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Web Technology Mini Project Report On

“Online Auction System”

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In

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CERTIFICATE

Certified that the Web Technology Mini Project Work titled **Online Auction System** has been carried out by **Mr. NAVEED ALI (4MW16CS007)** and **MR. KEERTHAN ACHARYA (4MW16CS028)**, who are the bonafide students of Shri Madhwa Vadiraja Institute of Technology and Management, in partial fulfillment for the award of **Bachelor of Engineering** in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the year 2019-20. This Web Technology Mini Project Report has been approved as it satisfies the academic requirements with respect to the project work guidelines prescribed for the said Degree.

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Naveed Ali
Keerthan Acharya

ABSTRACT

Auctions are among the oldest economic institutions in place. They have been used since antiquity to sell a wide variety of goods, and their basic form has remained unchanged. In this dissertation, we explore the efficiency of common auctions when values are interdependent-the value to a particular bidder may depend on information available only to others-and asymmetric. In this setting, it is well known that sealed-bid auctions do not achieve efficient allocations in general since they do not allow the information held by different bidders to be shared. Typically, in an auction, say of the kind used to sell art, the auctioneer sets a relatively low initial price. This price is then increased until only one bidder is willing to buy the object, and the exact manner in which this is done varies. In my model a bidder who drops out at some price can “reenter” at a higher price. With the invention of E-commerce technologies over the Internet the opportunity to bid from the comfort of one's own home has seen a change like never seen before. Within the span of a few short years, what may have begun as an experimental idea has grown to an immensely popular hobby, and in some cases, a means of livelihood, the online auction gathers tremendous response everyday, all day. With the point and click of the mouse, one may bid on an item they may need or just want, and in moments they find that either they are the top bidder or someone else wants it more, and you're outbid! The excitement of an auction all from the comfort of home is a completely different experience. The levels of comfort may rise in the near future but the rules to be followed remain the same. Infact may rise with the new technologies. Society cannot seem to escape the criminal element in the physical world, and so it is the same with online auctions. This is one area wherein a question can be raised as to how safe online auctions.

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INTRODUCTION

1.1 Auction Introduction

1.1.1 Auction:

An auction is a sale in which a seller presents his product on a public platform/ forum. The selling price in an auction is determined by the bids made by interested buyers. The price they bid is based on their own valuation of, and need for, the product. The product is sold to the highest bidder. A potential buyer participates by bidding on an item that a seller has listed. The person who has offered the highest bid at close of auction wins the right to purchase the item at that price.

1.1.2 Bid:

A bid is the amount of money proffered for an item that has been put on sale in an auction. The bidder competes with other potential buyers, keeping in mind that the buyer with the highest bid is obliged to complete the purchase with the seller. In other words, your bid tells other buyers, "I want to buy this item at this price."

1.1.3 Win:

You win an auction by placing the winning (read highest) bid and obtaining the item on auction. The person with the highest bid is the winner of the auction. Now that you're familiar with how an auction generally works.

1.2 TYPES OF AUCTION:

There are three different types of auctions.

1.2.1 Straight Auction:

The price of the product on auction increases with every incremental bid. The price increases as per the minimum bid increment set by the seller. The seller must sell the item to the highest bidder at the close of the auction. For example, if a seller has put up product 'A' for sale with a reserve price of Rs.10 and five buyers bid for it with the highest bid coming in from buyer 'B' who bids Rs.12, the product is sold to 'B' for Rs.12.

1.2.2 Dutch Auction:

This is an auction where the number of units of a particular product for sale is more than one. This simply means that a number of identical products have been put up for sale by the seller. In an auction like this, there will obviously be more than one winner. Buyers can also bid for more than one unit of that product. At the end of the auction all the bidders pay the same price - the lowest winning bid amount (subject to the reserve price being met) for the product. This is a perfect auction type for those who wish to sell many units of the same product. Here is how it works: The Seller starts by listing a minimum price or starting bid for a product and the quantity or number of units for sale. Bidders specify both a bid price and the quantity they wish to buy. All winning bidders pay the same price per item - the lowest successful bid. If there are more buyers than items, the earliest successful bids get the goods. Higher bidders are more likely to get the quantity they asked for. Bidders can refuse partial quantity. For example, if you place a bid for 10 items and only 8 are available after the auction, you are not obliged or bound to buy any of them. Example Case: A seller places 10 pens on auction at Rs.1 each. 10 people bid Rs. 1 for one pen each. In this case, all 10 bidders will win a pen for Rs. 1. However if, let's say, five people bid Rs. 1.25 for a pen each and 10 others bid Rs. 1. The minimum bid for the pen will be raised to Rs. 1.25 because demand exceeds supply. Because the Rs. 1.25 bidders bid higher than the Rs. 1 bidders, they will be guaranteed a pen. The other 5 pens will go to the earliest Rs. 1 bidders. The final price for each pen will be Rs. 1 (even though some participants placed a higher bid of Rs. 1.25) since all winning bidders pay the same price - which is the lowest successful bid. In this format at the time of allocation of the quantities the preference is given to the buyer who puts in the highest bid and he/she will get the quantity he bid for and this flows progressively down the bidding value stream.

Note: Even for a multiple quantity Auction, the winning bid amount displayed is for single quantity. The winner has to pay an amount which is equal to the winning bid amount multiplied by the quantities (units) he has bid for.

1.2.3 Sealed Auction:

As the name suggests, a Sealed Auction is an auction in which the bid prices are hidden or undisclosed. It's almost like making a 'Tender' wherein one party doesn't know the price offered by any other party.

Requirement Analysis

2.1 General Requirements

The process of an online auction is much the same as a live auction. This means that users place bids for items, and the goods get sold to the highest bidder. You are notified through email on the status of your bids, which is when you place a bid, when you've been outbid and when you've won an item. To bid for an item, there is a bidding form through which you may place bids on the item. To bid on an item, enter your bid amount. While entering your bid, you need to consider the bid increment. The bid increment is the amount by which each bid increases. The seller sets this amount. The bid amount should be one bid increment or more above the current leading bid specified on the item page. Automatic Bids and manual bids need not be exact multiples of the bid increment amount. Bids will only have to be one increment or more above the current bid to be accepted.

Automatic Bid is an optional facility. If you activate Automatic Bid, you need not be online to bid for and win an item you desire. The system will bid for you if necessary by the specified bid increment amount to the limit of your Automatic Bid. Please note that the Automatic Bid system will only bid for you when you have been outbid or to meet the reserve price at the end of the auction. You will receive an email notification every time the Automatic Bid bids for you. To bid on a multiple items is considered to be a special auction where a seller has more than one quantity of the item he or she wants to sell/bid. The seller selects the starting bid amount and indicates how many of these items are available for the auction. An auction is a multiple auction or not can be known by checking the quantity box of the item. If there is number of quantities displayed is more than 1, then it is a MQA (Multiple Quantity Auction).

The proposed system contains 2 modules:

2.1.1 User Module

From the user's side, the user can view each and every product that is available. There are various product categories which divide the products. To bid on a product he/she should log in or register to the system. But after registration, the user should activate his/her account in order to bid on a product. Other bidding rules are the same. A user should enter an amount more than the minimum bid value. If a user enters highest bid amount then the system lists his/her account name in the product's detail as the highest bid. Before bidding the user can check for product details, image, and bidding logs easily. The system also displays time left to bid and the number of bids.

2.1.2 Admin Module

Admin has full control of the system; the user should perform major functions from the admin side. Here, the admin can notifications about their products on the bid. This notification displays a small message of the user's account with the placed bid on certain product item. He/she can easily check the entire product's post, end date, the number of bidders, products on bid and bidding logs easily. Another main feature is about adding products to a bid. In order to add products, the admin has to enter the Product name, starting bid price, regular price, select category, product descriptions and upload a product image. It's simple to add a new product category, admin just has to provide a category name and upload an image file. Without uploading an image here, the system won't proceed to the further steps. The system displays all the products and categories inside Main Menu, in a clean and responsive way. Design of this project is pretty simple so that the user won't find any difficulties. Online Bidding System in PHP helps in easy management of online biddings on various products. To run this project you must have installed virtual server i.e. XAMPP on your PC (for Windows).

2.2 Functional Requirements

The application must be compatible with all kinds of devices that meet the software and hardware requirements:

- The user must be able to bid for the correct bidding item.
- The user is to be notified of the item bid winning.

2.3 Non-functional Requirements

The application must be compatible with all kinds of devices that meet the software and hardware requirements.

