

AUCTION BD

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This Report Presented in Partial Fulfillment of the Requirements for the
Degree of Bachelor of Science in Computer Science and Engineering

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DHAKA, BANGLADESH

November 2018

APPROVAL

This Project titled “**Auction BD**”, submitted by Ashiqur Rahman Chowdhury to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 25 November, 2018.

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I hereby declare that, this project has been done by me under the supervision of **Saiful Islam, Lecturer, Department of CSE** Daffodil International University. I also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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ACKNOWLEDGEMENT

First we express our heartiest thanks and gratefulness to almighty Allah for His divine blessing makes us possible to complete the final year project successfully.

We are really grateful and wish our profound our indebtedness to **Saiful Islam, Lecturer**, Department of CSE Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of Computer Science and Engineering to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior draft and correcting them at all stage have made it possible to complete this project.

We would like to express our heartiest gratitude to **Dr. Syed Akhter Hossain, Professor & Head**, Department of CSE, for his kind help to finish this project and also to other faculty member and the staff of CSE department of Daffodil International University.

We would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

Finally, we must acknowledge with due respect the constant support and patients of our parents.

ABSTRACT

Nowadays, buying or selling of products over the internet is the most common daily activity of people. In this digital world people become too busy. Time become expensive that people don't have it to go to market, search of desired products, buy that products and waste time. For saving time, online buying system is the best solution. In this digital world of e-commerce people love to buy or sell things online. So why not the auction bidding system. That's why as a final year project it is decided to do an online auction system and named it "Auction BD". Actually the auction is a system where public sale of goods or property, where people make higher and higher bids for each thing, until the thing is sold to the person who (the highest bidder) will pay most. So the online auction is the online version of the same auction system. The online auction system has two parts- customer interface and admin interface. This system presents an online display of category wised products to sell or bid and there will be some options for user to browse category and products. Admin can add categories and products from admin panel. There will be a good dashboard for admin that admin can check everything and modify or delete any information from the admin panel. To bid on a product customer must has to login first. After logging in customer can bid on a product and admin can select the winner from bidder list. This is how the online auction system works. The main goal of the project is to build a web application that can save time, money, give better price, better choice and provide the best service of auction system online.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Auction BD is an online website that can makes auctioning system easier and more available to customers who can bid on auction products live over online from anywhere and anyplace. As we know in digital world people wants everything to be easier. “Auction BD” is an online auctioning web application where customers can find products from a category list and bid on their desired products to buy. We designed it as MVC based website where we used Laravel an open-source PHP web framework. In this web application customer can see all categories of products. Also customers can check all products by clicking on categories. But customer must need to login first if he wants to bid on any product. So there also a signup options for customer to register as a customer in our website.

There is an admin panel to add categories and add products. Admin need to login first by using admin login link and for security admin must have to provide their login ID and password. Admin can check all about categories, product list with description and customer or client details. Admin also can check the bids on product and select the client who’s going to win the bid.

In customer panel, all particular bids have limited time to finish. After finishing the bidding time period admin can notify the highest bidder about the news by phone call or emailing. This is a well secured system and can be easily operated. The main aim of this web application is to make a good online system that provides a great alternative of bidding policy for general people that saves both time and money.

1.2 Motivation

Nowadays, buying or selling of products on online or over the Internet is the most common daily activity of people. In the digital world of e-commerce people love to buy things over online. So why not the auction bidding system? That’s why we decided to do an online auction system and we named it “Auction BD”. In our country there is no renowned auction website. So think this will be a great job if we launched

a site like this one. In our online system customer can check products in a category and also can bid on products live. This system may provide a great alternative of auction system for general people.

Because of the project, I will gain experience in developing web application and increase skills in different zones of web development project.

1.3 Objectives

Every project contains two types of core objectives to achieve quality and to get better efficiency:

The General Efficiencies:

- To increase efficiency and services to the customers through better application of technology in daily operation.
- For increasing the efficiency of the system we used MVC format by Laravel an open-source PHP web framework.
- To be able to stand out from competitors also in the ecommerce sites.

The Specific Objectives:

- To enable customers to see all kind of product categories and the products without any authentication or without login.
- To enable the customers to have a visual confirmation that the bid was placed.
- Mainly making the total auction system bidding over online and to made it simple and easier to user is our one of the main objective.
- To enable the customers to know product details before bid.
- To ensure he customer about correct bid placement by confirmation message through visual interface.

1.4 Expected Outcome

The outcome is precisely relied to those who are looking to buy product from auction but from online to saves both money and time. Our customers can browse our category list to find the product to bid. We want our website to be user friendly also the design of the site to be easier to find what clients wants from an auction system.

1.5 Report Layout

Chapter 1: Introduction

In this chapter, we write the introduction part of “Auction BD” which is the name of our project. Also we declared the motivation, objectives, expected outcome and report layout.

Chapter 2: Background

In this chapter, we discuss about the background circumstances of our project. Here we also show the related works, some competitors, comparison to other system, and the scope of the problem and challenges for the project.

.Chapter 3: Requirement Specification

This chapter is all about the requirements like business process modeling, the requirement collection and analysis, the use case model of the project and their description, the logical relational database model and the design requirements.

Chapter 4: Design Specification

In this chapter all the designs of the project will be described. Front-end design, back-end design, all about graphic design, website interface design and interaction design and the implementation requirements.

Chapter 5: Implementation and Testing

This chapter contains the implementation of database, front-end designs, interactions and the test results of the project.

Chapter 6: Conclusion and Future Scope

In the last chapter we write about the total project in discussion and conclusion, limitations & the scope for further developments which pretty much derive about out project.

At last of the report, I give the reference to ensure that the given information we declare in the report are must be correct.

CHAPTER 2

BACKGROUND

2.1 Introduction

Background of a project describes the set of events which is created for a plot, presented and leading up to that plot. In our project we decided to implement the auction bidding system as a web application. Before the auction system was done by arranging customer in a fixed date and time to sell some particular products. An auctioneer may announce prices, then bidders may call out their bids themselves. The highest bidder wins to buy the product. But that was too lengthy process to manage customers, fixing date and bidding. That's why we think about to develop this project. So that we can get customers from anywhere and anytime. The bidding process become too easy because customer can bid on project anytime until the last time period is over of bidding time set by admin.

So we believe people will be benefited by our service. We also want to fulfill our aim of this web application is to make a good online auction system that provides a great alternative of bidding policy for general people that saves both time and money.

2.2 Related Works

There are some related websites available in our country. Most of them are not well renowned. But few websites are related and there are also some websites which are doing bit related product selling like ours. In the below section we mention some related works. There are some related website like our project "Auction BD". Some of are doing similar things. But very few sites doing actual online auctioning.

Some of related works details are given below-

BD-Auction is a much similar website like ours, but they mainly focus on clothing's and cosmetic products as we can see on their website [4]. Also they are selling product in worldwide. We can see in their website that only they are selling auction products by bidding system in Bangladesh. They have huge amount of products to but

their website is not looks professional. So there is a reason that people may not trust their site. Also they use dollar as their currency as we can see on their website. [4]

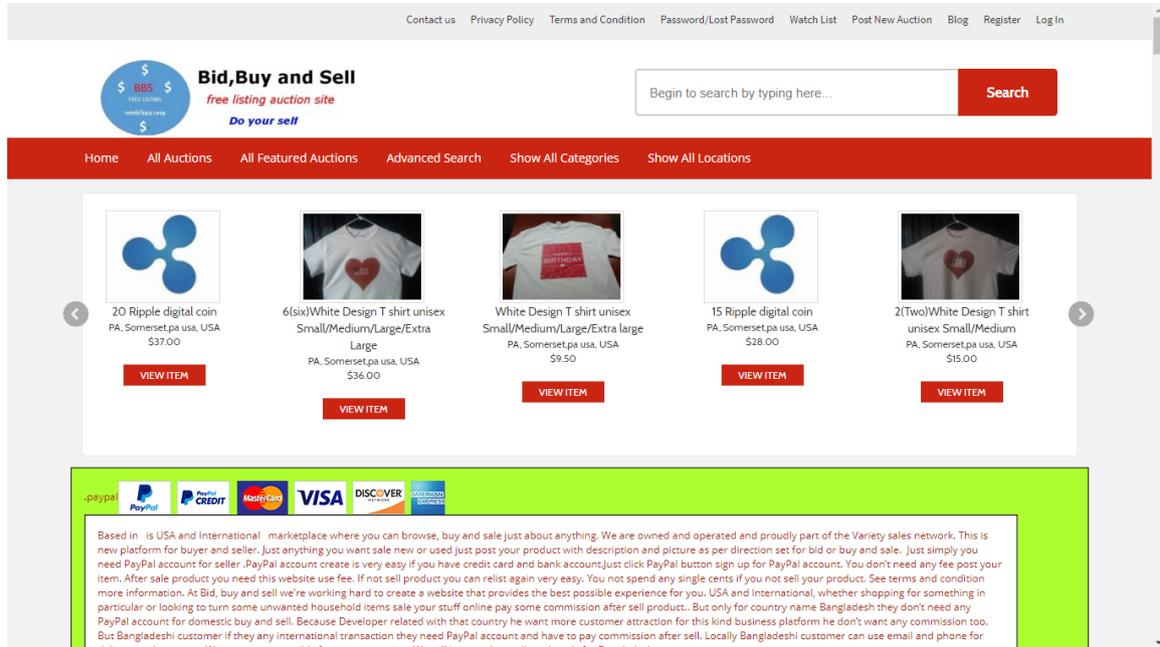


Figure 2.2.1: bd-auction website

Bangladesh Customs is a government website who are selling customs products over online and offline too. But they mainly sell custom products over offline. In this government website we can see that in below Figure 2.2.2 they describe what type of products they sell over auction system. This website is under NBR (National Board of Revenue). In their website goods are sold through auction pending adjudication, appeal, revision or decision of a court, proceeds of such sale shall be deposited to the government treasury. Subsequently, if the court finds that the goods so sold are not liable for confiscation, sales proceeds shall, after necessary deduction of duties, taxes or dues, be refunded to the owner. Then the goods concerned involves a court case, customs will have to retain samples so that the same can be produced before the court if it so desires. [6]

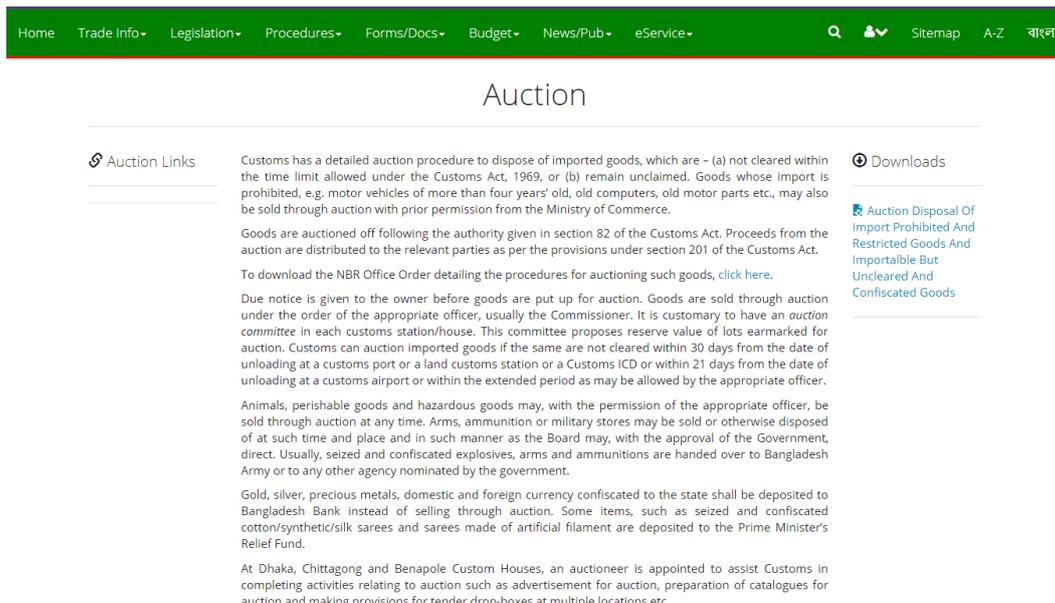


Figure 2.2.2: bangladeshcustoms.gov.bd website

Kroy Bikroy is also a similar website to our site, but they are mainly an e-commerce website. They do not actually doing the auction thing. There is no bidding option on products. So we can say there not actually similar to our project. But this site is raked in google as an auction site. By the way, we can say they are doing buy and selling but without the bidding options for customer. [3]

