code:

```
$count = 0;
$sids = array();
if ($tags != "") {
    $tagss = explode(",", $tags);
    //Getting similar items within same category
    foreach ($tagss as $a) {
        $sql1 = "SELECT * FROM auction WHERE cid = '$cid' && auction.tags LIKE '%$a%' order by views desc";
        $res1 = mysqli_query($conn, $sql1) or die(mysqli_error($conn));
        while ($row = mysqli_fetch_assoc($res1)) {
            if ($row["aid"] != $aid) {
                if (!in_array($row["aid"], $sids)) {
                    array_push($sids, $row["aid"]);
                    $count++;
                }
            }
            if (count($sids) == 4) break;
        }
    }
    //Getting similar items outside of similar category
    if (count($sids) != 4) {
        foreach ($tagss as $a) {
            $sql1 = "SELECT * FROM auction WHERE cid != '$cid' && auction.tags LIKE '%$a%' order by views desc";
            $res1 = mysqli_query($conn, $sql1) or die(mysqli_error($conn));
            while ($row = mysqli_fetch_assoc($res1)) {
                if (!in_array($row["aid"], $sids)) {
                    array_push($sids, $row["aid"]);
                    $count++;
                }
            }
            if (count($sids) == 4) break;
        }
    }
}
//Getting highest views items within same category
if (count($sids) != 4) {
    $sql1 = "SELECT * FROM auction WHERE cid = '$cid' order by views desc";
    $res1 = mysqli_query($conn, $sql1) or die(mysqli_error($conn));
    while ($row = mysqli_fetch_assoc($res1)) {
        if ($row["aid"] != $aid) {
            if (!in_array($row["aid"], $sids)) {
                array_push($sids, $row["aid"]);
                $count++;
            }
        }
        if (count($sids) == 4) break;
    }
}
//if recommending items are less than 4
if (count($sids) != 4) {
    $sql1 = "SELECT * FROM auction WHERE cid != '$cid' order by views desc";
    $res1 = mysqli_query($conn, $sql1) or die(mysqli_error($conn));
    while ($row = mysqli_fetch_assoc($res1)) {
        if (!in_array($row["aid"], $sids)) {
            array_push($sids, $row["aid"]);
            $count++;
        }
    }
    if (count($sids) == 4) break;
}
}
```

Figure 15: Item Based Recommendation of Online Auction System

Chapter 4: Implementation and Testing

4.1. Implementation

4.1.1. Tools Used

• Diagram Tool:

The components of the system and the flow of the data and control between these components are demonstrated by diagram tools by using graphs. “Draw.io” and “Canva” are the diagram tool used in the project.

• Web Development Tool:

These tools assist in designing web pages with all aligned elements like forms, text, script, graphics, and so on. Visual Studio Code is used as a web development tool in the project.

The different frontend tools used for the completion of the project are:

- HTML 5
- CSS
- Bootstrap
- Javascript
- JQuery

The backend tool used for this project is:

- PHP

The database tool used for this project is:

- MySQL

The Server used for this project is:

- Apache(Xaamp 3.2.4)

4.1.2. Implementation Details of Modules

Login Module:

This module is used for verifying and logging-in registered users. It restricts unauthorized users and only allow authorized and registered users.

Source Code:

```
$usr = $psw = "";
$usr = check_input($_POST['email']);
$psw = check_input($_POST['password']);
$pattern = "/^[_a-z0-9-]+(\\.[_a-z0-9-]+)*@[a-z0-9-]+(\\.[a-z0-9-]+)*(\\.[a-z]{2,})$/i";

if (!preg_match($pattern, $usr) || !preg_match('/[A-Za-z0-9A-Za-z!@#%]+$/ ', $psw)) {
    echo '<span style="color:red;">Enter Valid Details</span>';
} else {
    $sql = "SELECT * FROM user WHERE email='{ $usr}' AND password= '{ $psw}' AND isHidden = 0";
    $result = mysqli_query($conn, $sql) or die(mysqli_error($conn));
    if (mysqli_num_rows($result) > 0) {
        while ($row = mysqli_fetch_assoc($result)) {
```

Figure 16: Login Module of Online Auction System

Register Module:

This module is used for registration of new users. This module asks basic personal detail and add/store to the system.