Software Requirement Specification

3.1 SOFTWARE CONFIGURATION

OPERATING PLATFORM : WINDOWS 10/8

DBMS : PHPMYAdmin SQL Database

SERVER : APACHE SERVER

SOFTWARE : BRACKET.RELEASE.1.14

FRONT END TOOL : JAVASCRIPT, JQuery, HTML, PHP

3.2 HARDWARE CONFIGURATION

RAM : 4GB

HARDDISK : 1TB

Analysis and Design

4.1 Analysis of the current system

The entire project has been developed keeping in view of the distributed client server computing technology, in mind. The specification has been normalized up to 3NF to eliminate all the anomalies that may arise due to the database transaction that are executed by the general users and the organizational administration. The user interfaces are browser specific to give distributed accessibility for the overall system. The internal database has been selected as PHPMyAdmin SQL Database. The basic constructs of table spaces, clusters and indexes have been exploited to provide higher consistency and reliability for the data storage. The PHPMyAdmin SQL Database is a choice as it provides the constructs of high-level reliability and security. The total front end was dominated using the HTML and PHP technologies. At all proper levels high care was taken to check that the system manages the data consistency with proper business rules or validations. The authentication and authorization was crosschecked at all the relevant stages.

4.1.1 Analysis of System Requirements

4.1.1.1 Object Oriented Analysis:

Analysis is the process of extracting the needs of a system and what the system must do to satisfy user requirements. The goal of Object Oriented analysis is to first understand the domain of the problem and the systems responsibilities by understanding how the users or will use the system. OOA process consists of the following steps:

1. Identify the actors.
2. Develop a simple business process model using UML activity diagram.
3. Develop the use case.
4. Develop interaction diagram.
5. Identify classes.

4.1.1.2 Object Oriented Design:

Unified approach combines the high level models of Ram Baugh and Jacobson's analysis and interaction diagrams. Booch's Object diagrams, and Ram Baugh's Domain models and finally following the Jacobson's life cycle model can produce designs that are traceable across requirements, analysis, design, coding and testing. OOD

Process consists of:

1. Designing, classes, their attributes, methods, associations, structures, and protocols, apply design axioms.
2. Design the access layer
3. Design and Prototype user interface.
4. Iterate and refine the design.

4.1.1.3 The business layer:

The business layer contains all the objects that represent the business(both data and behavior).The responsibilities of the business layer are very straightforward. When creating the business layer, it is important to keep in mind a couple of things:

1. Displaying details: Business objects should have no special knowledge of how they are being displayed and by whom.
2. Data access details: Business objects also should have no special knowledge of "where they come from".

A business model captures the static and dynamic relationships.

Static relationships in business model include object associations and aggregations. Dynamic relationships show how the business objects interact to perform tasks.

4.2 System Design

People tend to frequent seized property auctions because goods can be purchased at a low price relative to market value. This is good for the buyer, but not for the debtor whose budget and credit record are dependent on this money. A limited audience who will not pay the full value of the items up for bidding attends the auctions. The body appointed to seize and auction property operates it.

When debtors must liquidate their assets, they must first open an account. All items going through site , either seized or brought in by the debtor, use the Item Profiler to create a standard description page to post items on the on-line auction site. The page layout includes digital images representing the orthographic views of the item plus a text section detailing its make, model, year, history, etc. with an additional line worded by the debtor.

4.2.1 Use Cases Design

Use cases are “a description of set of sequences of actions, including variants, that a system performs that yield an observable result of value to an actor”. They are used in order to: design system from user’s perspective, communicate system behavior in user’s term and enumerate all externally visible behavior. Here are the use cases for the on line auction system project (there are two actors for the system: a normal user and an administrator).

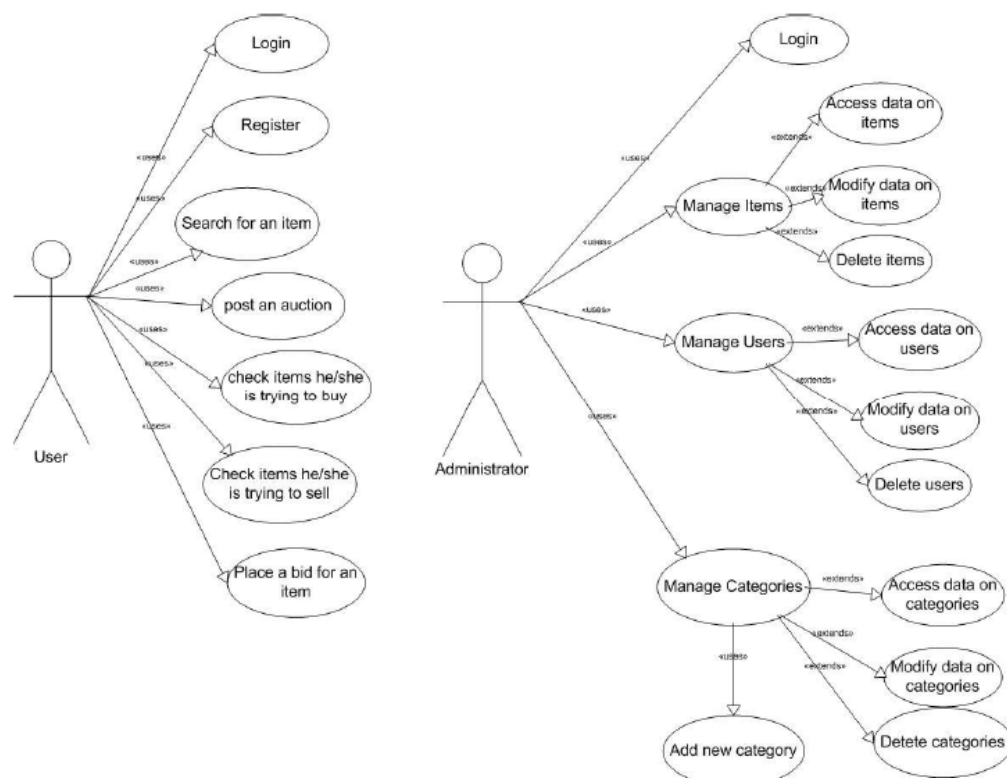


Figure 4.1: User Cases

4.2.2 Design Elements

4.2.2.1 User Elements

Home Page:

The home page is the entry point to access the main services:

- Register
- My personal page
- Search
- Help

The home page shows also a list of categories to simplify items searching and the latest auctions.

Registration:

The registration page allows user to provide his/her personal data (name, address, date of birth, fiscal code, email address, phone number, userID, password) and receive a userID and a password. UserID and password allow the user to access to his/her personal page, to take part to the auction and to post a new auction. It performs basic checks on entered data and provides user registration or an error message if the userID and/or user fiscal code are already present in the system.

Login :

Every time the user tries to access to non-public areas (personal page, bid, post an auction...), he/she is asked to provide his/her personal ID and password. These are entered through a form. If userID and password are correct, the user is logged in and is no more asked to login throughout the session. Otherwise an error message is raised.

Personal page:

To access the personal page the user is asked to login, or to register. The personal page keeps track of all the items the user is presently trying to buy and has bought in the recent past and of all items he/she is trying to sell. From this page it is also possible to post a new auction.

Browse:

The user can browse the auctions selecting among several categories of items (e.g. cars, books etc.). The results will be shown in a table and the user can sort them by price, by auction interval (by lasting period of the auction).

Search:

The user can search for items on auction providing a key word by different criterions:

- Excluding a word
- In a given category

Both registered and unregistered users can access to this service.

Item page:

Item characteristics are shown in the item page. From this page the user can place a bid pushing the button “PLACE A BID” and view the chronology of the bids.

Bid:

The user that makes a bid is asked to login if not already logged. If the bid is accepted by the system, the item is listed in the user personal page. Bids can only be placed during the auction interval and they must be at least one minimum increment bid above the current price.

Post an auction:

From his/her personal page, the user can post an auction from a specific form, providing the characteristics of the item he/she is willing to sell. If the auction is accepted by the system, the item is listed in the user personal page and other users can place a bid for it.

4.2.2.2 Administrator Elements

Administrator Page:

From the login page, providing his/her administratorID and password, he/she can access the administrator page, that shows the administrator menu to access all the administration activities (manage items, manage users, manage categories).

Manage Items:

The administrator can access all data about items stored in the database and also delete them, but not modify the characteristics of the items (initial price, description etc.).