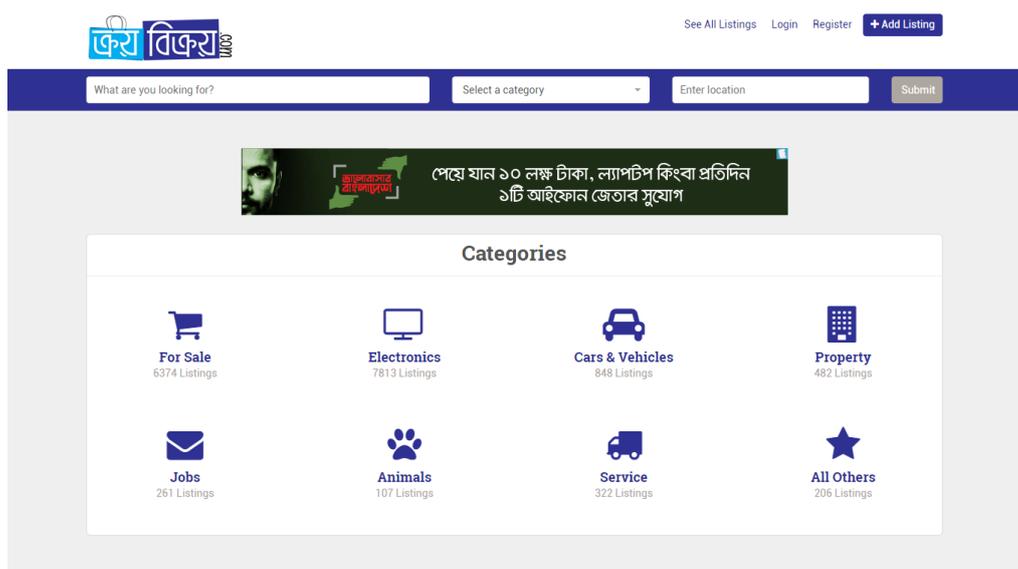


Figure 2.2.3: kroybikroy.com website

Bikroy is the most known and widely used by the people of our country. They are mainly an e-commerce website. They do not actually to the auction thing. There is no bidding option on products. So we can say there not actually similar to our project. But this site is raked in google as an auction site. By the way, we can say they are doing buy and selling but without the bidding options for customer. In this site anyone can be seller and anyone can be buyer. So buying and selling is always hugely running on bikroy.com. [2]



Figure 2.2.4: bikroy.com website

Cick BD is also a well know website in our country. The site is much similar to bikroy.com, but the price of product in this site is fixed. This site is also known site. Also their selling or buying system is much similar like Bikroy. But it's called the largest e-commerce site in Bangladesh. [5]

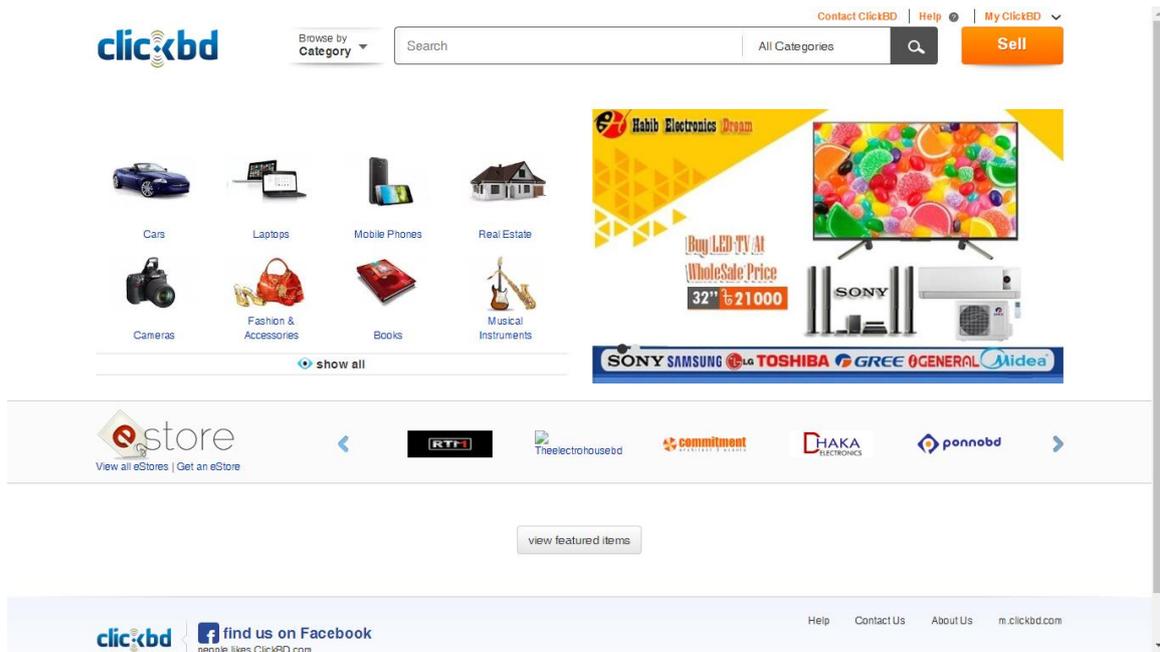


Figure 2.2.5: clickbd.com website

2.3 Comparative Studies

The implemented project is obviously different from other existing websites. In this project we tried to do something different from other and most importantly we tried to make the auction system to online and also the bidding system easier to customer. As we can see above that there are not much related website like ours so we think that we have a better opportunity to do something good with our online auction system.

There are some problems or lacks in similar web application. This are-

- They don't have the bidding option.
- Low security and complex user interface.
- None of them are giving actual auction system online.
- The user interface are not enough friendly for user in some of them.

2.4 Scope of the Problem

Every development contains positive scope and negative scope. But all of them can be handled by the developer of the project as following the meet of the development. As we selected web based application as our final year project so there must be some in scope and out of scope of the project. They are-

In Scope:

- Bidding system is online
- Mainly web based
- MVC development
- Related to ecommerce business
- Getting unlimited customer from online
- Selling become easier
- Chance of getting better price than offline auction system

Out of Scope:

- User can't sell product online directly
- Will not useable without net connection
- May fake registered customers
- May place fake bids by fake user

2.5 Challenges

When we develop any project, we have to face some difficulties or may have to face some problems. No project can completely be smooth and accomplished without any obstacle. Similarly, to develop this project we have to face some challenges here. Since this project is a web application, in that case the challenges are-

- MVC format by using Laravel PHP framework to build a responsive site
- Graphical User Interface Representation
- Banner design and slider selection to attract customer more
- Representation of JS works of slider
- The orientation of all lists as category list, product list etc.
- Conditions to fulfil any requirements

- Reusability of codes
- Repetition of products and other system
- Create a multi-authentication system
- Profile confirmation by admin
- Admin can check and update data from the system
- Making system very attractive and user friendly
- Security
- More safe and more trustworthy
- Perfect admin panel with functionalities

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

In requirements specification we will show the total description of how our web application will perform. By using a model which is called Business Process Model we can easily describe requirement specification and how the business will run. Business process modeling is also known as BPM, in system engineering the activity of representing the workflow of a system or an enterprise demonstration is BPM. The Business process modeling is the structural representation, description or diagram, which defines a specified flow of activities in a particular business or system. [12]

Here is the Business Process Model of our project is given below-

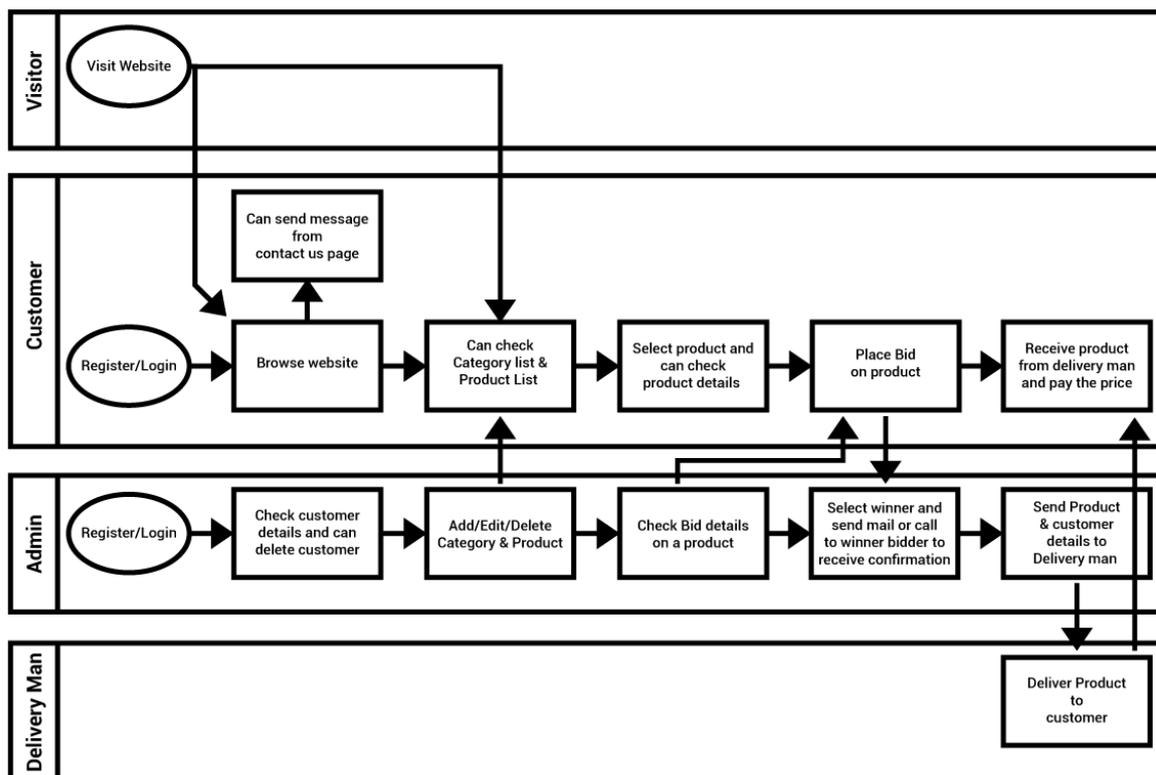


Figure 3.1.1: BPM Model Diagram

In this diagram it is clearly visible that, the visitors of the website can browse our website and without getting logged in he can check our category list also can check product name and product details. But in the product details page the visitor cannot bid on a product. There will be a restriction for visitors that he must be login first to bid on product.

When the visitor register or login to our website he will become the customer of our business. Customer can browse and check category list and product list. Customer can view product details. And customer can bid on product.

Admin or administrator can add category, delete category and edit category. Also he can add product, delete product and edit product. Admin can check user information and delete user if needed. On product list, admin can check bid on products. From the bid information page, admin can select winner of the product. Then he can confirm it by calling or mailing the customer manually. After finishing the process admin can unpublished or delete the product from product list.

3.2 Requirement Collection and Analysis

Development of web based systems requires analysis of the process to be digitized in order to enable a correct system, a system that functions as required and to assist the potential users of the system understand the general functionality of the system. The analysis specifies the system's objectives and constraints to which designers have to comply. The purpose of doing analysis is to transform the system's major inputs into structured specification. This has mainly two requirement section- Admin section and User section.

Requirement analysis:

- Each user type admin or user needs to register him or her as a user or an admin for accessing the user's necessary information. They also have email, username and password. They can login into the system from the web using their email and password.

- Admin needs to login to the system to operate the system. Admin has an individual or unique login email, password and a user level. Through this email and password admin can login into the system.
- Admin can update all product pages. An admin can insert a new product with details and can update the product information through edit option.
- Admin can delete user from user panel. It can have the full access of user's bid list.
- Admin can have access in the bid page.
- Admin can check all category.
- Admin can add category.
- Admin can edit category.
- Admin can check delete category.
- Admin can check all products.
- Admin can add products.
- Admin can edit product.
- Admin can delete product.
- Admin can check bid on a products by users.
- Admin can check details of bidder.
- Visitors can browse the website.
- Visitors can check category.
- Visitors can check all products and details of product.
- Visitor cannot bid on product without login.
- Visitor can register or login.
- Users can look for a product from a selected category.
- User can add a product to the site with full details of that product.
- They can see their products and bided list through their account page.
- Users can edit their profiles.
- User can contact with admin by contact us page.

3.2.1 Functional Requirement

For user the project should have many functional requirements like,

- Explore website: visitor can browse or explore website without login also can check categories and products
- Register: visitors need to sign up first to bid on a product
- Login: user can login by using email and password used to registered
- Check product: user can see all product list
- Check Product details: user can see the product details as price, last bidding date, description etc.
- Check category: user can check all the categorized products by browsing category list.
- Bid on product: User can bid on a product from product details page
- Contact with admin: user can contact with admin by a contact us form. Also there user can discuss with admin if he wanted to sell any product to that page.