Source Code:

```
$name = $_POST["name"];
$email = $_POST["email"];
$number = $_POST["number"];
$district = $_POST["district"];
$location = $_POST["location"];
$password = $_POST["password"];

foreach ($FILES["files"]["tmp_name"] as $key => $tmp_name) {
    $file_name = $_FILES["files"][$key];
    $file_tmp = $_FILES["files"][$key];
    $ext = pathinfo($file_name, PATHINFO_EXTENSION);

    if (in_array($ext, $extension)) {
        if (!file_exists("product/" . $file_name)) {
            move_uploaded_file($file_tmp, "product/" . $file_name);
        } else {
            $filename = basename($file_name, $ext);
            $newFileName = $filename . time() . "." . $ext;
            move_uploaded_file($file_tmp, "product/" . $newFileName);
        }
    } else {
        echo '<script>
        alert("Select valid Documents");
        window.location = "./login.php";
        </script>';
        exit();
    }
}

$sql = "Insert into user(name,email,number,district,location,password, document, userType, pending) values('$name','$email','$number','$district',
|$location','$password','$fileNames', 'User', 1)";
$result = mysqli_query($conn, $sql) or die(mysqli_error($conn));
```

Figure 17: Register Module of Online Auction System

Create Auction Module:

This module is used for creating new Auction.

Source Code:

```
extract($_POST);
$error = array();
$extension = array("jpeg", "jpg", "png", "gif");
$fileName = implode(' ', $_FILES["files"]["name"]);
include("../include/conn.php");

$title = $_POST["title"];
$category = $_POST["category"];
$district = $_POST["district"];
$location = $_POST["location"];
$number = $_POST["number"];
$iPrice = $_POST["iPrice"];
$delivery = $_POST["delivery"];
$desc = $_POST["desc"];
$uid = $_POST["uid"];
$date = $_POST["date"];
$time = $_POST["time"];
$tags = $_POST["tags"];

$datetime = date('Y-m-d', strtotime($date)) . " " . $time;
$sanitized_desc = mysqli_real_escape_string($conn, $desc);

$sql = "INSERT INTO auction(uid, cid, title, pictures, district, location, number, iPrice, delivery, description, eDate, tags)
VALUES('$uid','$category','$title','$fileName','$district','$location','$number', '$iPrice','$delivery', '$sanitized_desc', '$datetime', '$tags')";
$result = mysqli_query($conn, $sql) or die(mysqli_error($conn));
if ($result) {
```

Figure 18: Create Auction Module of Online Auction System

Bid Module:

This module is used for bidding in auction. User can bid appropriate amount via this module.

Source Code:

```
$amount = $_POST['price'];
$sql1 = "delete from bids where aid ='$aid' && uid ='$uid'";
$res1 = mysqli_query($conn, $sql1) or die(mysqli_error($conn));
$sql1 = "Insert into bids(aid,uid,bAmount) values('.$aid.', '.$uid.', '.$amount.')";
$res1 = mysqli_query($conn, $sql1) or die(mysqli_error($conn));
if ($res1) {
```

Figure 19: Bid Module of Online Auction System

4.2. Testing

In this stage, the validity of the program is checked. Testing is the process of debugging of the software that is discovering the errors or bugs and removing them. In course of testing, all algorithms used in the program are verified. Analysis on structure of programs, data flows across modules through all the possible paths and complexity of the system is undertaken.

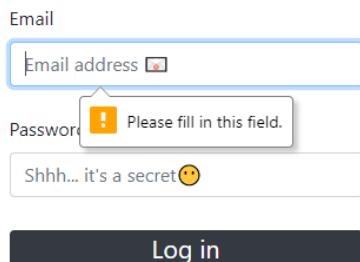
4.2.1. Test Cases for Unit Testing

Test case for logging-in with empty fields:

Input: NULL

Expected Outcome: Fill all fields.

Obtained Outcome:



The screenshot shows a login form with two input fields: 'Email' and 'Password'. The 'Email' field contains the placeholder text 'Email address' and a red eye icon. The 'Password' field contains the placeholder text 'Shhh... it's a secret' and a yellow smiley face icon. A tooltip with a yellow warning icon and the text 'Please fill in this field.' is displayed over the 'Email' field. Below the fields is a dark grey 'Log in' button.

Remarks: Pass

Test case for logging-in with incorrect details:

Input: Random email and password.