Manage Users:

The administrator can access and modify all data about users stored in the database and also delete them.

Manage Categories:

The administrator can access and modify all data about categories stored in the database, add a new category and also delete them. The administrator can delete a category if and only if no items are associated to that category; otherwise an error message is raised.

4.2.3 UML Class Diagram

The class User contains several parameters that are information about a normal user that browses the system (username, password, name, surname...); the parameter administrator is a flag that indicates whether the user is an administrator or not. This class performs the operations of a normal user (search for an item, get the items on auction, post a new auction, send messages to other users) and those of a system administrator (create a new category, delete a category, delete an item, delete an user). The class Message has a text, a topic and the user_id of the sender and of the receiver. The class Item contains several information about the item on auction (the name of the item, its photo, a textual description of it..) and about the category it belongs to a category has a name and, eventually, a super-category it belongs to: a category can belong to another category (e.g. category sport car belongs to category car).

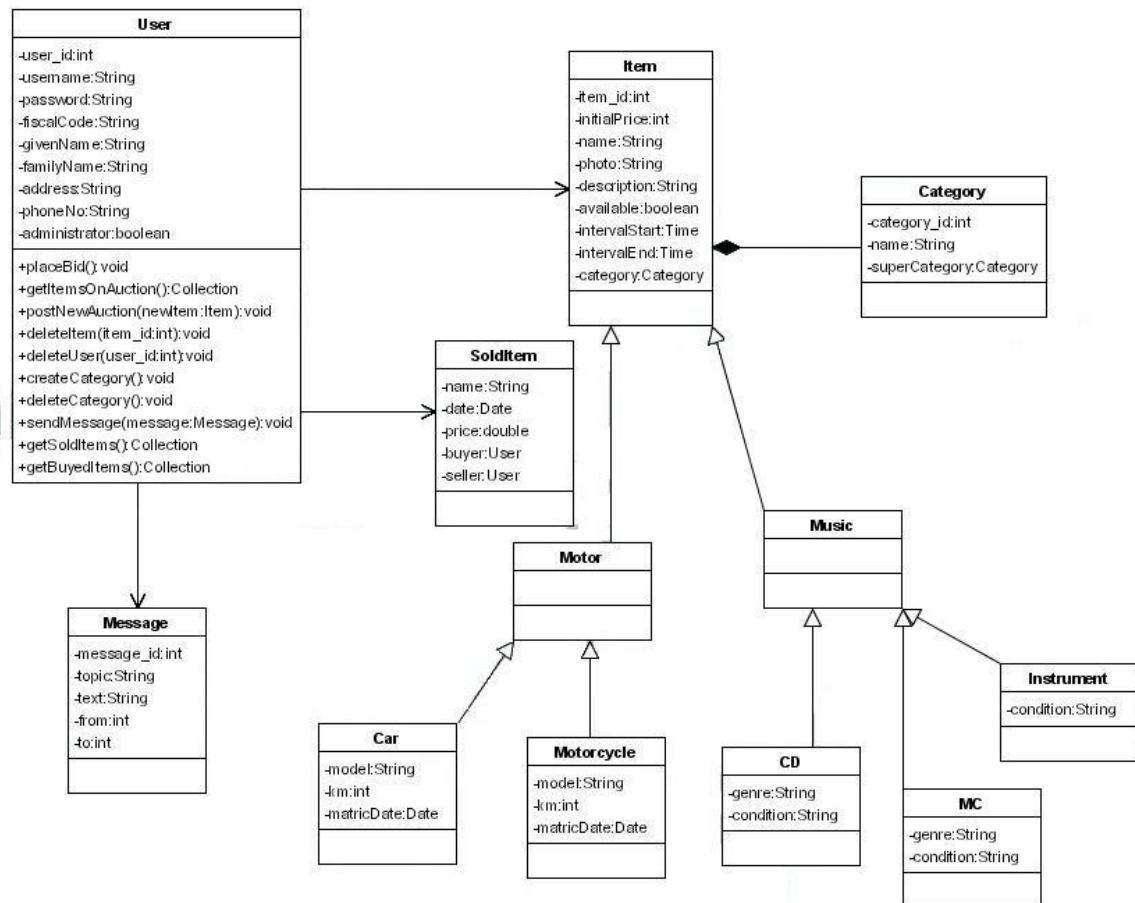


Figure 4.2 UML Diagram

4.2.4 EER Diagram for Database Design

After having drawn the UML Class Diagram for the On Line Auction System, it is clear what kind of data should be stored in the database. Since nilamee is a relational database, the EER modelling approach is very useful to design the database schema since it maps well to the relational model and the constructs used in the ER model can easily be transformed into relational tables. Here is the EER

Diagram for the database of the system.

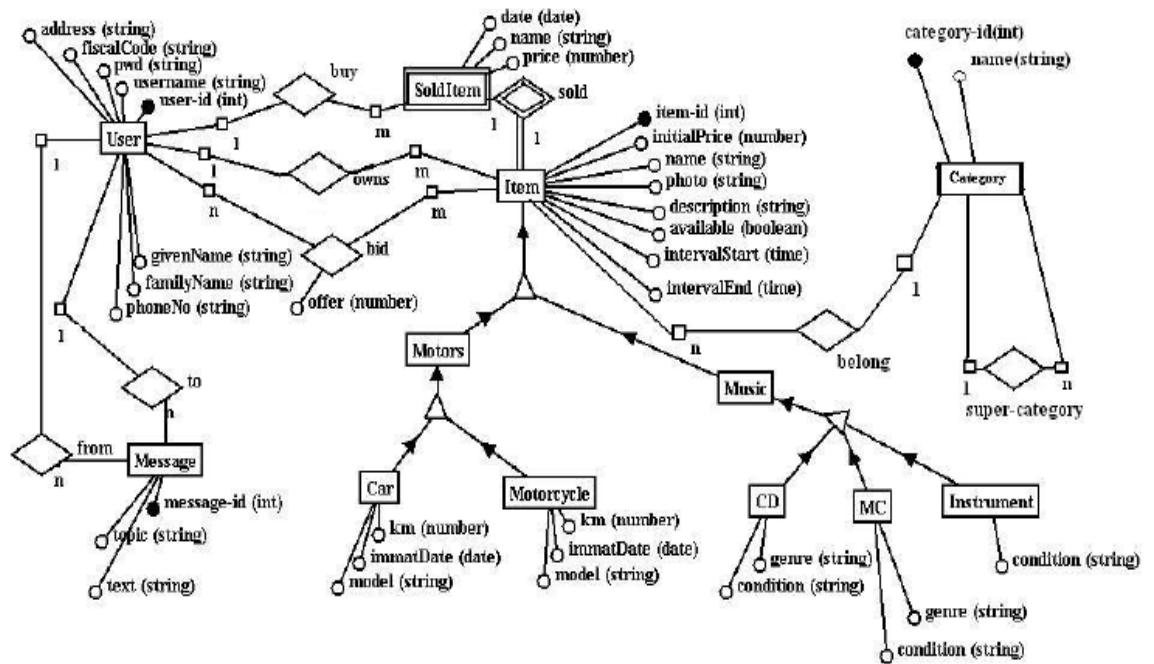


Figure 4.3 EER Diagram

As shown on the schema, there are several entities (user, item, message...) with their own attributes and relations. Motors and music are particular kind of items (they extend the entity item). Each User owns one or more items and can bid, making an offer, for one or more of them. Each Item, on the other hand, is owned by exactly one User and belongs to one category. A Category can have one super-category. A Message is sent from one User to exactly one another User. Car, motorcycle and CD, MC, instrument are respectively sub-entities of motors and music. In addition to the attributes inherited from item, they have their specific attributes (km, matriculation date, genre...). Sold-Item is a particular kind of entity called “weak entity”. A weak entity, in contrast to regular entity, does not have key attributes of its own. When an Item is sold, it becomes a Sold-Item.