For admin the project should have many functional requirements like,

- Add category: Admin can add categories
- Check category: Admin can check categories
- Edit Category: Admin can edit categories
- Add Product: Admin can add products
- Check Product: Admin can check products
- Edit Product: Admin can edit products
- Remove User: admin can remove user
- Check User Information: Admin can check user information
- Check Bid: Admin can see bid amount and bidder details on product information page
- Notify User: Admin can notify bidders when the bidding period is ended by calling or mailing the user

3.2.2 Non-Functional Requirement

There are also some requirements which is important for this project but they are non-functional. They are-

- Clean and user friendly user interface
- Responsiveness web design
- Eye-catching banner and category image that customer can understand easily what type of product we sell in the category
- Compatible with all type of screens like, desktop, tab, phones etc.
- Overall performance, speed and efficiency should be perfect

3.3 Use Case Modeling and Description

A use case model is call the blueprints of a system. It is the graphic presentation of the interactions among the elements of a system. A use case is a methodology used in system analysis to identify, clarify and organize system requirements. A use case diagram is a graphic description or depiction of the interactions among the entity or elements of a system. It is used in system analysis to identify, clarify, and organize system requirements. In this project, there are many activity and entity elements that are reflected by the below Use case model. [15]

The Use Case Modeling diagram of Auction BD with both user and admin panel is given in the following figure 3.3.1

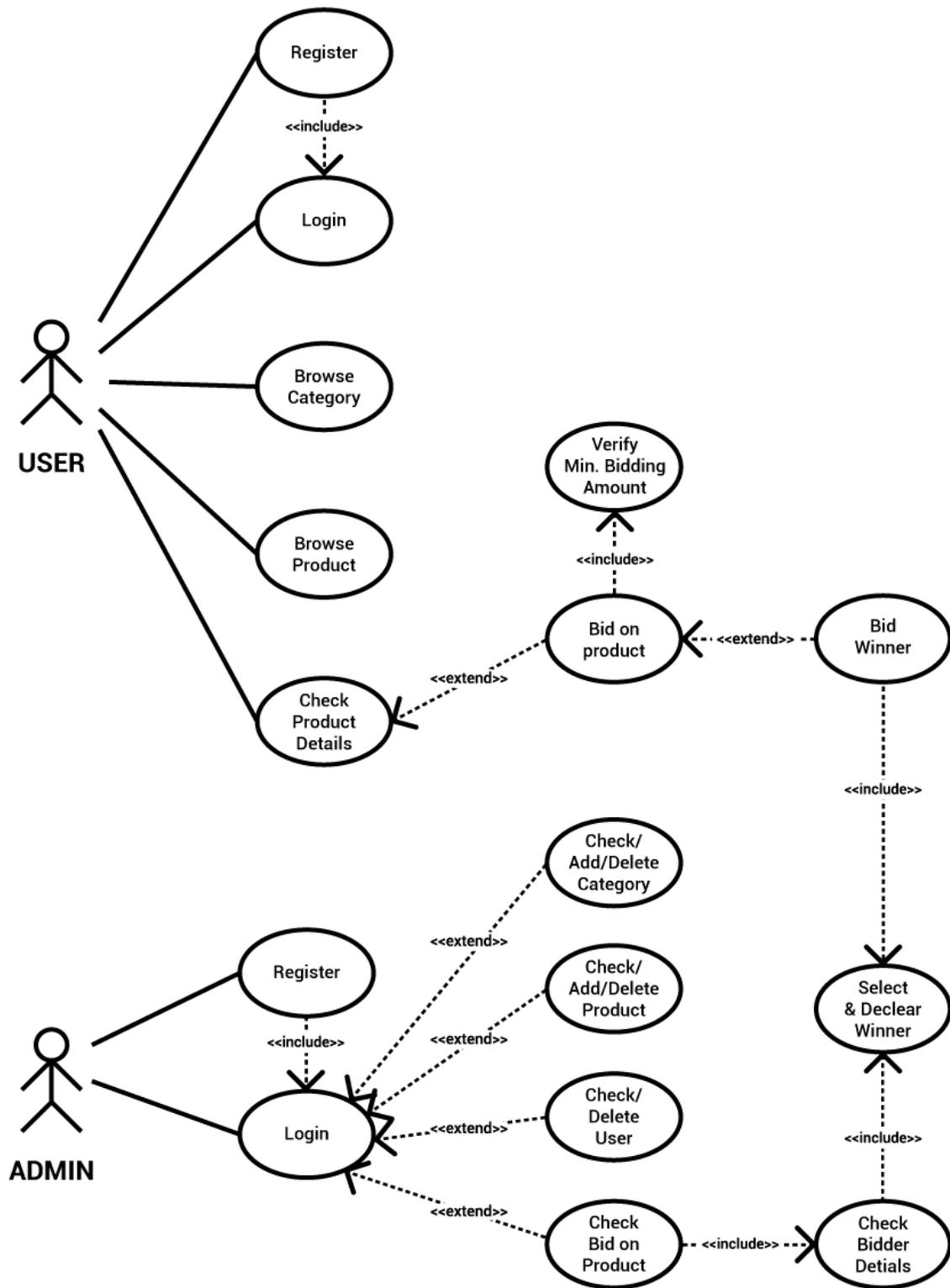


Figure 3.3.1: Use Case Diagram of Auction BD

3.4 Logical Data Model:

Our project logical data model has relational table named clients, categories, products, front_users, users, password_resets, messages, biddings and migrations. All table has its own attributes. The total relational model has showed on the following figure 3.4.1

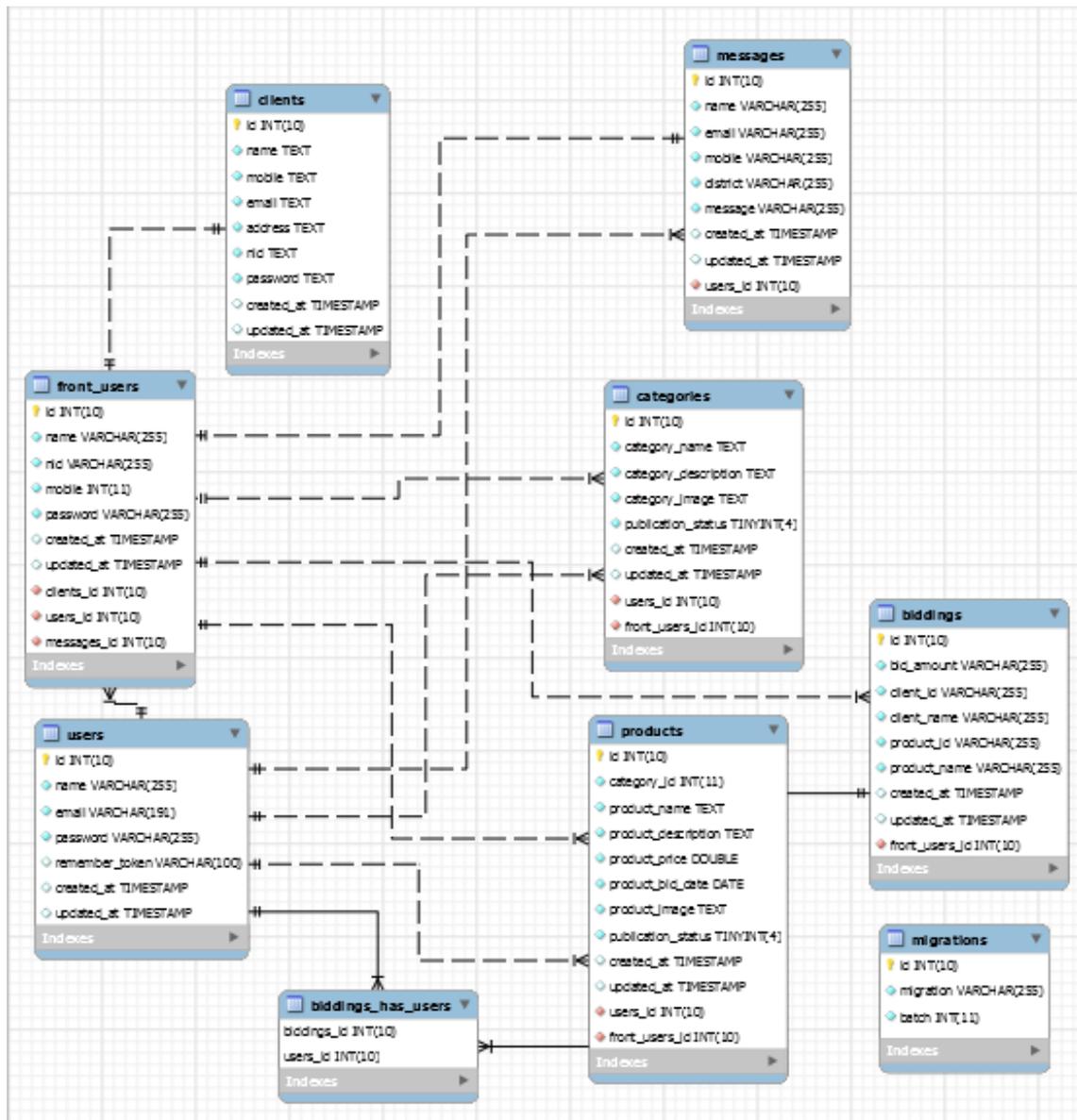


Figure 3.4.1: Entity Relationship Diagram (ERD)

3.5 Design Requirements

Requirements will describe the need and what will be delivered by a project. And design means what will be done. So design requirements will describe what will be done by the project. For user panel there are some design requirements.

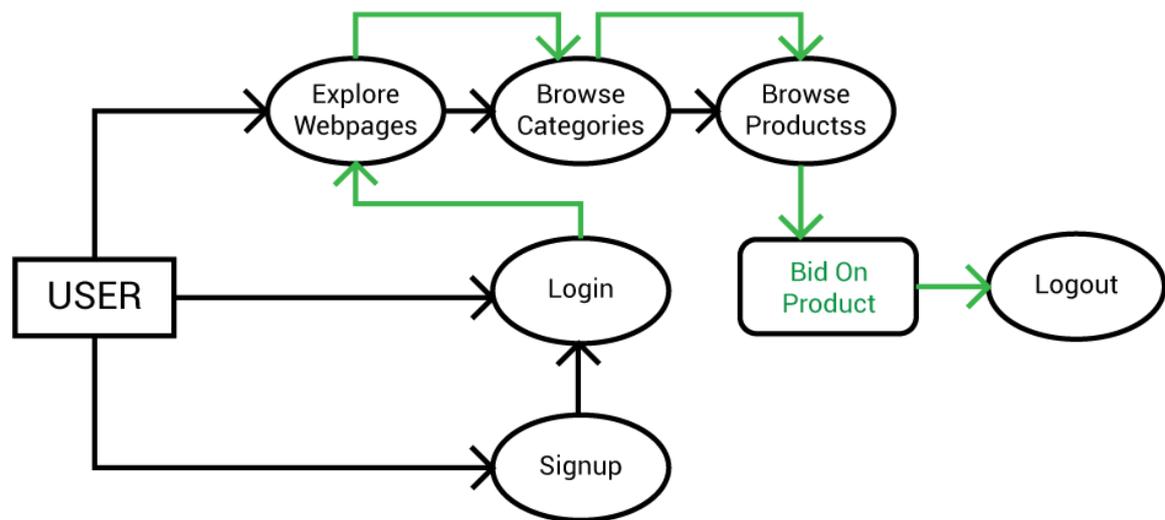


Figure 3.5.1: Data Flow Diagram for User

In this data flow diagram we can easily understand what actually done by the user to bid on a product. User can browse website, check categories, products and product descriptions with details. User can register and login to bid on product. After finishing bidding process the user can logout. This is the all about the process of bidding by a user.

For admin panel there are some requirements. By a data flow diagram we can easily describe about design requirements.