Email: aasd@gmail.com

Password: aasds

Expected Outcome: Invalid details

Obtained Outcome:



Remarks: Pass

Test case for logging-in with correct details:

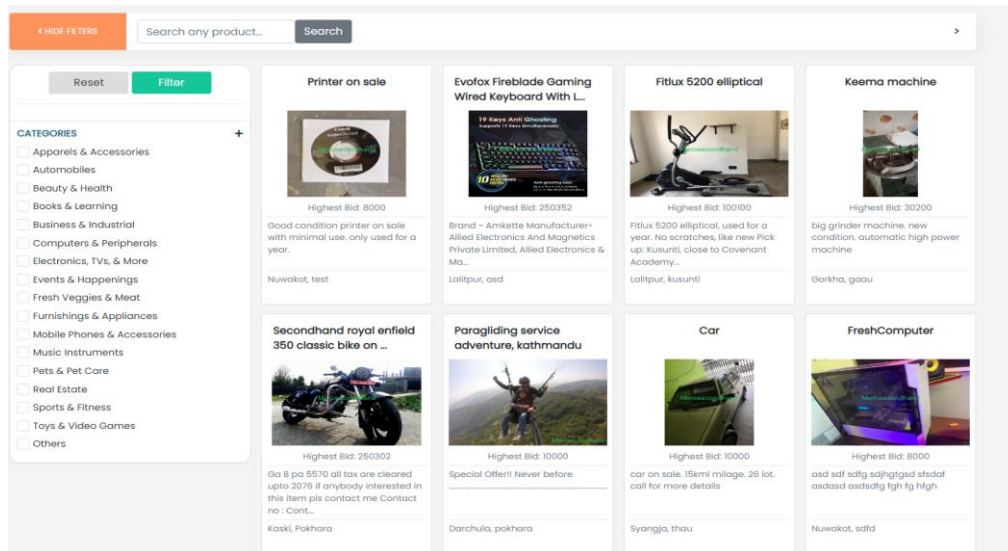
Input: Valid email and password.

Email: test123@gmail.com

Password: password

Expected Outcome: Redirect to index page

Obtained Outcome:



Remarks: Pass

Test case for creating user:

Input: User information

Expected Outcome: User Created, waiting admin approval

Obtained Outcome:



Remarks: Pass

4.2.2. Test Cases for System Testing

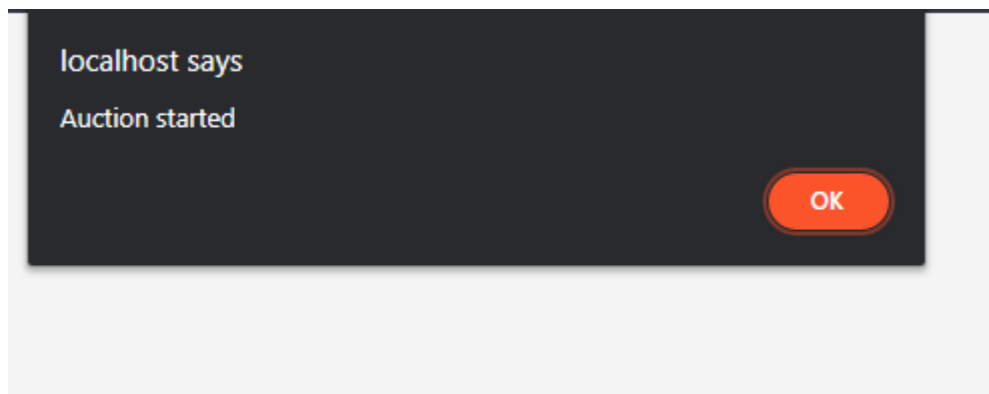
System Testing is a type of software testing that is performed on a complete integrated system to evaluate the compliance of the system with the corresponding requirements. System Testing is carried out on the whole system in the context of either system requirement specifications or functional requirement specifications or in the context of both.