CHAPTER 5

IMPLEMENTATION

5.1 Implementation Environment

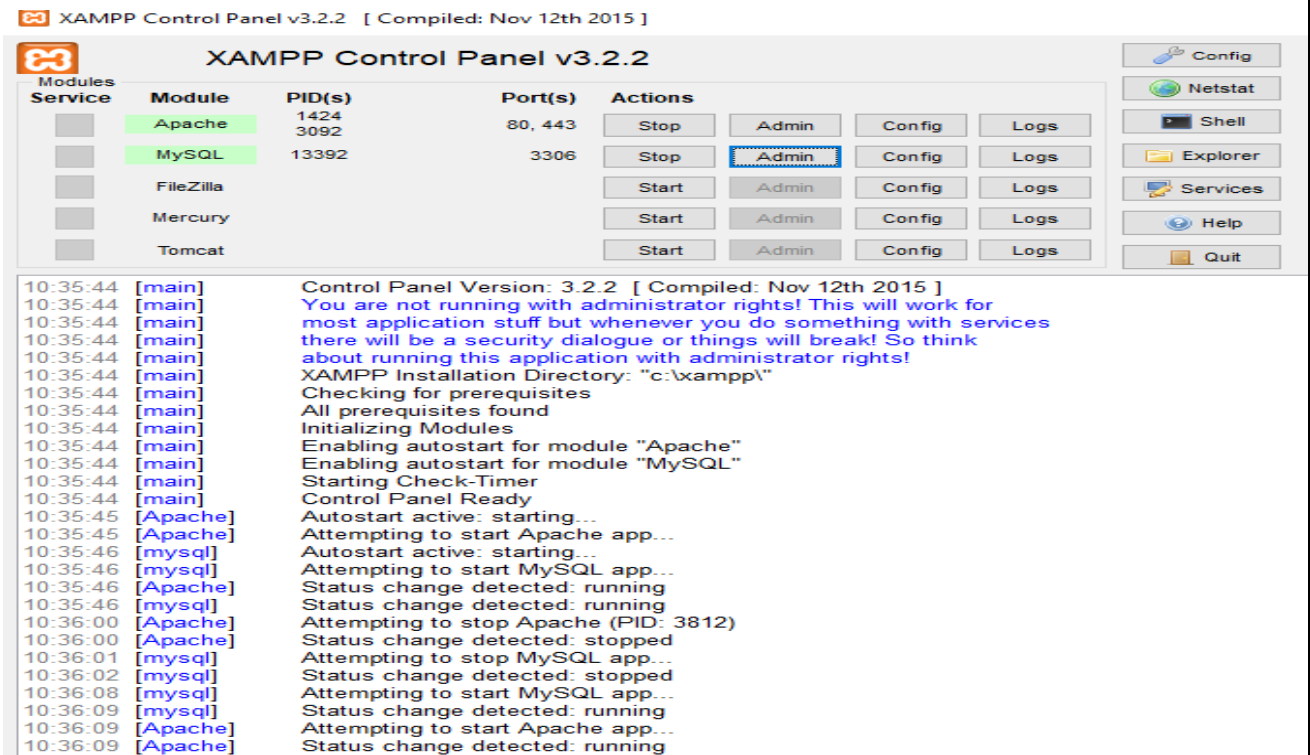


Figure 5.1 XAMPP Control Panel

XAMP-VM installs a complete working PHP/MySQL server environment on Windows platforms. Installs PHP, MySQL, Apache, and PHPMyAdmin.

5.1.1 PHP

PHP designed for producing dynamic web pages. It has evolved to include a command line interface capability and can be used in standalone graphical applications. While PHP was originally created by Rasmus Lerdorf in 1995, the main implementation of PHP is now produced by **ThePHP Group** and serves as the de facto standard for PHP as there is no formal specification. PHP is free software released under the PHP License, is a scripting language originally however it is in the GNU General Public License. It is a widely-used general-purpose scripting language that is especially suited for web development and can be embedded into HTML. It generally runs on a web server, taking PHP code as its input and creating web pages as output. It can be deployed on most web servers and on almost every operating system and platform free of charge. PHP is installed on more than 20 million websites and 1 million web servers.

5.1.1.1 Syntax

```
<html>

<head>

<title>PHP Test </title>

</head>

<body>

<?php

echo "<p> Hello World </p>";

?>

</body>

</html>
```

PHP only parses code within its delimiters. Anything outside its delimiters is sent directly to the output and is not parsed by PHP. The most common delimiters are `<?php` and `?>`, which are open and close delimiters respectively. `<script language="php">` and `</script>` delimiters are also available. Short tags can be used to start PHP code, `<?` or `<?='` (which is used to echo back a string or variable) and the tag to end PHP code, `?>`. These tags are commonly used, but like ASP-style tags (`<%` or `<%=` and `%>`), they are less portable as they can be disabled in the PHP configuration. For this reason, the use of short tags and ASP-style tags is discouraged. The purpose of these delimiters is to separate PHP code from non-PHP code, including HTML. Variables are prefixed with a dollar symbol and a type does not need to be specified in advance. Unlike function and class names, variable names are case sensitive. Both double-quoted ("") and here docstrings allow the ability to embed a variable's value into the string. PHP treats newlines as whitespace in the manner of a free-form language (except when inside string quotes), and statements are terminated by a semicolon. PHP has three types of comment syntax: `/* */` serves as block comments, and `//` as well as `#` are used for inline comments. The `echo` statement is one of several facilities PHP provides to output text (e.g. to a web browser). In terms of keywords and language syntax, PHP is similar to most high level languages that follow the C style syntax. If

conditions, for and while loops, and function returns are similar in syntax to languages such as C, C++, Java and Perl.

5.1.2 MySQL

A database management system (DBMS) such as Access, FileMaker Pro, Oracle or SQL Server provides you with the software tools you need to organize that data in a flexible manner. It includes facilities to add, modify or delete data from the database, ask questions (or queries) about the data stored in the database and produce reports summarizing selected contents. MySQL is a multithreaded, multi-user SQL database management system (DBMS). The basic program runs as a server providing multi-user access to a number of databases. Originally financed in a similar fashion to the JBoss model, MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQLAB now a subsidiary of Sun Microsystems, which holds the copyright to most of the codebase. The project's source code is available under terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL is a database. The data in MySQL is stored in database objects called tables. A table is a collections of related data entries and it consists of columns and rows. Databases are useful when storing information categorically. A company may have a database with the following tables: "Employees", "Products", "Customers" and "Orders".

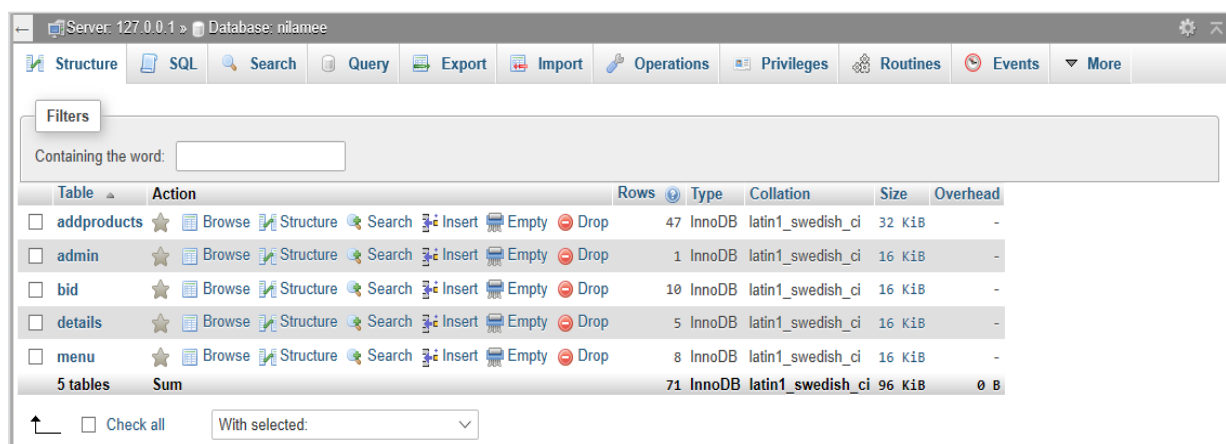


Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> addproducts		47	InnoDB	latin1_swedish_ci	32 KiB	-
<input type="checkbox"/> admin		1	InnoDB	latin1_swedish_ci	16 KiB	-
<input type="checkbox"/> bid		10	InnoDB	latin1_swedish_ci	16 KiB	-
<input type="checkbox"/> details		5	InnoDB	latin1_swedish_ci	16 KiB	-
<input type="checkbox"/> menu		8	InnoDB	latin1_swedish_ci	16 KiB	-
5 tables	Sum	71	InnoDB	latin1_swedish_ci	96 KiB	0 B