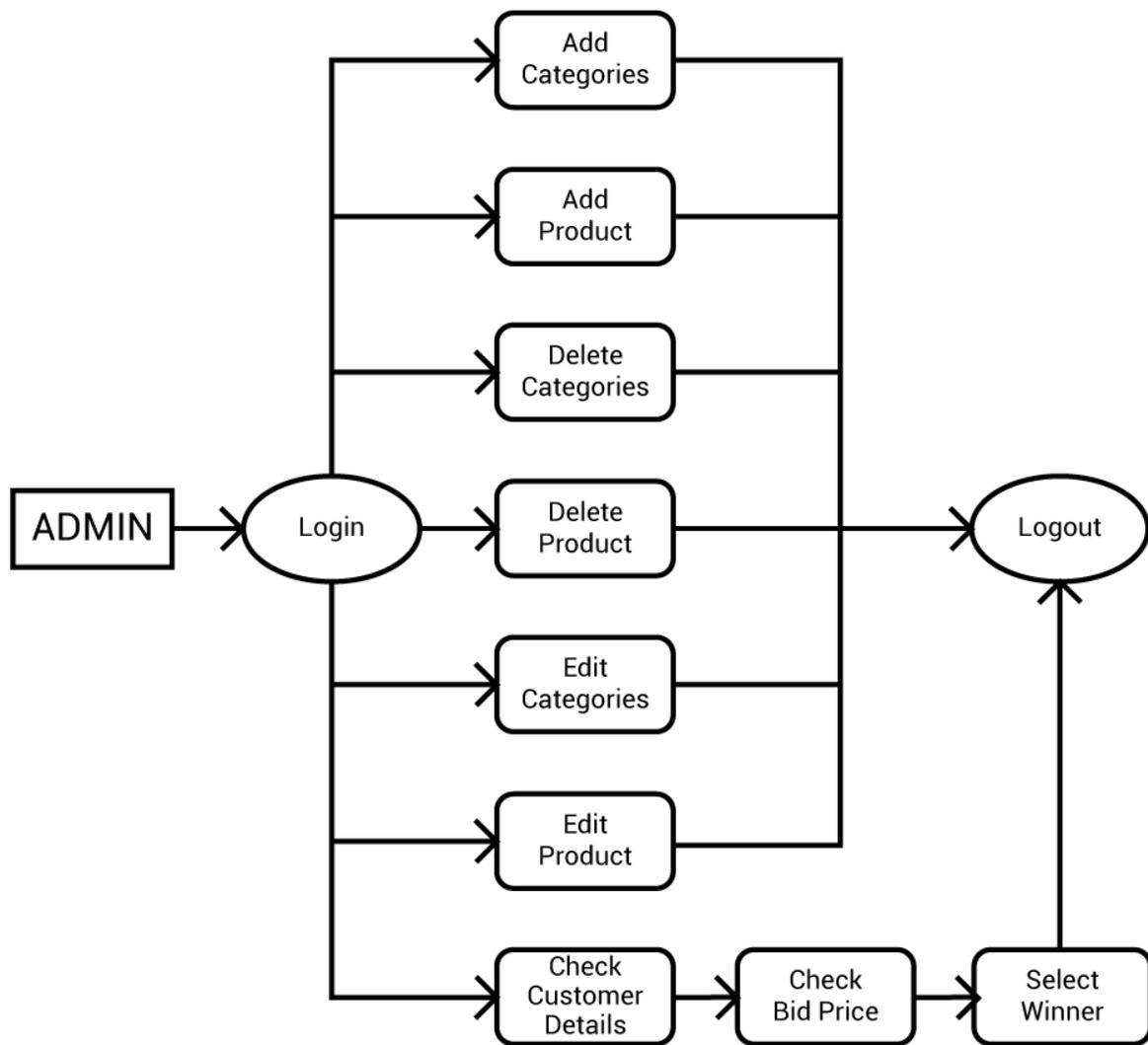


Figure 3.5.2: Data Flow Diagram for Admin

By this data flow diagram we can easily understand what actually admin could do to sell product and declare winner bidder.

CHAPTER 4

DESIGN SPECIFICATION

The design specification is the clarification of a development that express the procedure of how the design is developed, how it works, the responsiveness and the specific needs of used design elements statement. In this part, we will try to show the front end part and also back end part of our web application. In this development we used some tools, platforms and frameworks, so we also discuss about those too in this chapter.

4.1 Front-end Design

Now-a-days good looking user interface is most important part of business websites. People don't like and trust old style or design. So we think front-end is a most vital section for a development. Front-end web development, also known as client-side development is the practice of producing HTML, CSS and JavaScript for a website or web application so that a user can see and interact with them directly.

We all know that home page is the first page which load first when we visited in a website.

So the design of the home page must be so attractive and informative that user may impressed by the design and easily get all facilities or services from the website. Therefore a good front-end design is most important of the home page.

Actually for web application the front-end design done by HTML, CSS, JavaScript, Bootstrap etc. For our front-end design we mainly used row HTML, CSS, JavaScript. In the below we describe specifically about these-

4.1.1 HTML

Hyper Text Markup Language is a standard markup language that describe the website page structure. HTML contains some elements that are represented by tags known as HTML Tag. By this we create web page structure design.

4.1.2 CSS

Cascading Style Sheets is used to design or to add style to web page beside with HTML. CSS is the style sheet language widely used to maintaining presentation of a document written in a markup languages as we used HTML for creating page structure and for style we used CSS.

4.1.3 JavaScript

JavaScript is a scripting language used with HTML to making a website more responsive in easy way. Its allow us to implement complex things on web pages. JavaScript is works as the third layer of the layer cake of standard web technologies.

4.2 Back-end Design

Back-end design means how the front-end part are working with database. Back-end design create the relationship of interface and database. Also representing any particular data for any particular page done by back-end design. Also for MVC based design the modeling and controlling total part is all about back-end design. In our website we used MVC format by PHP framework Laravel and for database programming we used MySQL.

4.2.1 PHP

PHP is called Hypertext Preprocessor. From its name we can understand what actually it do. PHP is an alternative to Microsoft's Active Server Page (ASP) technology. PHP script is embedded within a Web page along with its HTML. Before the page is sent to a user that has requested it, the Web server calls PHP to interpret and perform the operations called for in the PHP script. Mainly we don't use row PHP but we used Laravel the framework of PHP for back-end designing.

4.2.2 MySQL

For database, we used MySQL. It is an open source relational database management system based on SQL query. We managed it by XAMMP control panel after starting Apache and MySQL module.

4.3 Interaction Design and UX

Interaction design represent the relation of interface combination with logical behaviors of the system. It is the process that create the flow of elements and also the flow of one page to another page. All of the interactions in our website is given below-

4.3.1 Client Page

- Client can check category list without login.
- Client can check product details without login.
- Client can browse the static part of website also.
- Client can register.
- Client can login.
- Client can check bid price of products.
- Client can bid on product.
- Client can directly contact with email.

4.3.2 Admin Page

- Admin can login or register through admin login URL.
- Admin can add category.
- Admin can delete category.
- Admin can add product.
- Admin can delete product.
- Admin can check user list.
- Admin can check bid on products.
- Admin can check bidder details to set the user as the winner.

UX is also important part of web application, UX means User experience. It is the process of increasing the usability, accessibility and pleasure provided by the interaction design of the web application.

4.4 Implementation Requirements

To develop our web project we used different type of tools, components and platforms. In Implementation Requirement section we discussed about all those tools and platforms that we use to develop this project. All the tools and platforms description are given below-

4.4.1 Design

- HTML
- CSS
- JavaScript

4.4.2 Web Server

- Apache (XAMPP Control Server v3.2.2)

4.4.3 Database Language

- MySQL

4.4.4 Server Side Language

- PHP 7

4.4.5 Framework Used

- Basic Laravel 5 under MVC format

4.4.6 Tools

- JetBrains PHPStorm or Any notepad app.
- Any Browser

CHAPTER 5

Implementation and Testing

5.1 Implementation of Database

Database design is the process of producing a detailed data model that may called implementation of database. Database design is the process of producing a detailed data model of a database. As we used MVC format so our total project is divided into 3 part. The model part is one of them. The model part do all kind of implementation with view and controller part. Database design is the process of producing a detailed data model of a database.

In this project we used MySQL database and for server we used Apache by using XAMPP server control panel. By getting in phpmyadmin we can check the data base tables from there.

The description of the database of the online auction system is given below-

Table 5.1.1: Database Tables

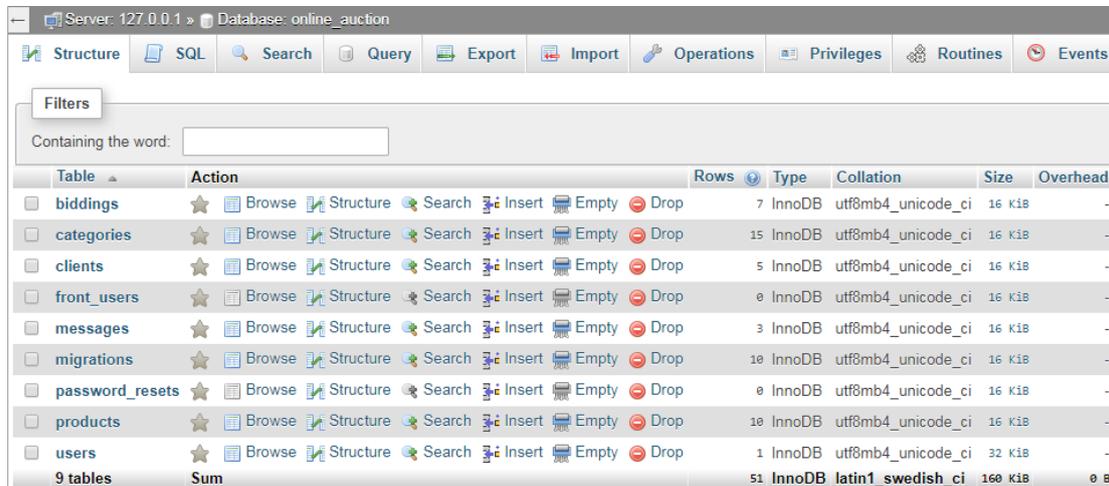


Table	Action	Rows	Type	Collation	Size	Overhead
biddings	Structure Search Insert Empty Drop	7	InnoDB	utf8mb4_unicode_ci	16 KiB	-
categories	Structure Search Insert Empty Drop	15	InnoDB	utf8mb4_unicode_ci	16 KiB	-
clients	Structure Search Insert Empty Drop	5	InnoDB	utf8mb4_unicode_ci	16 KiB	-
front_users	Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16 KiB	-
messages	Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_unicode_ci	16 KiB	-
migrations	Structure Search Insert Empty Drop	10	InnoDB	utf8mb4_unicode_ci	16 KiB	-
password_resets	Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16 KiB	-
products	Structure Search Insert Empty Drop	10	InnoDB	utf8mb4_unicode_ci	16 KiB	-
users	Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_unicode_ci	32 KiB	-
9 tables	Sum	51	InnoDB	latin1_swedish_ci	160 KiB	0 B

In this screenshot we can see the name of our database “online_auction” in the most upper. We can see all the table names here. We can see there are 9 tables exist in the database “online_auction”.

Table 5.1.2: biddings

Showing rows 0 - 6 (7 total, Query took 0.0030 seconds.)

```
SELECT * FROM `biddings`
```

Number of rows: 25 | Filter rows: Search this table | Sort by key: None

	id	bid_amount	client_id	client_name	product_id	product_name
<input type="checkbox"/>	1	22000	2	AR Chowdhury	4	Nikon Coolpix P510
<input type="checkbox"/>	2	5201	3	Abrar	5	Signature Guitar Indian
<input type="checkbox"/>	3	5201	3	Abrar	5	Signature Guitar Indian
<input type="checkbox"/>	4	20000	4	ARC	10	GeForce GTX 1050Ti
<input type="checkbox"/>	5	30000	2	AR Chowdhury	4	Nikon Coolpix P510
<input type="checkbox"/>	6	43000	5	Ashiqur Rahman Chowdhury	2	Apple iPhone 7
<input type="checkbox"/>	7	22000	6	Ashiqur Rahman	4	Nikon Coolpix P510

In this table of database we recorded the bid amount of the user and which user is bided on which product also recorded on here.