Test case for creating Auction:

Input: Auction information

Expected Outcome: Auction is started

Obtained Outcome:



Remarks: Pass

Test case for bidding in an auction:

Input: Bid Amount

Expected Outcome: Bid placed successfully

Obtained

Outcome:



Remarks: Pass

Test case for editing profile:

Input: Users' new information

Expected Outcome: Edit successful

Obtained

Outcome:

User info:

Name

Sagar1

Email

sagar@gmail.com

District

Kathmandu

Location

Jorpati

Phone Number

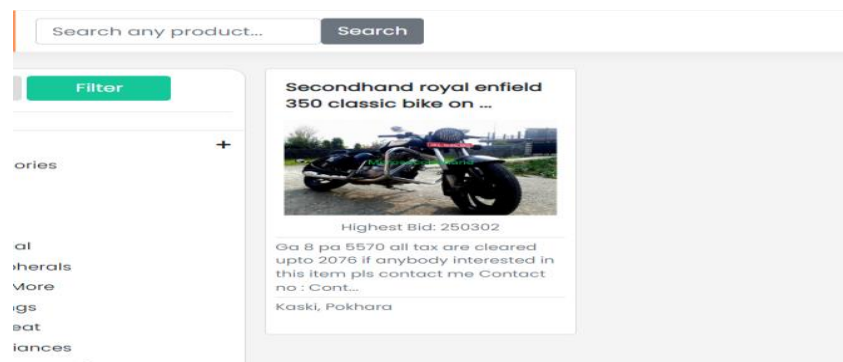
Remarks: Pass

Test case for searching auctions:

Input: Auction title

Expected Outcome: Searched entered auction

Obtained Outcome:





Remarks: Pass

Test case for deleting auction:

Input: clicked on 'delete' button

Expected Outcome: Auction removed from list

Obtained Outcome:

Auctions Created:					
Title	Started Date	End Date	Highest Bid	status	
FreshComputer	2022-08-02 13:18:52	2022-08-27 17:22	8000	Running	
Xiomí mi 2 band with heart rate monitor sale at ka...	2022-08-02 13:23:08	2022-09-29 16:25	1000	Running	





Remarks: Pass

Test case for deleting user:

Input: clicked on 'delete' button

Expected Outcome: User removed from users list

Obtained Outcome:

test2	test2@gmail.com	9860050124	Syangja, Thamel	User		
Sagar1	sagar@gmail.com	9841234567	Kathmandu, Jorpati	User		

Remarks: Pass

Chapter 5: Conclusion and Future Recommendations

5.1. Lesson Learnt / Outcome

While working on this project, we have learned a lot of things that are being implemented in real-world projects. Although this project was supposed to be an academic fulfilment, with the help of our teachers' guides and time spent on this project, we have learned many more about software engineering, testing, and database management, rules to create software, time management, and better audience targeting.

Although the project has turned out to be exactly what we had imagined it to be, there are some functions that we would like to add in the forthcoming days and make it more user-friendly and competitive.

5.2. Conclusion

We created our system to be fully interactive, reliable, and efficient. Now system users register themselves, create an auction and place bids on them. The admin can edit users, auctions and get overall basic report.

5.3. Future Recommendations

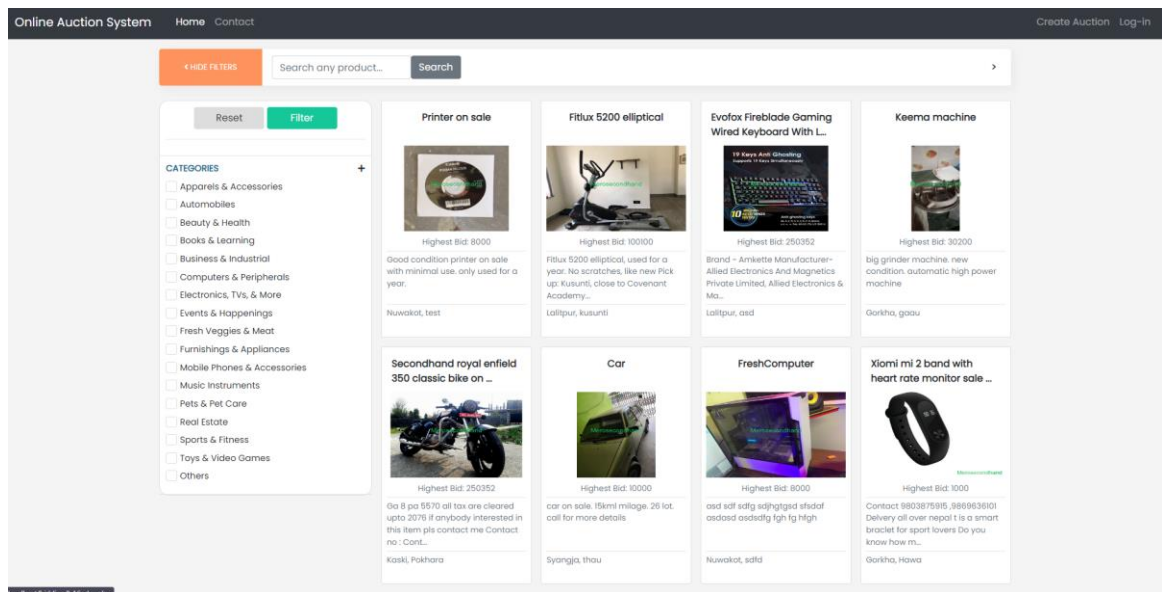
Although this project is fully usable and can be used in the real world, it can be polished more with new features and great improvements. However, here are some features that we would love to add start working on:

- i) Provide email facility for confirmation.
- ii) Provide OTP for changing password via email.
- iii) Add inbuilt payment facility for secure transaction.

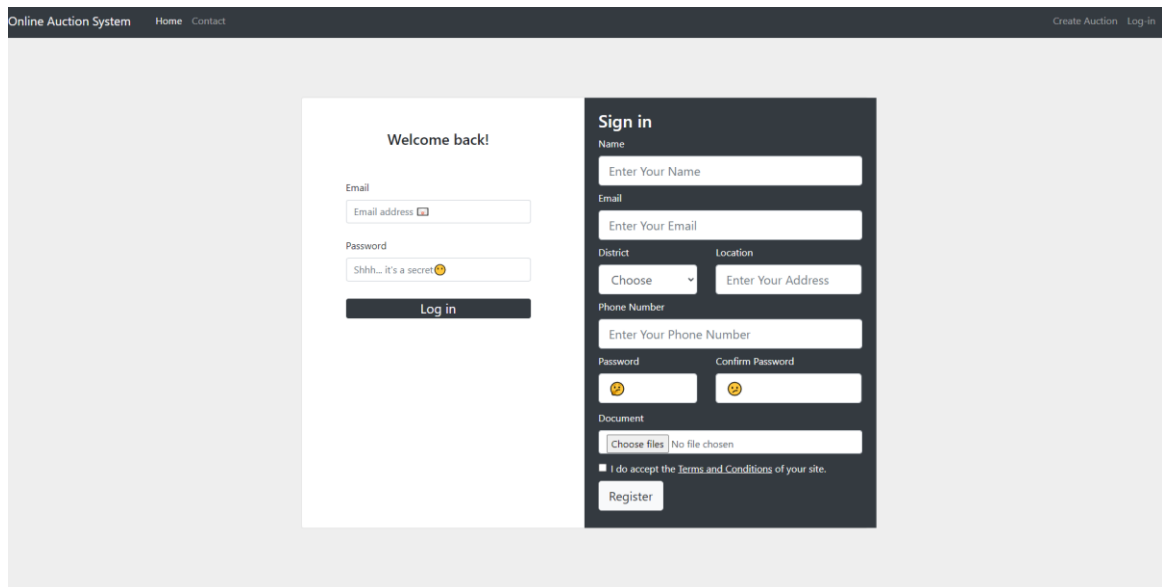
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Appendices



Index Page



Login/Register Page

Online Auction System

Home Contact

1 user online

Search any product...

Reset

Filter

CATEGORIES

Apparels & Accessories

Automobiles

Beauty & Health

Books & Learning

Business & Industrial

Computers & Peripherals

Electronics, TVs, & More

Events & Happenings

Fresh Veggies & Meat

Furnishings & Appliances

Mobile Phones & Accessories

Music Instruments

Pets & Pet Care

Real Estate

Sports & Fitness

Toys & Video Games

Others

Create Auction

Title

Upload Photo

Choose files No file chosen

Category

Choose

Phone Number

District

Choose

Location

End Date

dd-mm-yy

End Time

--:--

Initial Price

Delivery

-- --

Description

Tags

☐ I do accept the Terms and Conditions of your site.

Close

Post

Create Auction My Account Log

Evofox Fireblade Gaming Keyboard With L...

Highest Bid: 250352

Keema machine

Highest Bid: 30200


FreshComputer

Highest Bid: 8000

Xiami mi 2 band with heart rate monitor sale ...