Table 5.1 Tables present in the project database

5.1.3 PHPMyAdmin

phpMyAdmin is an open source tool written in PHP intended to handle the administration of MySQL over the World Wide Web. phpMyAdmin supports a wide range of operations with MySQL. it can create and drop databases, create/drop/alter tables, delete/edit/add fields, execute any SQL statement, manage users and permissions, and manage keys on fields. while you still have the ability to directly execute any SQL statement. phpMyAdmin can manage a whole MySQL server (needs a super-user) as well as a single database. To accomplish the latter you'll need a properly set up MySQL user who can read/write only the desired database. It's up to you to look up the appropriate part in the MySQL.

pid	title	descri	price	btime	cid	image
1	KTM RC-1200	new well maintained.. in short mast h bhai	89499	2019-08-27 14:20:00	4	productimages/bikekk.jpg
2	Alesis DM6	Alesis DM6 is a electronic drum. USB supportable.	1899	2016-08-27 14:20:00	6	productimages/alesis dm6 electric drum.jpg
20	Yamaha m1	Yamaha m1 chromozome is a keyboard instrument. wel...	1499	2016-08-27 14:20:00	6	productimages/Chromozome_Yamaha_102013_m3141...
24	Guitar LH	71019131_5_1000x700_left-handed-electric-guitar-fe...	1299	2016-08-27 14:20:00	6	productimages/71019131_5_1000x700_left-handed...
25	Drum TAMA	TAMA drum-fender-standard-stratocasterf_rev002_B...	1799	2016-08-27 14:20:00	6	productimages/drums.jpg
26	Rabbit painting	Bunnie_Rabbit_Painting_for_sale.original hai	1999	2016-08-27 14:20:00	2	productimages/Bunnie_Rabbit_Painting_for_sale.jp
27	Texture painting	Textured-painting -For-sale-30031_ ye bhi original...	1890	2016-08-27 14:20:00	2	productimages/Textured-painting -For-sale-30031.jp
28	girl painting	mark-spain-young-girl-ii-85340 Textured-painting...	2099	2016-08-27 14:20:00	2	productimages/mark-spain-young-girl-ii-85340.jpg
29	children painting	children-paintings-for-sale-children39s-gifts-free...	2049	2016-08-27 14:20:00	2	productimages/children-paintings-for-sale-children...
30	Honda Fury - R	new and well maintained.. in short mast h bhai. ar...	89949	2016-08-27 14:20:00	4	productimages/09_Honda_Fury_review_01.jpg
31	Yamaha Vmax- R	Yamaha-vmax-2 new and well maintained.. in short m...	98999	2016-08-27 14:20:00	4	productimages/Yamaha-vmax-2.jpg
32	Bugatti Veyron	Bugatti Veron-2 Black-beast, new and well maintaine...	202020	2016-08-27 14:20:00	3	productimages/Black-beast.jpg
33	Maserati	Maserati-Mistrale Black-beast, new and well mainta...	178990	2016-08-27 14:20:00	3	productimages/Maserati-Mistrale.jpg
34	Marussia	Marussia Black&white-beast, new and well maintaine...	300999	2016-08-27 14:20:00	3	productimages/best-cars-in-the-world.jpg
35	Audi-Sport	Latest-Audi-Sport-car-model-2door--beast, new and ...	146844	2016-08-27 14:20:00	3	productimages/Latest-Audi-Sport-car-model-2door...
36	1 Indian paisa	historical coin used in old days. in india	99	2016-08-27 14:20:00	5	productimages/1 paisa.jpg
37	2-3 Indian paisa	historical coin used in old days. in india	199	2016-08-27 14:20:00	5	productimages/2 paisa.jpg

Table 5.2 : Contents of the Database

phpMyAdmin can:

- browse and drop databases, tables, views, fields and indexes
- create, copy, drop, rename and alter databases, tables, fields and indexes
- maintenance server, databases and tables, with proposals on server configuration
- execute, edit and bookmark any SQL-statement, even batch-queries
- load text files into tables
- create and read dumps of tables
- export data to various formats: CSV, XML, PDF, ISO/IEC 26300 - OpenDocument Text and Spreadsheet, Word, Excel and LATEX formats
- administer multiple servers

- manage MySQL users and privileges
- check referential integrity in MyISAM tables
- using Query-by-example (QBE), create complex queries automatically connecting required tables
- create PDF graphics of your Database layout
- search globally in a database or a subset of it
- transform stored data into any format using a set of predefined functions, like displaying BLOB- data as image or download-link
- support InnoDB tables and foreign keys
- support mysqli, the improved MySQL extension

5.1.4 Apache Web server

Often referred to as simply Apache, a public-domain open source Web server developed by a loosely-knit group of programmers. The first version of Apache, based on the NCSA httpd Web server, was developed in 1995. Core development of the Apache Web server is performed by a group of about 20 volunteer programmers called the Apache Group.

However, because the source code is freely available, anyone can adapt the server for specific needs, and there is a large public library of Apache add-ons. In many respects, development of Apache is similar to development of the Linux operating system. The original version of Apache was written for UNIX, but there are now versions that run under OS/2, Windows and other platforms. The name is a tribute to the Native American Apache Indian tribe, a tribe well known for its endurance and skill in warfare. A common misunderstanding is that it was called Apache because it was developed from existing NCSA code plus various patches, hence the name a patchy server, or Apache server. Apache consistently rates as the world's most popular Web server according to analyst surveys. Apache has attracted so much interest because it is full-featured, reliable, and free. Originally developed for UNIX™ operating systems, Apache has been updated to run on Windows, OS/2, and other platforms. One aspect of Apache that some site administrators find confusing — especially those unfamiliar with UNIX-style software — is its configuration scheme. Instead of using a point-and-click graphic user interface (GUI) or Windows Registry keys as most other modern software packages, Apache generally relies on simple text files for its configuration settings.

5.2 Interfaces of the System

5.2.1 The User Interface

Here we will give a short guide of the system. The first page of the on line auction portal is the home page as shown here below:

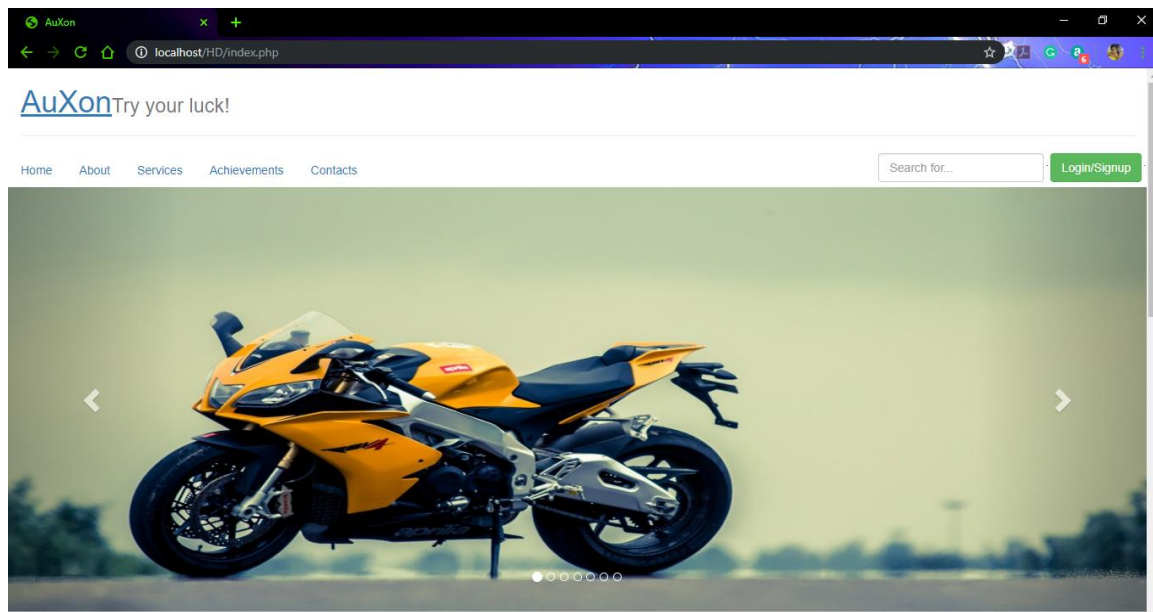


Figure 5.2 First page

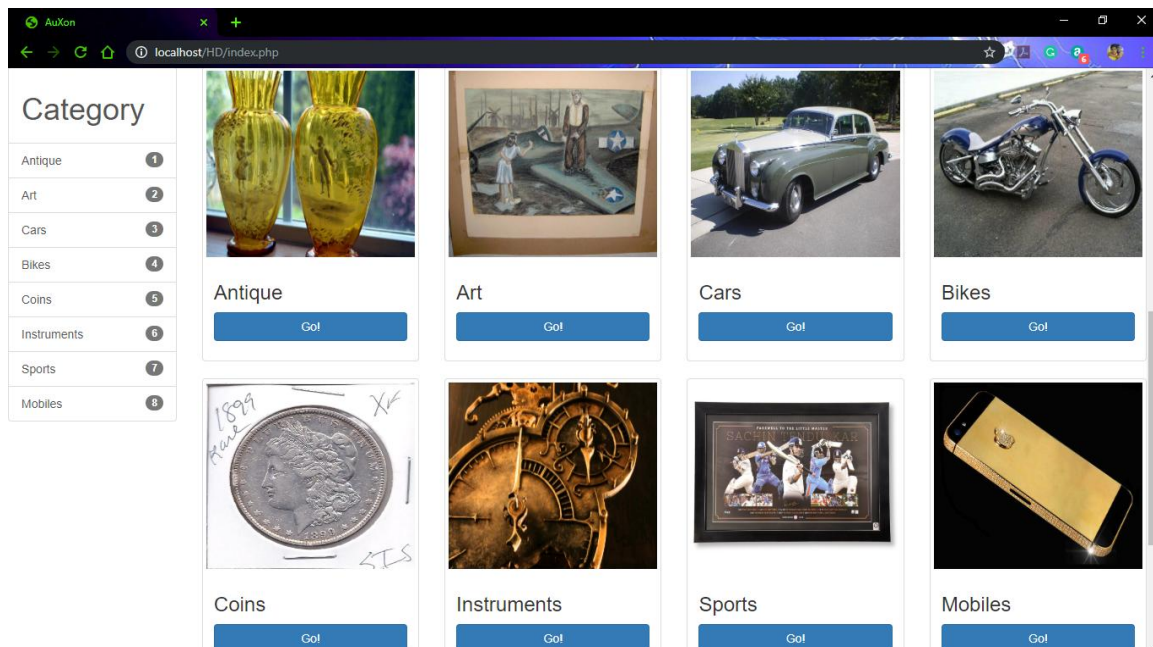
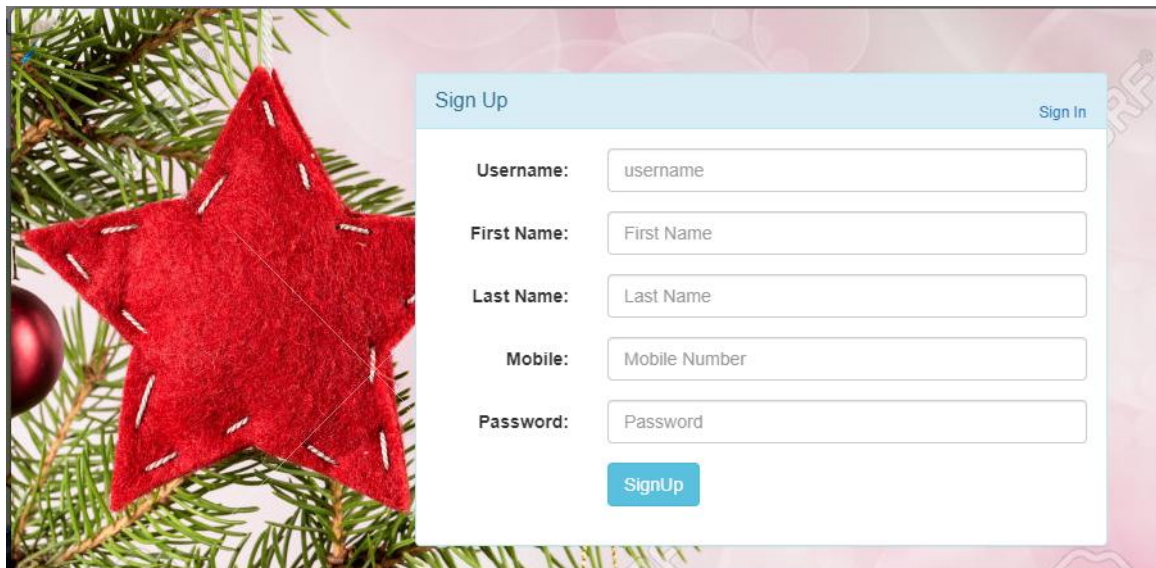


Figure 5.3 Categories

This is how the registration page will look like for a new user :

The image shows a web registration form titled "Sign Up" in a light blue header. In the top right corner of the header is a "Sign In" link. The form contains five input fields: "Username:" with the placeholder "username", "First Name:" with "First Name", "Last Name:" with "Last Name", "Mobile:" with "Mobile Number", and "Password:" with "Password". Below these fields is a blue "SignUp" button. The background of the page features a red star ornament and green pine branches on the left, and a faint "PRF" watermark on the right.

Sign Up

Sign In

Username:

First Name:

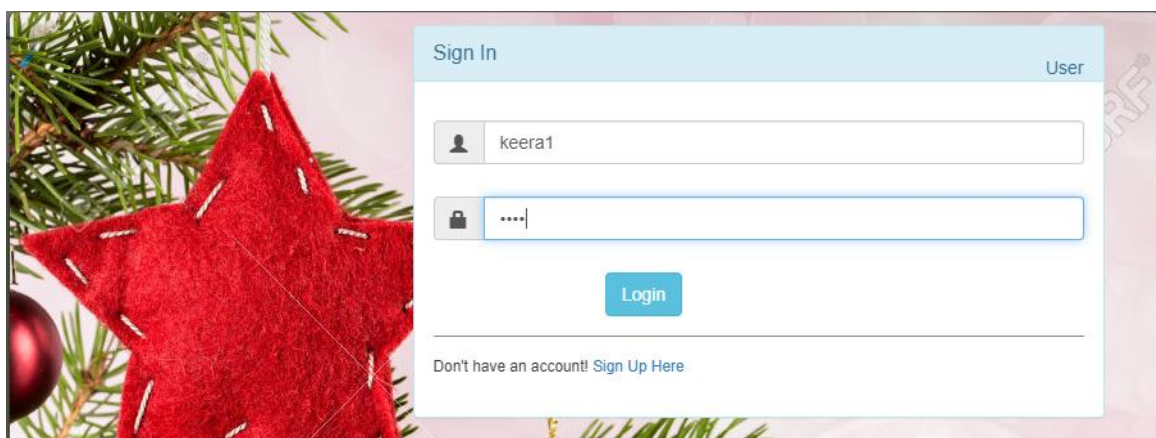
Last Name:

Mobile:

Password:

Figure 5.4 Registration Page

The login page has this interface:

The image shows a web login form titled "Sign In" in a light blue header. In the top right corner of the header is a "User" link. The form contains two input fields: a username field with a person icon and the value "keera1", and a password field with a lock icon and masked characters "....". Below these fields is a blue "Login" button. At the bottom of the form, there is a link that says "Don't have an account! Sign Up Here". The background of the page features a red star ornament and green pine branches on the left, and a faint "PRF" watermark on the right.

Sign In

User

Don't have an account! [Sign Up Here](#)

Figure 5.5 Login Page

If the user wants to put up items for the auction, the user must click the "Submit Your Ad" option to get this interface:

Submit Your Ad!