Table 5.1.3: categories

	id	category_name	category_description	category_image	publication_status
<input type="checkbox"/>	1	Mobile	Mobile, Tablets, Phones etc	category-image/mobile01.jpg	1
<input type="checkbox"/>	2	Camera	Camera, Camera Lens, Try pod, Charger, battery etc	category-image/camera.jpg	1
<input type="checkbox"/>	3	Music Instruments	All type of music instruments	category-image/music instruments.jpg	1
<input type="checkbox"/>	4	Laptop	All brand laptops	category-image/laptops.jpg	1
<input type="checkbox"/>	5	Desktop	Full Desktop set or Parts	category-image/Desktop.jpg	1
<input type="checkbox"/>	6	Antiques	Antiques Items	category-image/Antique-Sign.jpg	1
<input type="checkbox"/>	7	Art	All types of Art	category-image/Art.jpg	1
<input type="checkbox"/>	8	Books	All type of Books collection	category-image/physical-books-Herok.jpg	1
<input type="checkbox"/>	9	Collectibles	Collectibles	category-image/Collectibles.jpg	1
<input type="checkbox"/>	10	Crafts & Hobbies	Crafts & Hobbies	category-image/Crafts & Hobbies.jpg	1
<input type="checkbox"/>	11	Jewelry	Jewelry & Gemstones	category-image/Jewelry & Gemstones.jpg	1
<input type="checkbox"/>	12	Religious Items	Religious Items	category-image/Religious Items.jpg	1
<input type="checkbox"/>	13	Sports	Sports Items	category-image/819605100-612x612.jpg	1
<input type="checkbox"/>	14	Vehicles	Cars Bike etc	category-image/car.jpg	1
<input type="checkbox"/>	15	Bike	Bike	category-image/suzuki-gixxer.jpg	1

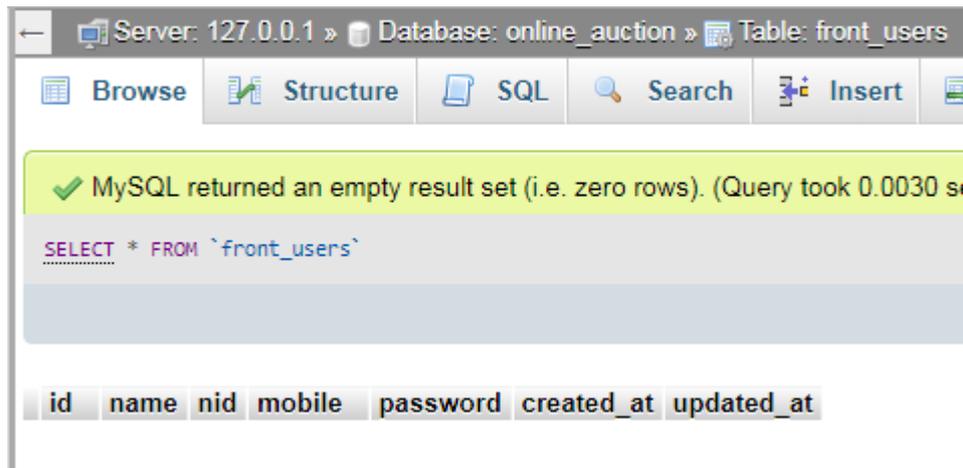
In this table we recorded the category name, category description, category image link and publication status of that category.

Table 5.1.4: clients

	id	name	mobile	email	address	nid	password
<input type="checkbox"/>	2	AR Chowdhury	1635025008	ashiq2015@gmail.com	345, west rampura, Dhaka	1234567890	\$2y\$10\$RgayiHLRVINNzBvRQMPUU00FxmB9cZl
<input type="checkbox"/>	3	Abrar	01991027274	yeaamoon@gmail.com	345, west rampura, Dhaka	1234	\$2y\$10\$Vxb4fwQ3JYnO7LF6TRC1uIRXfgVcbUG.q8
<input type="checkbox"/>	4	ARC	1635025008	ashiq1214@gmail.com	345, west rampura, Dhaka	214412456789076	\$2y\$10\$0vNVQbtPV1ctcnLbjYHU.ajl3ULZILWTgUg
<input type="checkbox"/>	5	Ashiqur Rahman Chowdhury	01635025008	ashiq100@gmail.com	345, west rampura, Dhaka, Bangladesh	12345678904545	\$2y\$10\$xDAABC6/OpuYfhiMYU2bgOCr6j0XSELU4
<input type="checkbox"/>	6	Ashiqur Rahman	01635025008	ashiq1234@gmail.com	345, Palashbag, West Rampura, Dhaka	12345678909876	\$2y\$10\$MR0F8Vc7furfFPzjf94r.Y4bMjChmB02v2pr

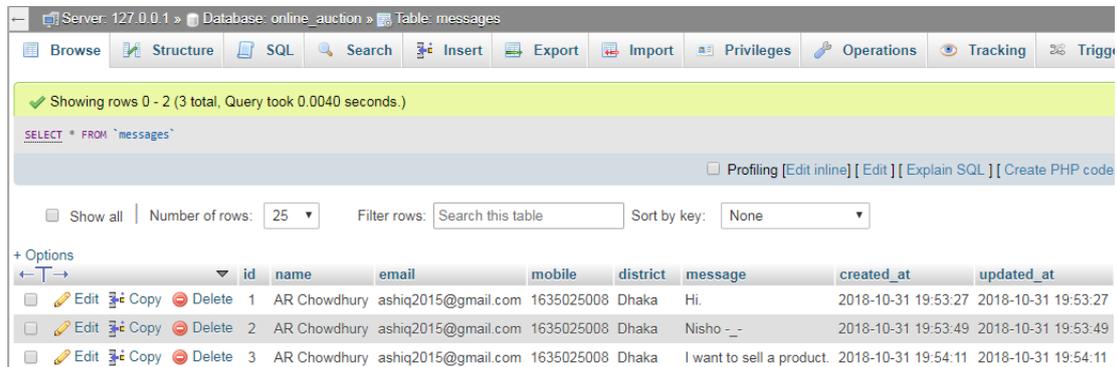
Here we record the client information while the user had been registering to our system and filled up a form for registration. The form data was recorded to this table on that time when client pressed the button to confirm register.

Table 5.1.5: front_user



We can see this is just an empty table which is used to get the information of client while registering to our site.

Table 5.1.6: messages



This table is used to work the contact us form to send message to the admin from clients.

Table 5.1.7: migrations

	id	migration	batch
<input type="checkbox"/> Edit Copy Delete	1	2014_10_12_000000_create_users_table	1
<input type="checkbox"/> Edit Copy Delete	2	2014_10_12_100000_create_password_resets_table	1
<input type="checkbox"/> Edit Copy Delete	3	2018_08_06_110445_create_categories_table	1
<input type="checkbox"/> Edit Copy Delete	4	2018_08_06_131003_create_products_table	2
<input type="checkbox"/> Edit Copy Delete	5	2018_08_06_131945_create_products_table	3
<input type="checkbox"/> Edit Copy Delete	6	2018_09_01_114037_create_front_users_table	4
<input type="checkbox"/> Edit Copy Delete	7	2018_10_17_153545_create_ashiks_table	5
<input type="checkbox"/> Edit Copy Delete	8	2018_10_23_143205_create_clients_table	6
<input type="checkbox"/> Edit Copy Delete	9	2018_10_31_194323_create_messages_table	7
<input type="checkbox"/> Edit Copy Delete	10	2018_10_31_204055_create_biddings_table	8

As we used Laravel Framework of php where to create table we used a method which is called Model. To create table we used terminal section of PHPStrom (PHP Based IDE) instead of CMD to create tables. To creating tables in that way is called migrations and this table is automatically created by Laravel when we call as example, “php artisan php artisan make:migration create_users_table --create=users” to create users table.

Table 5.1.8: password_resets

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0030 seconds)

```
SELECT * FROM `password_resets`
```

email	token	created_at
-------	-------	------------

This is another empty table, it will use to reset password for admin.

Table 5.1.9: products

id	category_id	product_name	product_description	product_price	product_bid_date	product_image	publication_status
1	1	Xiaomi Note 5 Pro	Xiaomi Note 5 Pro(Ram: 6GB \ Rom: 64GB)	27000	2019-01-01	product-image/Xiaomi_Redmi_Note_5_Pro_L_1.jpg	1
2	1	Apple iPhone 7	Highlights 4.7-inch (diagonal) Retina HD display w...	40000	2019-03-31	product-image/iphone7.jpg	1
3	1	Galaxy S6 edge	Galaxy S6 edge 64GB ROM & 3GB RAM	18000	2019-10-02	product-image/samsung.jpg	1
4	2	Nikon Coolpix P510	Nikon Coolpix P510 fixed lens DSLR with 16 megapix...	21000	2019-10-03	product-image/288682-nikon-coolpix-p510.jpg	1
5	3	Signature Guitar Indian	Indian Signature Acoustic Guitar	5200	2019-10-01	product-image/signature.jpg	1
6	3	Ddrum	Ddrum D120B 5-Piece Drum Set	11000	2019-02-28	product-image/H78655000001000-00-500x500.jpg	1
7	4	Asus	8GB RAM, 1TB HDD, 17" display, 2GB Nvidia Graphics...	41000	2019-02-03	product-image/asus.jpg	1
8	4	Dell Vostro	Dell Laptop from DIU for sell, 4GB RAM, i3 Process...	25000	2019-10-01	product-image/dell.png	1
9	5	Acer Veriton	Acer Veriton M200H61 Desktop (i7,500GB, 8GB RAM	60000	2019-12-12	product-image/acer-desk1-1000x1000.jpg	1
10	5	GeForce GTX 1050Ti	GeForce GTX 1050 Ti PH, 4096 MB GDDR5	19900	2019-05-01	product-image/gcas-185_gcas_185_1g_800x800.jpg	1

This table contains the product details given by admin from admin side. We can see an entity category_id which is used to categorize the products. There are also product_name, product_description. Product_price, product_bid_date, product_image, publication_status etc.

Table 5.1.10: users

id	name	email	password	remember_token
1	AR Chowdhury	ashiq@gmail.com	\$2y\$10\$YKfqYjJFPMo9zOPq6iuAgOSKtaA9KWctYbn98TiHLe9...	pl5daTcMlauSPNggXq5zd5gQqADsXiipzOpTRetesL3v7eFYv4...

This table contains the admin name, email, password and we can see another entity on the table named remember_token. The remember_token contains the token to understand the encrypted password. This will use when admin enter his password to login to the admin panel. But in password is encrypted password. To understand the password the token is used.

5.2 Implementation of front-end Design

We all know the importance of the front-end of a website. For our front-end design we mainly used row HTML, CSS, JavaScript. The front design is given below-

5.2.1 Home

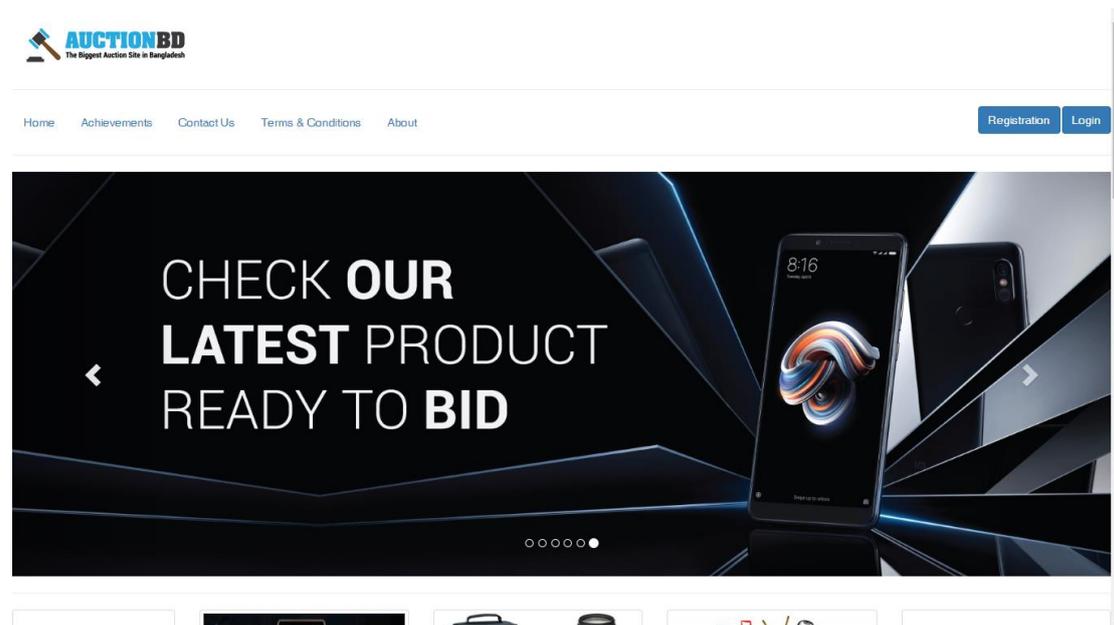


Figure 5.2.1.1: Home Page

This is the homepage of our website. Here we can see the logo, navigation bar with menus, login & register button, a slider to show out ads or promotions or new products etc. Also in the below we can see the category list.