Highest Bid: 1000

Create Auction Page



Fitlux 5200 elliptical

Lalitpur, kusunti

Fitlux 5200 elliptical, used for a year. No scratches, like new

Pick up: Kusunti, close to Covenant Academy

Price : Rs. 100,000(negotiable)

Phone Number: 9860050010


Highest Bid: 100100

Expiry Date: 2022-08-30 12:00:00

Bid

You may also like

Printer on sale




Highest Bid: 8000

Good condition printer on sale with minimal use. only used for a year.

Nuwakot, test

Evofox Fireblade Gaming Wired Keyboard With L...




Highest Bid: 250352

Brand - Amikette Manufacturer- Allied Electronics And Magnetics Private Limited, Allied Electronics & Ma...

Lalitpur, asd

Keema machine




Highest Bid: 30200

big grinder machine. new condition, automatic high power machine

darkha, gaou

Squat rack



Highest Bid: 100000

Heavy Quality Product Maximum load bearing 700 Kg Prevents the barbell from slipping down accidentally Not ...

Kathmandu, Jorpati

Product Page

Online Auction System

[Home](#)
[Contact](#)

[Create Auction](#)
[My Account](#)
[Log-out](#)

Hi Test1!

Dashboard

My Auction

Profile

Total Bids

3

Current Bids

3

My Auction

3

Bids won

0 (0%)

Auctions Participated:

Title	Seller	Highest Bid	My Bid	Edate	status
Evrofox Fireblade Gaming Wired Keyboard With Led Ba...	John Doe	250352	250352	2022-08-30 18:59:56	Running
Secondhand royal enfield 350 classic bike on sale ...	Test1	250352	250201	2022-08-20 18:59:48	Running
Keema machine	John Doe	30200	30200	2022-08-30 19:00:07	Running

User Dashboard Page

User info:

Name

test2

Email

test2@gmail.com

District

Syangja

Location


Thamel

Phone Number

9860050124

Document

Gentlemen, it is with great pleasure to inform you that





today is Wednesday

Cancel

Edit

User Edit Page

Auctions Created:					
Title	Started Date	End Date	Highest Bid	status	
FreshComputer	2022-08-02 13:18:52	2022-08-27 17:22	8000	Running	
Xiommi mi 2 band with heart rate monitor sale at ka...	2022-08-02 13:23:08	2022-09-29 16:25	1000	Running	

User Auction Page

Online Auction System

Home

Log-out

Hi admin!

Dashboard

Users

Auctions

Total Auction13

Current Auction13


















Total Bids8

Users7











Pedning Users:

Name	Email	Number	Location	User Type	Document	status
------	-------	--------	----------	-----------	----------	--------

Admin Dashboard Page

Enter user's name						
All Users:						
Name	Email	Number	Location	User Type	Document	status
Test1	test123@gmail.com	9800	Rolpa, Boudha	User		
John Doe	asdl@gmail.com	0	Dadeldhura, Nepal	User		
admin	admin@gmail.com	9860232456	Kathmandu, Boudha	Admin	    	
Test2	test2@gmail.com	9823654585	Dadeldhura, Nepal	User	 	
test2	test2@gmail.com	9860050124	Syangja, Thamel	User		
Sagar1	sagar@gmail.com	9841234567	Kathmandu, Jorpati	User		

Users Edit Page

Auctions:					
Title	Started Date	End Date	Highest Bid	status	
Secondhand royal enfield 350 classic bike on sale ...	2022-06-09 14:05:03	2022-08-20 18:59	250352	Running	
Evofox Fireblade Gaming Wired Keyboard With Led Ba...	2022-06-09 14:22:52	2022-08-30 18:59	250352	Running	
Fitlux 5200 elliptical	2022-06-09 14:27:10	2022-08-30 12:00	100100	Running	
Keema machine	2022-06-09 14:28:41	2022-08-30 19:00	30200	Running	
Printer on sale	2022-06-15 08:59:53	2022-08-29 11:02	8000	Running	
Car	2022-06-15 09:01:31	2022-08-30 12:03	10000	Running	
FreshComputer	2022-08-02 13:18:52	2022-08-27 17:22	8000	Running	
Xiomi mi 2 band with heart rate monitor sale at ka...	2022-08-02 13:23:08	2022-09-29 16:25	1000	Running	
Secondhand dio scooter-scooty on sale at kathmandu...	2022-08-02 13:27:36	2022-08-30 12:02	80000	Running	
Land on sale at lekhnath pokhara nepal	2022-08-02 13:37:22	2022-08-23 16:39	500000	Running	

Auctions Edit Page