Ad Title

Discription

Price

Select your category

--Categories-- ▾

Image

No file chosen

Name

Username

Mobile

Figure 5.6 Submitting AD for Product

Upon selecting a category "CAR" of the item to bid for:

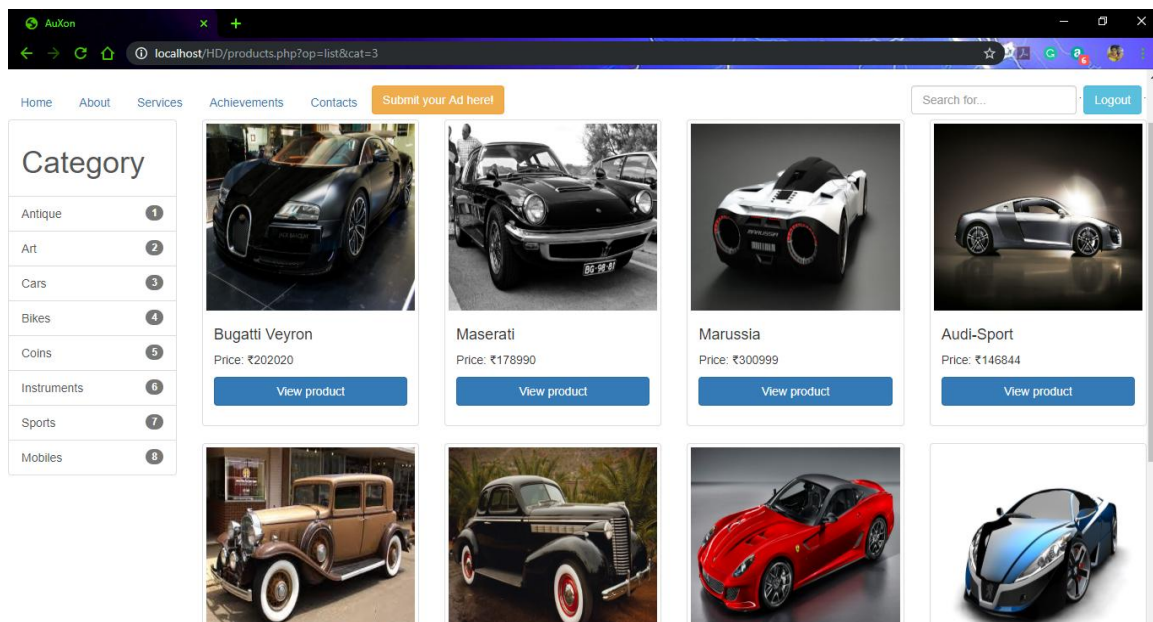


Figure 5.7 Category Car

Upon clicking the view product option:

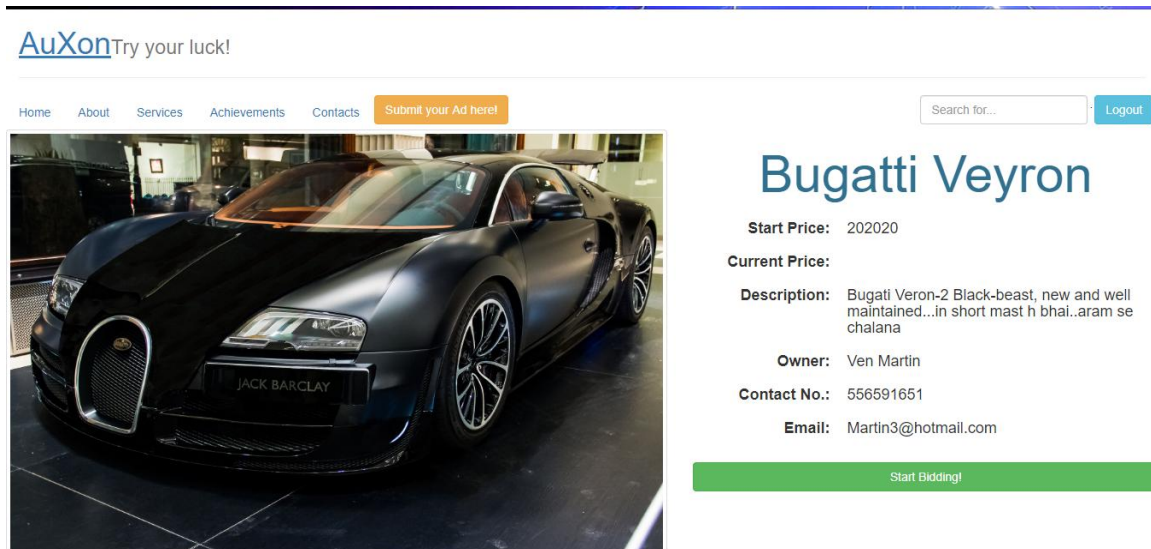


Figure 5.8 View Product Option

Upon clicking the “Start Bidding” option:

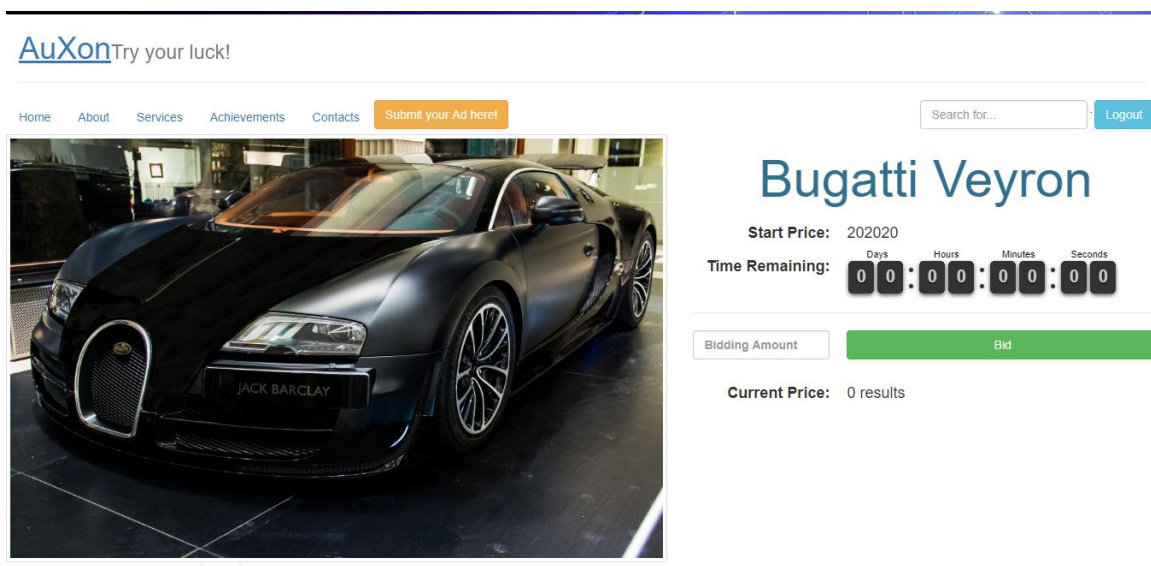


Figure 5.9 Bidding page

On searching for the keyword “CAR”:

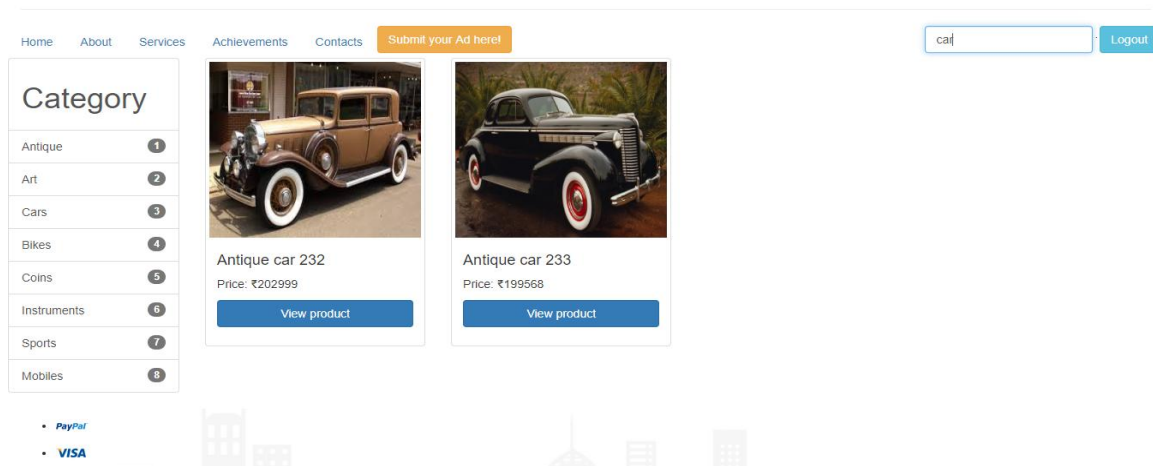


Figure 5.10 Search Category car

5.2.2 The Admin Interface

In this interface the admin has the options to delete a product, an user or change the bidding time for an item.