5.2.2 Category List

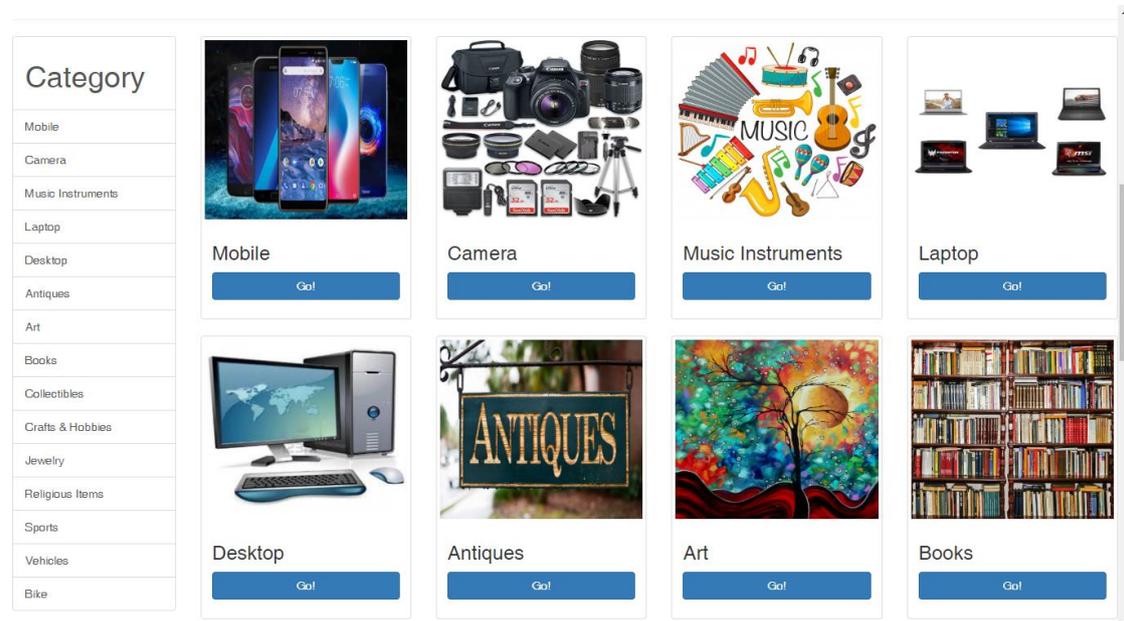


Figure 5.2.2.1: Category List

In the home page we directly add the category list, that user can easily check all products as a category-wise manner.

5.2.3 Product List

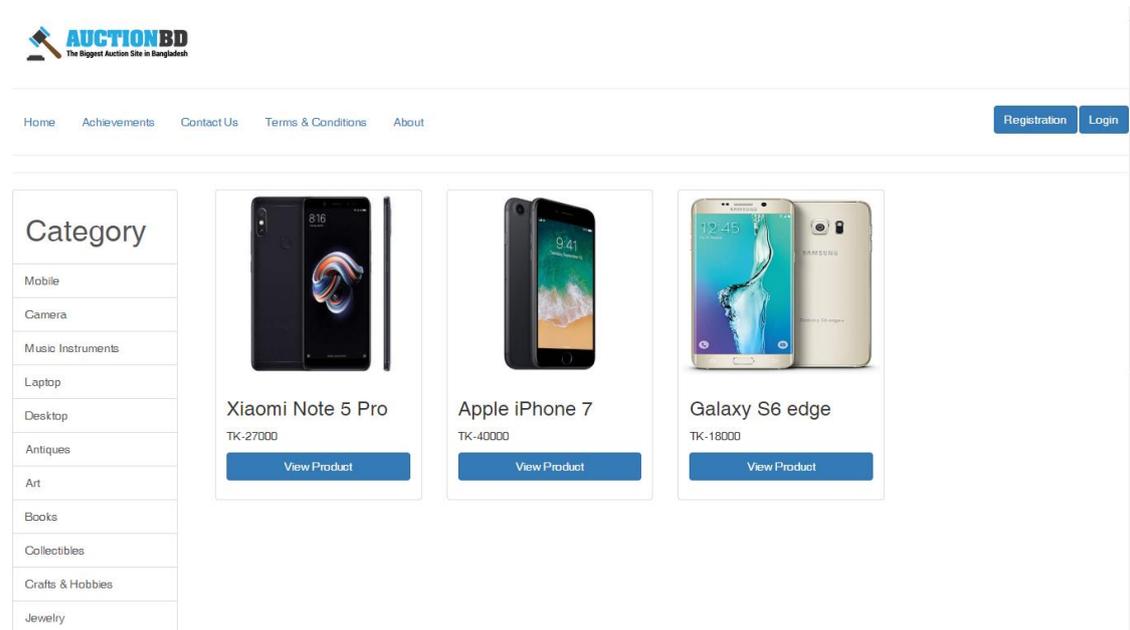


Figure 5.2.3.1: Product Page

In the product page we see all the products in a category. In the figure 5.2.3. we can see that there are 3 products on mobile named category. So user can check information about this 3 products from this page. If any user press the button of “View Product”. He can check the total details of the product, product price, product images form this page.

5.2.4 Footer

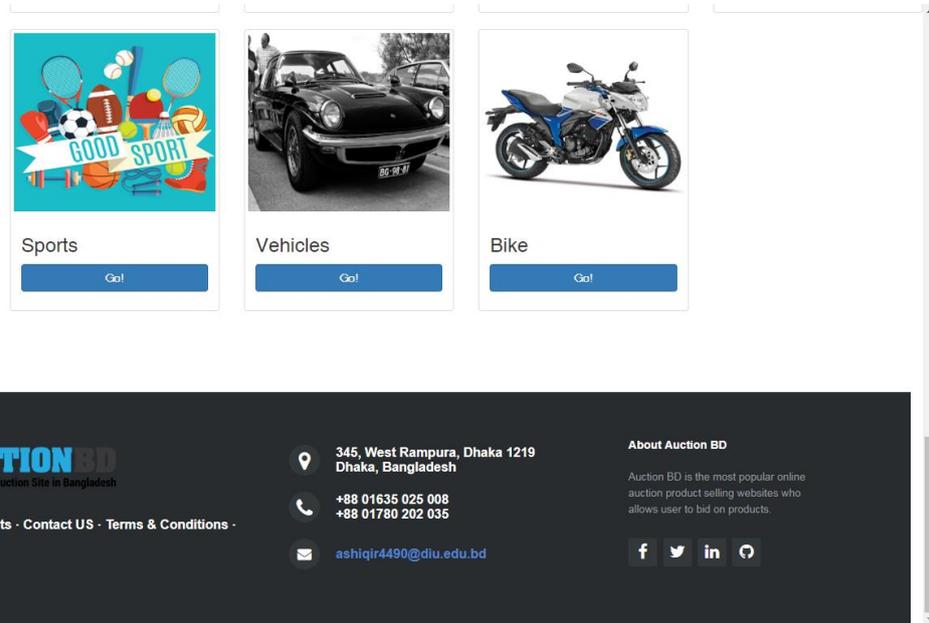


Figure 5.2.4.1: Home Page (Footer)

In the footer part we added our company details, contact information, other page links and our social media links that can help customer to know more about us. Also customer can get the information of contacting us from this page. Footer is one of the important part of a website. Because it's static on every single page on well design websites. So we added all of the important information that may help our clients.

5.2.5 Achievements

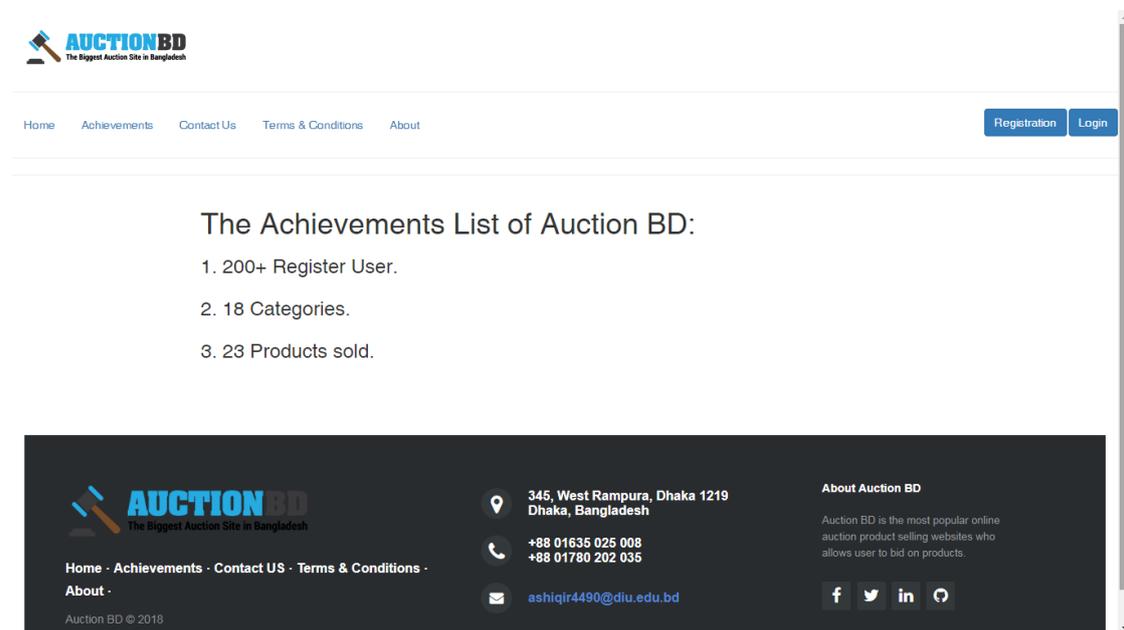
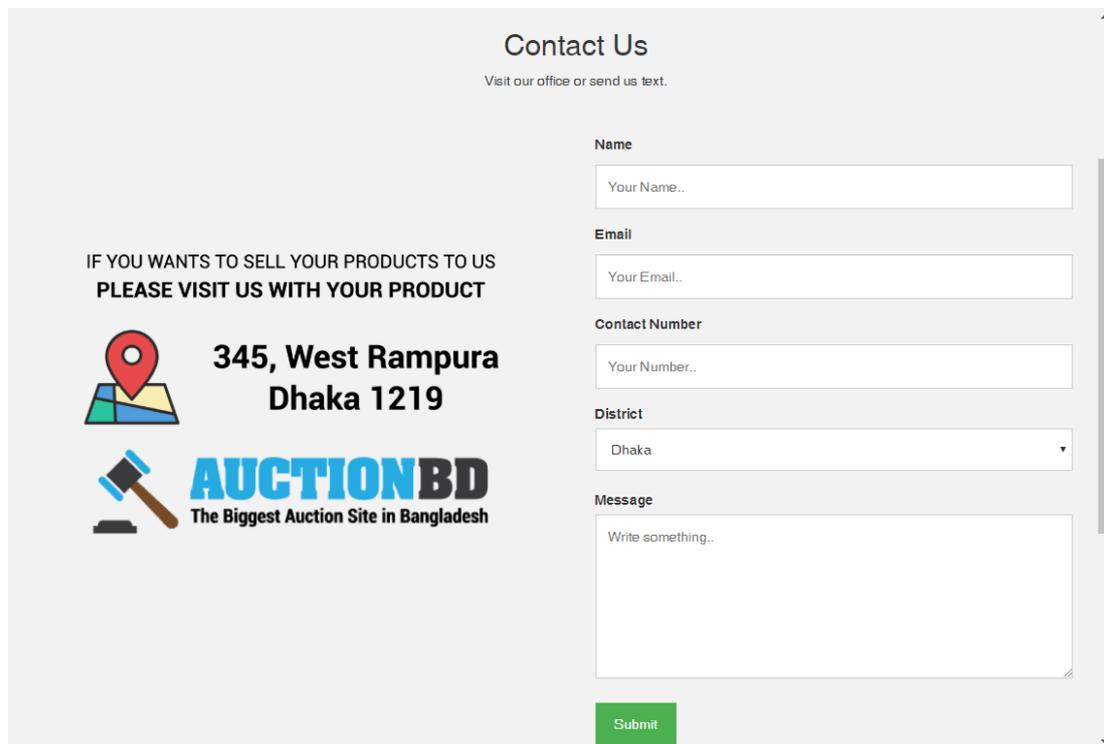


Figure 5.2.5.1: Achievements

Here we will declare all of our achievements and news about services. This page we will use to let our customer believe about our auction system. Also that customer can understand about our professionalism.

5.2.6 Contact Us



Contact Us
Visit our office or send us text.

IF YOU WANT TO SELL YOUR PRODUCTS TO US
PLEASE VISIT US WITH YOUR PRODUCT

 **345, West Rampura
Dhaka 1219**

 **AUCTIONBD**
The Biggest Auction Site in Bangladesh

Name
Your Name..

Email
Your Email..

Contact Number
Your Number..