Administrator

Delete Product:

Delete User:

Bidding time for Product

Product ID:

Date & Time:

Product Table

ID	Title	Price	Bidtime
1	KTM RC-1200	89499	2019-08-27 14:20:00
2	Alesis DM6	1899	2016-08-27 14:20:00
20	Yamaha m1	1499	2016-08-

User Table

ID	Username	Password
2	ujjawalpv0e	45322
4	vinitraj11	123456
10	wewe	123
11	ashish11	112233
13	kaka007	1234

Figure 5.11 Admin Page

Chapter 6

Testing

In the test phase various test cases intended to find the bugs and loop holes exist in the software will be designed. During testing, the program to be tested is executed with a set of test cases and the output of the program is performing as it is expected to. Often when we test our program, the test cases are treated as “throw away” cases. After testing is complete, test cases and their outcomes are thrown away. The main objective of testing is to find errors if any, especially the error uncovered till the moment. Testing cannot show the absence of defects it can only show the defects that are a set of interesting test cases along with their expected output for future use. Software testing is crucial element and it represents at the ultimate review of specification design and coding. There are black box testing and glass box testing. When the complete software testing is considered Back box attitudes to the tests. That is concluded predicted on a close examination of procedural detail.

Faults can be occurred during any phase in the software development cycle. Verification is performed on the output in each phase but still some fault. We likely to remain undetected by these methods. These faults will be eventually reflected in the code. Testing is usually relied upon to detect these defaults in addition to the fault introduced during the code phase .For this, different levels of testing are which perform different tasks and aim to test different aspects of the system.

6.1 Test Cases

Test 1: Invalid login credentials

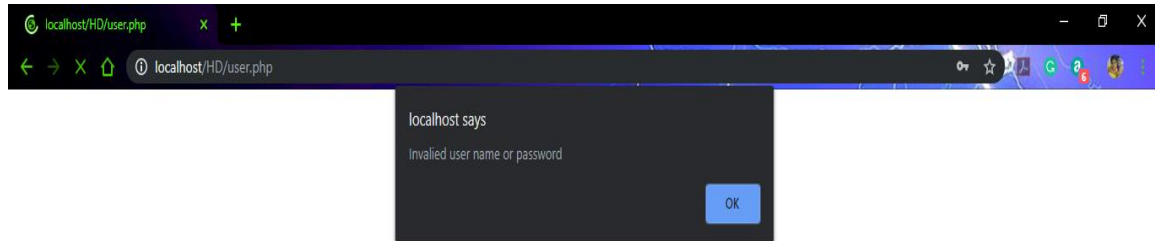


Figure 6.1 Invalid Credentials

Test 2 : Incomplete details of product to be auctioned

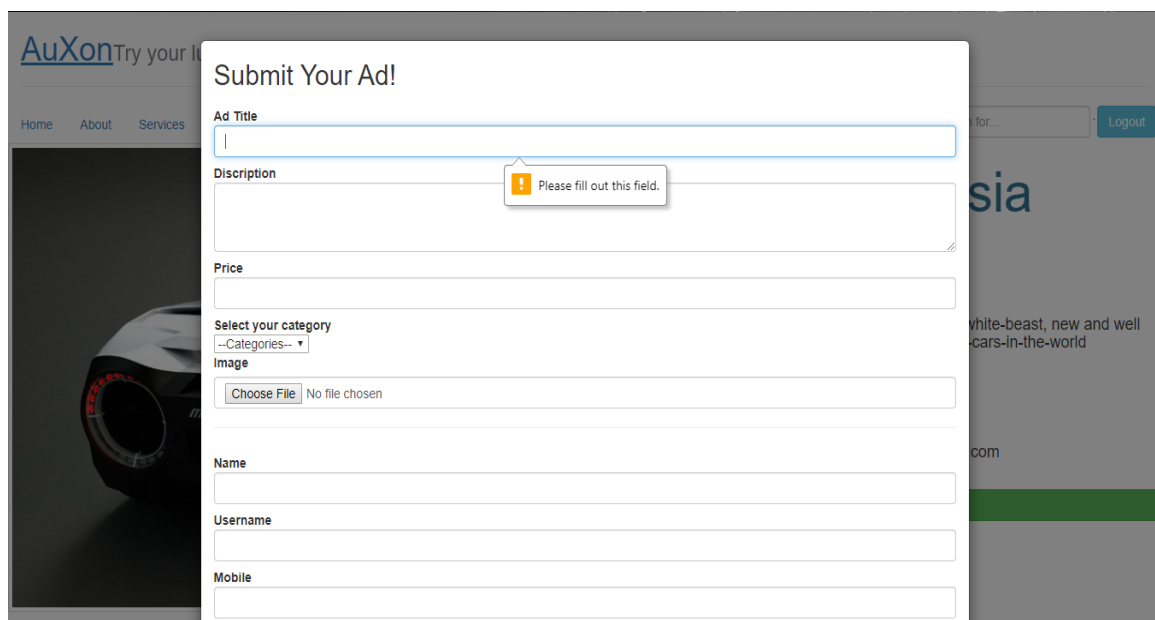


Figure 6.2 Incomplete Details

A message stating the incomplete detail has to be filled will be shown.

Test 3: When the bid amount isn't entered

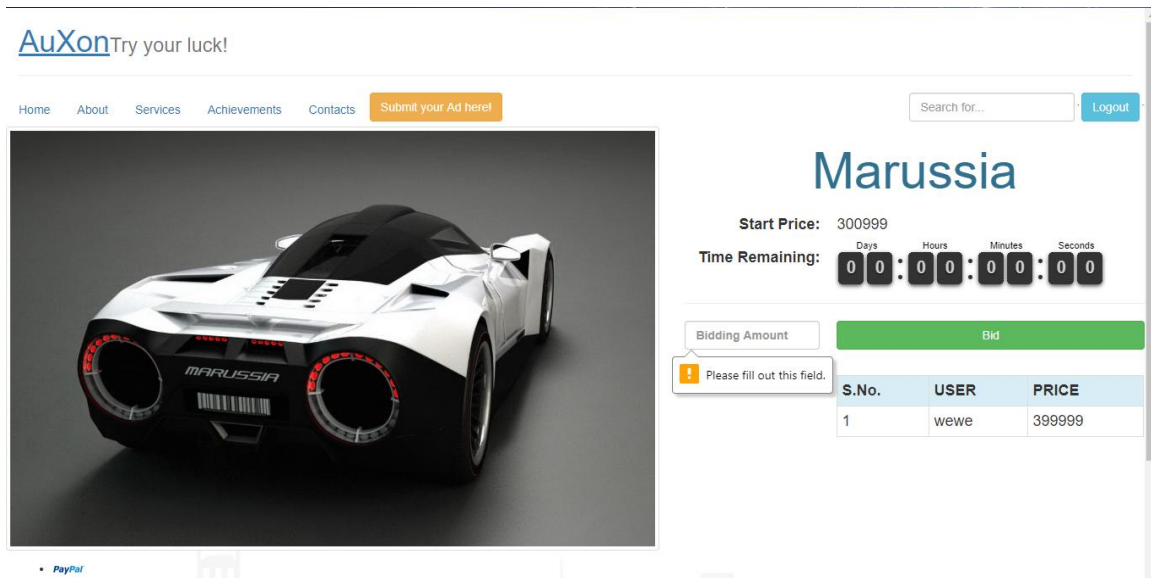


Figure 6.3 Incomplete bid amount

Chapter 7

Conclusion and Future Enhancement

7.1 Conclusion

The efficiency of any system designed to suit an organization depends cooperation during the implementation stage and also flexibility of the system to adopt itself to the organization. “Auxon” has been developed to overcome the problems with traditional Auction systems. As evidence of the success of this mission, there are millions of items listed each day in thousands of different categories. There are items for almost any interest that one could imagine, from sheet music to automobiles to hand tools to real estate. And the variety doesn't stop there. Need a computer? One may find it listed in the proper category, in any configuration from very old and obsolete to the latest greatest machine available. What about antiques? One can find an antique quilt that is up for highest bid, or maybe an old violin, whose beautiful tones have enchanted many though its years. Tickets? Maybe a ticket to the next concert of ones favorite artist or play production. Adding of the products depends on the interactivity of the users implementing the system.

7.2 Future Enhancement

The online auction portal works very well in all of its functionality. However, some future works can be done on the existing system:

- Add an SSL security system. Since a registered user can post new auctions, place bids, send messages etc., username and password are sensible data. So it could be useful to protect these data from being intercepted by a third party.
- Add a chat room to the portal. It would be nice for a user to enter in a chat room to talk with other users about auctions or any other topic. This chat can be realized using the Java Applet technology.
- Add a more attractive graphics to the web pages of the portal. The site is very easy to browse, also for new users, because the pages are simple and clear. However, the graphics of the site is also much simple, so it could be the case to improve it in order to attract more users.
- Add a credit card payment system. It would be nice for users to make payments using their own credit card to exchange money with the help of the website.

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