District
Dhaka

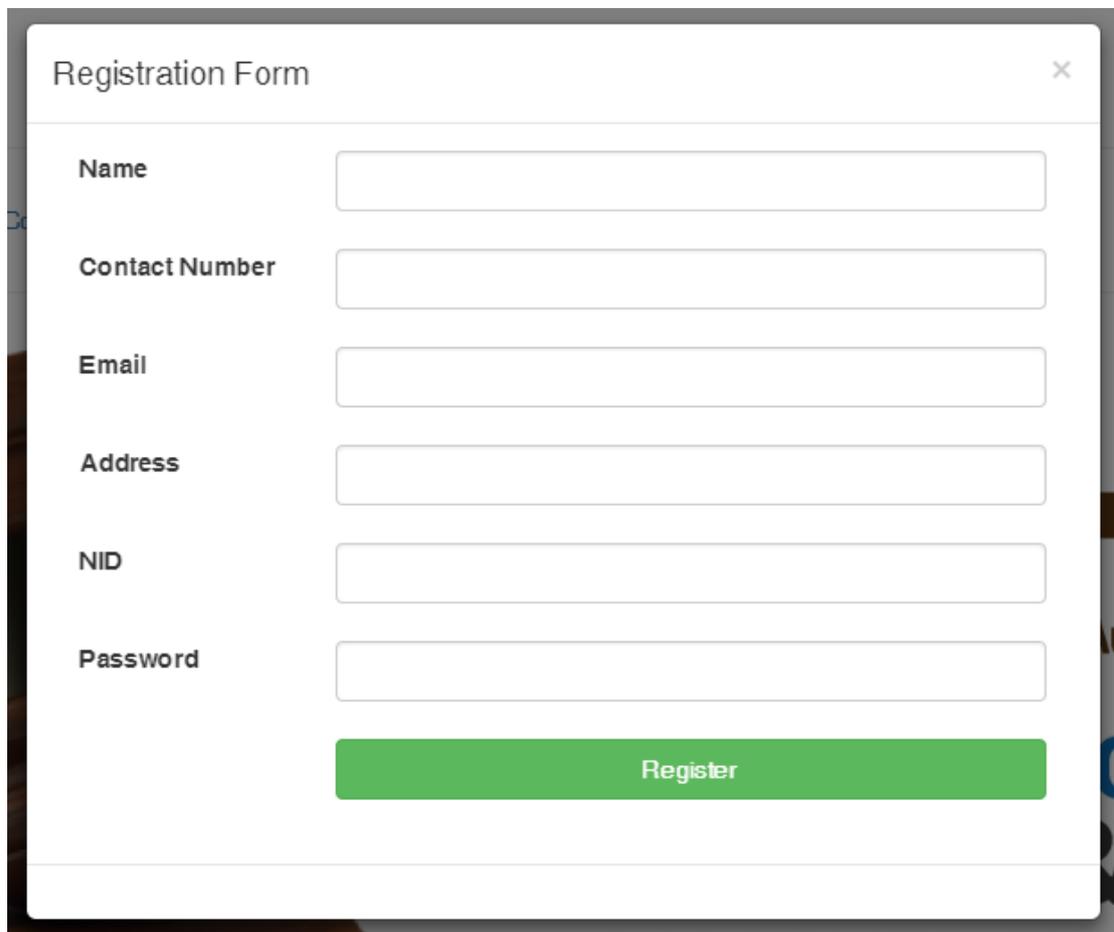
Message
Write something..

Submit

Figure 5.2.6.1: Contact Us

Here customer can send us message to contact with us. Customer also can send message to us if he wanted to sell his product to our website. Anyone can send their product to us for selling it on auction. For this the interested seller must need to contact with us by using this form.

5.2.7 User Registration



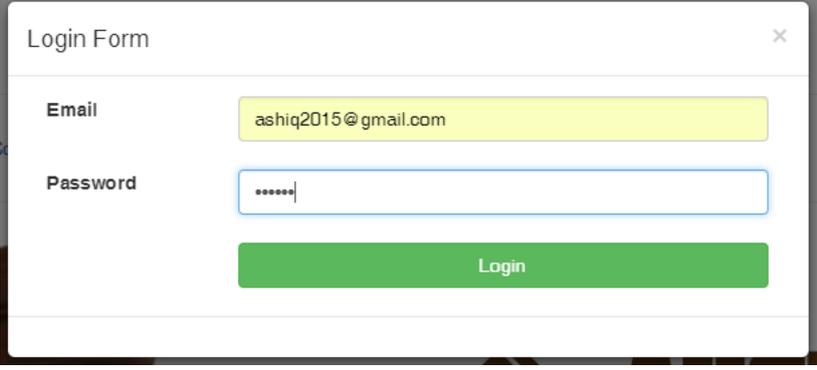
The image shows a registration form titled "Registration Form" with a close button (X) in the top right corner. The form contains six input fields: Name, Contact Number, Email, Address, NID, and Password. Below the input fields is a green "Register" button.

Name	<input type="text"/>
Contact Number	<input type="text"/>
Email	<input type="text"/>
Address	<input type="text"/>
NID	<input type="text"/>
Password	<input type="text"/>

Figure 5.2.7.1: Registration Form

Here customer can register to our website by filling up the form. Customer needs to provide his/her Name, Contact Number, Email, Address, NID No. & Password to register in our website.

5.2.8 User Login



Login Form

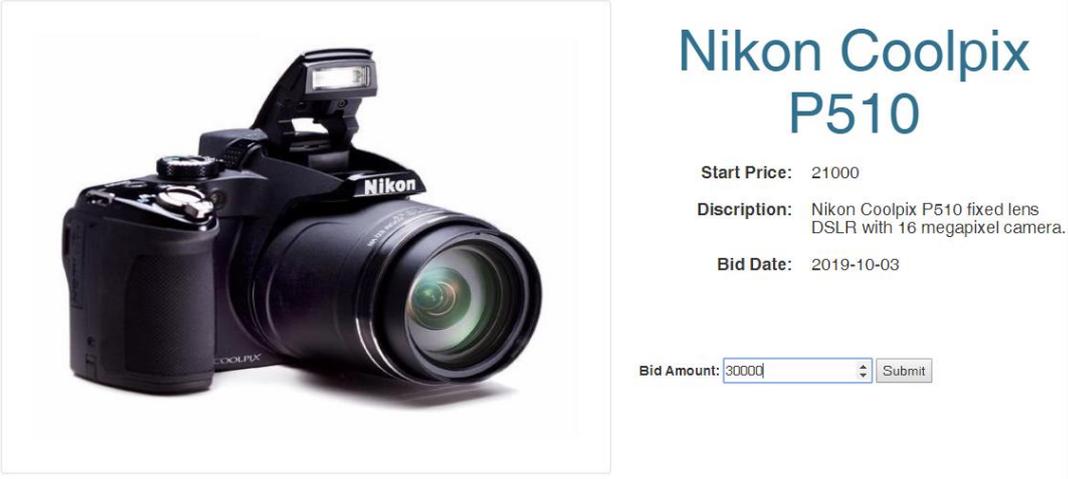
Email:

Password:

Figure 5.2.8.1: User Login Form

Here customer can login to our website by giving the registered email address and password by pressing the Login button.

5.2.9 Bidding Page



Nikon Coolpix P510

Start Price: 21000

Discription: Nikon Coolpix P510 fixed lens DSLR with 16 megapixel camera.

Bid Date: 2019-10-03

Bid Amount:

Figure 5.2.9.1: Bidding Page

Here customer can bid on product and check product price and minimum price to bid.

5.2.10 Bid Placed Notification Message



Figure 5.2.10.1: Bid Placed Notification

When customer bid will successfully done then this message will be appears in home page upper bar.

5.2.11 Admin Login Page

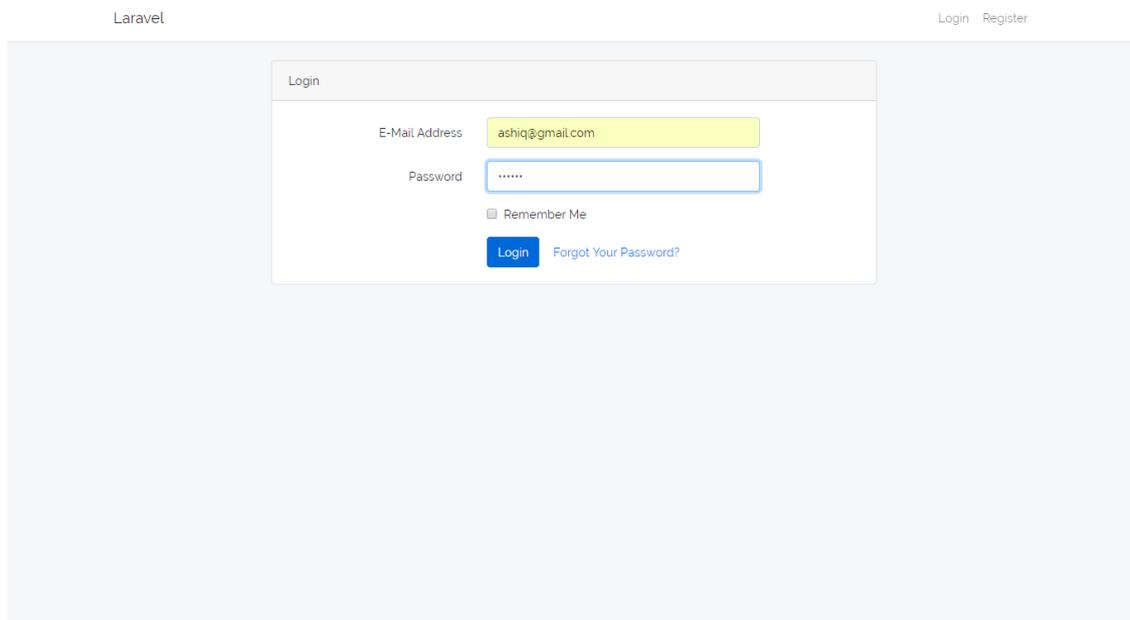


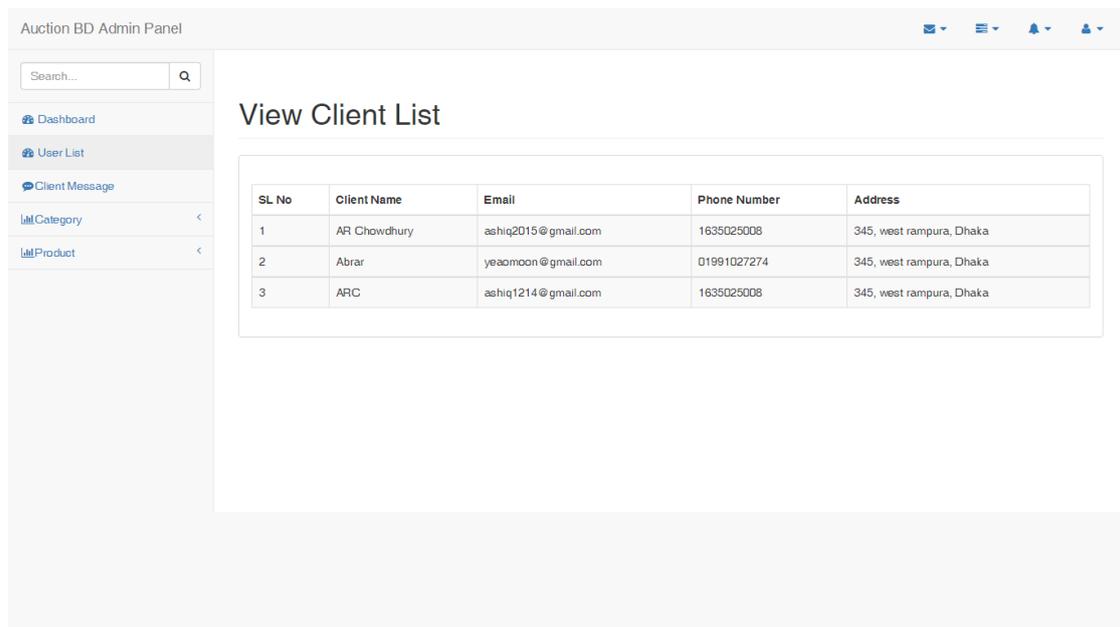
Figure 5.2.11.1: Admin login page

Here is the admin login page where from admin can login to admin panel.

To create this page we used Laravel default user creating method which is called auth. From terminal of IDE we just need to call php artisan auth to create this login page.

We can use this login page for admin or user. It's up to the developer. We choose this for admin. Because we think admin security is more important for a website. And laravel default login system is more secure than normal login system that we can create. That's why we choose this for admin login system.

5.2.12 Client List



The screenshot shows the 'Auction BD Admin Panel' interface. On the left is a sidebar with a search bar and navigation links: Dashboard, User List, Client Message, Category, and Product. The main content area is titled 'View Client List' and contains a table with the following data:

SL No	Client Name	Email	Phone Number	Address
1	AR Chowdhury	ashiq2015@gmail.com	1635025008	345, west rampura, Dhaka
2	Abrar	yeaomoon@gmail.com	01991027274	345, west rampura, Dhaka
3	ARC	ashiq1214@gmail.com	1635025008	345, west rampura, Dhaka

Figure 5.2.12.1: Client List

After getting login to admin dashboard admin can get the full access of the admin panel. Here admin can see all information from database. This page is called dashboard page.

Admin can do modifications or effects on data from dashboard.

After that, in dashboard left side bar admin has some menus to work with. Admin can check client information from client list page.

5.2.13 Add Categories

Auction BD Admin Panel

Search...

[Dashboard](#)

[User List](#)

[Client Message](#)

[Category](#) <

[Add Category](#)

[Category Details](#)

[Product](#) <

Category Name

Category Description

Category Image No file chosen

Publication Status Published Unpublished

Figure 5.2.13.1: Add categories

Admin can add categories from here.

5.2.14 View Category

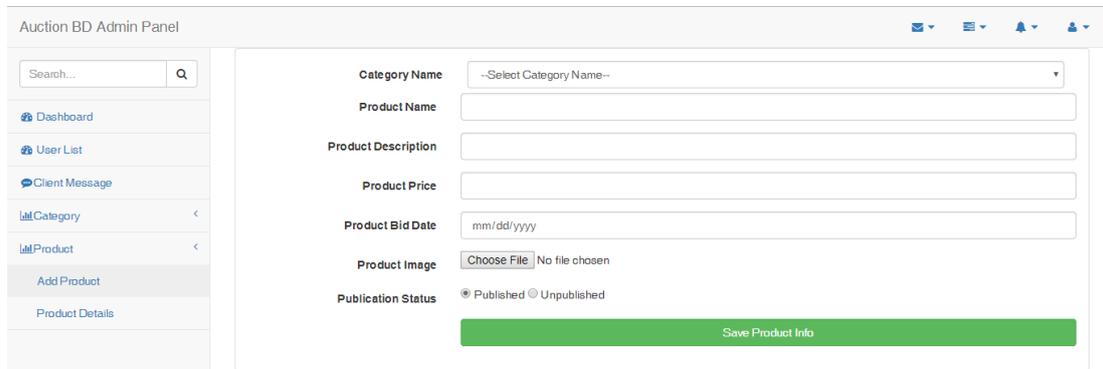
View Category

SL No	Category Name	Category Description	Category Image	Publication Status	Action
1	Mobile	Mobile, Tablets, Phones etc		1	<input type="button" value="Delete"/>
2	Camera	Camera, Camera Lens, Trip pod, Charger, battery etc		1	<input type="button" value="Delete"/>
3	Music Instruments	All type of music instruments		1	<input type="button" value="Delete"/>
4	Laptop	All brand laptops		1	<input type="button" value="Delete"/>
5	Desktop	Full Desktop set or Parts		1	<input type="button" value="Delete"/>
6	Antiques	Antiques Items		1	<input type="button" value="Delete"/>

Figure 5.2.14.1: View Category

Admin can check all product category, check and delete category.

5.2.15 Add Product



The screenshot shows the 'Auction BD Admin Panel' interface. On the left is a sidebar menu with options: Dashboard, User List, Client Message, Category, Product, Add Product (highlighted), and Product Details. The main content area contains a form with the following fields:

- Category Name:** A dropdown menu with the placeholder text "--Select Category Name--".
- Product Name:** A text input field.
- Product Description:** A text area.
- Product Price:** A text input field.
- Product Bid Date:** A text input field with a date format mask "mm/dd/yyyy".
- Product Image:** A file upload field with a "Choose File" button and the text "No file chosen".
- Publication Status:** Radio buttons for "Published" (selected) and "Unpublished".

At the bottom of the form is a green button labeled "Save Product Info".

Figure 5.2.15.1: Add Product

Admin can add product from here. To add products to client page admin needs to select product category that must be created. Admin also need to provide product name, product description, product price, product bid date, publication status and have to upload images of that product. When admin will click save product info then the details of product will saved on database and also will show in product list page and product details page.

5.2.16 View Product

		S6 edge			10-02			 
4	2	Nikon Coolpix P510	Nikon Coolpix P510 fixed lens DSLR with 16 megapixel camera.	21000	2019-10-03		1	 
5	3	Signature Guitar Indian	Indian Signature Acoustic Guitar	5200	2019-10-01		1	 
6	3	Ddrum	Ddrum D120B 5-Piece Drum Set	11000	2019-02-28		1	 
7	4	Asus	8GB RAM, 1TB HDD, 17" display, 2GB Nvidia Graphics, Intel i5 7100 Processor, 1 year Warranty	41000	2019-02-03		1	 
8	4	Dell Vostro	Dell Laptop from DIU for sell, 4GB RAM, i3 Processor, 500GB HDD, Intel internal 512MB GPU, 1.5 year used	25000	2019-10-01		1	 
9	5	Acer Veriton	Acer Veriton M200H61 Desktop (i7,500GB, 8GB RAM ,2GB Graphics)	60000	2019-12-12		1	 

Figure 5.2.16.1: View Product

Admin can view product and delete any product.

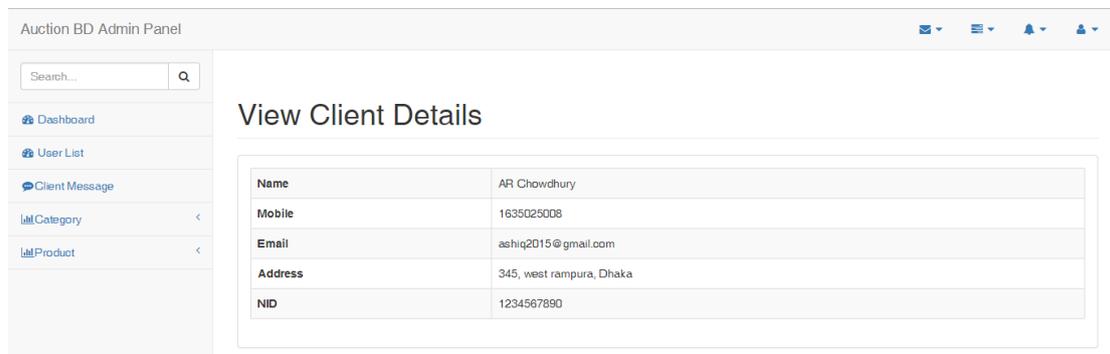
5.2.17 Bidder List

SL No	Client Name	Product Name	Bid Amount	Action
1	AR Chowdhury	Nikon Coolpix P510	22000	
2	AR Chowdhury	Nikon Coolpix P510	30000	

Figure 5.2.17.1: Bidder List

Admin can check bidders bid amount on products.

5.2.18 Bidder Details



The screenshot shows the 'Auction BD Admin Panel' interface. On the left is a sidebar with a search bar and navigation links: Dashboard, User List, Client Message, Category, and Product. The main content area is titled 'View Client Details' and contains a table with the following information:

Name	AR Chowdhury
Mobile	1635025008
Email	ashiq2015@gmail.com
Address	345, west rampura, Dhaka
NID	1234567890

Figure 5.2.18.1: Bidder Details

Admin can check total information of bidder by clicking the green button of bidder details. Admin can declare the winner by calling and mailing after finishing the auction process admin will delete de product from product list.

5.3 Implementation Interactions

We try to make our website user friendly and used graphical view is easier. Add every single option at the right place that can user can easily find what they looking for. The UI is set user friendly and understandable. Also for admin panel we design the interface that admin can easily handle everything. Also can check any information easily.

5.4 Testing Implementation

The given table describe the testing implementation,

Table 5.4.1: Test Case

Test case	Test input	Expected Outcome	Obtained Outcome	Pass/fail
User Registration	User can registered by any device.	Successfully Registered	Successfully Registered	Pass
User login	User can login by any device.	Successfully Login	Successfully Login	Pass
User bidding	User can bid from any device with appropriate information.	Bid Successfully placed	Bid Successfully placed	Pass
Admin registration	Admin can registered by any device.	Successfully Registered	Successfully Registered	Pass
Admin Login	Admin can login by any device.	Successfully Login	Successfully Login	Pass
Add/Delete Category	By following appropriate process	Successfully Done	Successfully Done	Pass
Add/Delete Product	By following appropriate process	Successfully Done	Successfully Done	Pass
Check Bid	By following appropriate process	All information showing perfectly	All information showing perfectly	Pass
Check User	By following appropriate process	All information showing perfectly	All information showing perfectly	Pass
Delete User	By following appropriate process	Successfully deleted	Successfully deleted	Pass

5.5 Test Results and Reports

After done full project we try to implements many fields and check test for confirming that how is our project, its ready or not. It's very important for a developing project. Result shows the environmental condition of a system. Does it work successfully? For this we try to test few time in different ways and fortunately it works smartly, a report is a paper that actually describe that test result and define that the system is ready to yes or not ready.

Given bellow few test categories that actually done with this project.

- Registration test successfully
- Login function work cleverly
- Admin Panel working perfectly
- Add/Delete category done perfectly
- Add/Delete product working perfectly
- Bidding working perfectly
- Showing all information in admin panel in perfect manner
- Presentation of details
- Others functionality
- Loading website and
- Finally, performance

CHAPTER 6

CONCLUSION AND FUTURE SCOPE

6.1 Conclusions

Auction system is actually a process of buying and selling system where customer do bid on a product to buy. This buying and selling process has been started from 500 B.C. From the beginning of 17th century, the auction become more popular. But now we are living in a digital world. Now a day's online auction system become a new experience and it has greatly impacted on consumers in its short time of existence. It has made consumer's behavior more effective and efficient to a new level. In digital world of electronic commerce buying and selling become more easy and time saving. Customers love to buy things from online in their busy life. So we think "Auction BD" the online auction system can serve a better service to whom who are interested to buy auction products.

To do better online business we think online auction system may drive an effective impact. As we know that in developed countries people are already buying or selling things from auction sites. But there was no online auction site in our country such as "Auction BD" though ours is an over populated country. It is also a developing country and many people have enough money to expense. We are living in a place on digital world. Technology also made our world so easier. Digital Marketing is a think which can easily grow a business well. It is possible to grow a business well and will be not so difficult now. Also there are many consumers who are still love traditional stores. Most of them are low and high age groups. Those consumers may have to buy things from an online auction system. They also may be helped by our site to gather knowledgeable information. Before offline auction system was popular. People has different type of things or goods to buy from auction. Also there was a social matter. People also go to buy goods from offline auction to meet people, friends or business pupils or other social or personal reason. Otherwise people don't interested for offline auction. But in digital world e-auction system can give user better service that can attract clients to visit our site. Technology and internet gives us good incomes of people and savvy population. The secured online payment methods, better to

electronic stores, return policies and discounts, coupon system could help the perceptions of online auction system benefits. We can consider the demographic profile of online consumer by gender, age, income and education have significant association to internet based auction system in the current scenario of the subcontinent. The overall results prove that the respondents of people have perceived online auction system in a positive manner. By this it can be justify that in our country launching an online auction system must be a positive step. Though, the frequency of online auction system in our country is not relatively a great idea and less demanded. But if we can utilize the technology, provide better service, serve suitable products, recall the tradition and add effective plans then it can be a successful implementation.

6.2 Limitations

This online application has some limitations. We will overcome this limitation in future. Some of the main limitations are given below-

- No seller panel for directly sell from user.
- There is no payment method added yet.
- Bidder can't check his bids or other customer's bids.

6.3 Scope for Future Developments

The future demand of this project is to improvise the user interface, the view and design, documentation, presentation etc. We also want to increase the security in the site. To perform the best service we develop the site dynamically and do the design responsive to all devices an all screens. There are also some in-scope that can made the site better. So we are thinking about to do some upgrade on our website in future:

- User account verification by email or SMS
- Fake bid/bidder detection
- Add online payment method
- Android or IOS application for existing website
- Automatic SMS or Email notification system
- New seller panel to sell products on our website

- Live customer care service 24/7
- More user friendly website
- More security for admin and user both

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APPENDICES

Appendix A: Project Reflection

We had started the journey to build the system from August 2017 and now it's November 2018. It was a long journey we just finished and launched the online auction system. In our country, there is no well-known auction website who are selling items or products by bidding system. So it is an innovative thing finally done by us. Our main goal was to create a web based online auction system that can do the total auction system for user online. User can check categories and products. Also user can bid on product. After the end of the bidding period admin will select the highest bidder as the winner. This is how our main process will done. Hope bidder and seller will be benefited by our development. We are so happy that by using our system people can save their time & money. With all hard work and spending a lot of time finally we are happy to release the online auction system named "Auction BD". We will continuously upgrade our website when needed or when we think that any function need to change we will do that. Some glossaries of terms are given below-

Laravel: it is a open-source PHP web framework, created by Taylor Otwell and intended for the development of web applications following the Model–View–Controller (MVC) architectural pattern and based on Symfony.

Open source software is software with source code that anyone can inspect, modify, and enhance.

Model: which represents the underlying, logical structure of data in a software application and the high-level class associated with it. This object model does not contain any information about the user interface.

View: which is a collection of classes representing the elements in the user interface.

Controller: which represents the classes connecting the model and the view, and is used to communicate between classes in the model and view.

Source Code:

<< <https://drive.google.com/open?id=1P5M63957hnEeC0xIegztFgWLLqTxLr50> >>

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