

MULTI VENDOR E-COMMERCE WEBSITE

“HOME SOLUTIONS BD”



DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

NOVEMBER 2020

DESIGN AND DEVELOPMENT OF MULTI VENDOR E-COMMERCE WEBSITE

NAMED “HOME SOLUTIONS BD: ONE-STOP HOME SOLUTIONS”

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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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DAFFODIL INTERNATIONAL UNIVERSITY

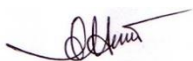
DHAKA, BANGLADESH

NOVEMBER 2020

APPROVAL

This Project titled “**DESIGN AND DEVELOPMENT OF MULTI VENDOR E-COMMERCE WEBSITE NAMED HOME SOLUTIONS BD: ONE-STOP HOME SOLUTIONS**”, submitted by MD. FAIZUR RAHMAN KHAN, ID No: 151-15-264 and MD. EFTHEKHAR ISLAM, ID No: 151-15-296 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 Bachelor of Science in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on Thursday 15.10.2020.

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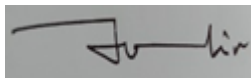
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We hereby declare that this project has been done by us under the supervision of **Ms. Nadira Anjum Nipa, Lecturer, Department of CSE**, Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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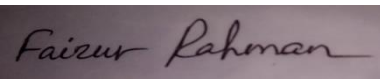
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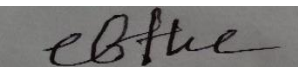
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ABSTRACT

The dynamics of online shopping are ever-changing. Nowadays e-commerce entrepreneurs understand that investing in a multi-vendor store is a more effective deal. Ecommerce investors, as well as business owners, are favoring multi-vendor systems – also referred to online marketplaces. They are favoring online market places over regular online stores because of a large range of advantages. The specialty of this is that you can invest in many people at one market place at a time. This is less costly than regular online stores as well. Only one person can invest in single e-commerce site and the cost of building a single website is high. That's why in modern days the multi-vendor sites are growing. The system has two-sectors. One is admin side and another one is vendor side. Admin will have access to these two sectors. But the vendor can only access the vendor dashboard part. Website details are provided in the settings section of the admin. From here all updates can be made. An admin can accept, create a category, add new vendor, search their activity, upload products, and edit, confirm the sale, and set up the site. A vendor can add new products and confirm the sale, create a category, take the customer purchase request, and update. The new products can be added to the site at any time. It can be updated and deleted also. Users can see all kinds of customer reports.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

The site we developed is a multi-vendor e-commerce website. Its name is Home Solution BD. It is very easy for anyone to open an account through this website and sell their product easily. The specialty of our developed site is products can be easily attracted to buyers and customers. Our system includes upload, edit, delete, and customer details part. There is a very good search system that allows you to easily find any product through the system, add as many bundles as we want. To make this system stand out, we have used Laravel, C#, and the SQL server. We have used visual studio 2015 and My SQL as well.

Html, CSS, JQuery, etc have been used and it is a dynamic website that will run on any Windows system and when opened on mobile the site will be optimized on the mobile screen as well.

1.2 Project Motivation

At present, people find a lot of products in a marketplace on one website, such as Alibaba Express, and those who sell products only single site are not very profitable if they have only one product. So with the thought of both buyers and sellers, we are motivated to build this multi-vendor website so that sellers can sell a lot of things at once, and a buyer can get a lot of things in one place and we have tried to create a one-stop Home Solution where anybody can find the things for their lovely houses. Houses are like heaven for the people who live in them. So this is the initiative to make every house a beautiful living place.

1.3 Benefits of The Project

Online shopping has made shopping very easy. It has various benefits like -

- It saves time.
- Anything can be searched easily.
- More than one store can be visited at a time.
- Prices can be compared easily.
- Shops are open for 24*7.

1.4 Methodology

This online shopping system project is carried out through the following phases-

- Analysis of procedures in the online shopping processing system.
- Identifications of problems and limitations.
- Requirement analysis of the new system.
- Design of a database schema to represent the entities and relationships.

1.5 Summary

In this chapter, our objectives have come very clear. We have discussed the system development life cycle and we followed that. Here we have discussed how the whole system works and how we have developed the whole system.

CHAPTER 2

BACKGROUND

2.1 Introduction

In this online shopping system, we have used Visual Studio, My SQL server to edit, and constructed code for the backend. We have also used an HTML theme [2] for the front end, and for the dashboard, we have used the Laravel framework. In our project Laravel framework is used so that the backend can run smoothly. Nowadays this is one of the most popular frameworks for building up a multi-vendor e-commerce system. That's why we have used the framework for our backend. We have also used a theme so that all the things in our site look good enough for a better user experience. Because user experience is one of the most important facts for growing up any e-commerce site.

2.2.1 Introduction to the Development platform

We have used the Laravel framework, C#, and My SQL Server, C# is a safe and more secure object-oriented language that admits developers to make a spread of secure and sturdy applications that run on the Code igniter Framework (Laravel). You can use Laravel to form Windows consumer applications, SQL Server services, distributed components, client-server applications, database applications, and much, much more. The Laravel Framework could be a package framework developed by Microsoft that runs totally on Microsoft Windows.

2.2.2 Database Platform

The database is a platform where all the data is stored here, the projector model and the controller, through the model, and the money that goes to the data through the marriage of Entity Frame Work, the data is kept. There are many types of databases. In this project, we have used My SQL to manage our data [1].

2.2.3 Introduction of Database

In computing, the SQL server is a relational database management system. As a data host, it is a software package on the affair of storing and thinking information that is requested by other software applications which may run either about the same pc or on another pc across a network.

2.2.4 Scope

The difference area where we may use this Website:

- A lot of things are available on one website
- Sellers have the opportunity to sell a lot on one website.

2.4.5 Study of feasibility

The study of feasibility is a rating and analytical imagining of the expectable designed project which is supported by the covered investigation and explores to apply full consolation to the determinations makers. Feasibleness gets to objectively and rationally break the forces and weaknesses by an existent business concern or advised enter, finds, and threats because this is presented along with the environment, the resourcefulness essential to assume by, and at last the expressions for success. In it has the easiest terms, the 2 measures to judge feasibility are cost asked and value to be attained. A well-designed feasibility analysis has best to provide an actual background by the business organization or project, description of the product or servicing, accountancy statements, points of the appendages and direction, market research and insurances, fiscal data, valid prerequisites, and assess responsibilities. Normally, feasibility analyzes lead to technical development and project execution. A few essential factors are mentioned in the feasibility study.

CHAPTER 3

REQUIREMENT AND SPECIFICATION

3.1 Introduction

We have discussed here the requirement collection and so analyzed the procedure. We have also discussed here the project's use-case model and some of the logical data models and design specifications.

3.2 Hardware Requirements:

- Processor Speed: 1.0GHZ or above
- RAM: 1 GB RAM or above
- Hard Disk: 20 GB hard disk or above
- Processor: Intel dual-core or above

3.3 Software Requirements:

In our system, we just have used these technologies-

- Javascript
- Owlcarousel
- Bootstrap
- Backend: PHP, Laravel, Ajax
- Add to cart Package
- Smtplib for email verification
- Database: Mysql
- Payment Method: Sslcommerce demo version

3.4 UML Diagram

In this chapter, we will discuss regarding UML diagram. About that point are many types of UML diagrams. We intend to discuss a pair of them. By using what we will discuss the entire program.

3.4.1 Use Case Diagram

The use case diagram represents all the actors who are related to the system and then show them how they can participate in the system. Figure-3.4 is the use case diagram of our system

Figure 3.4.1 shows the use case of the Multivendor marketplace shopping system.

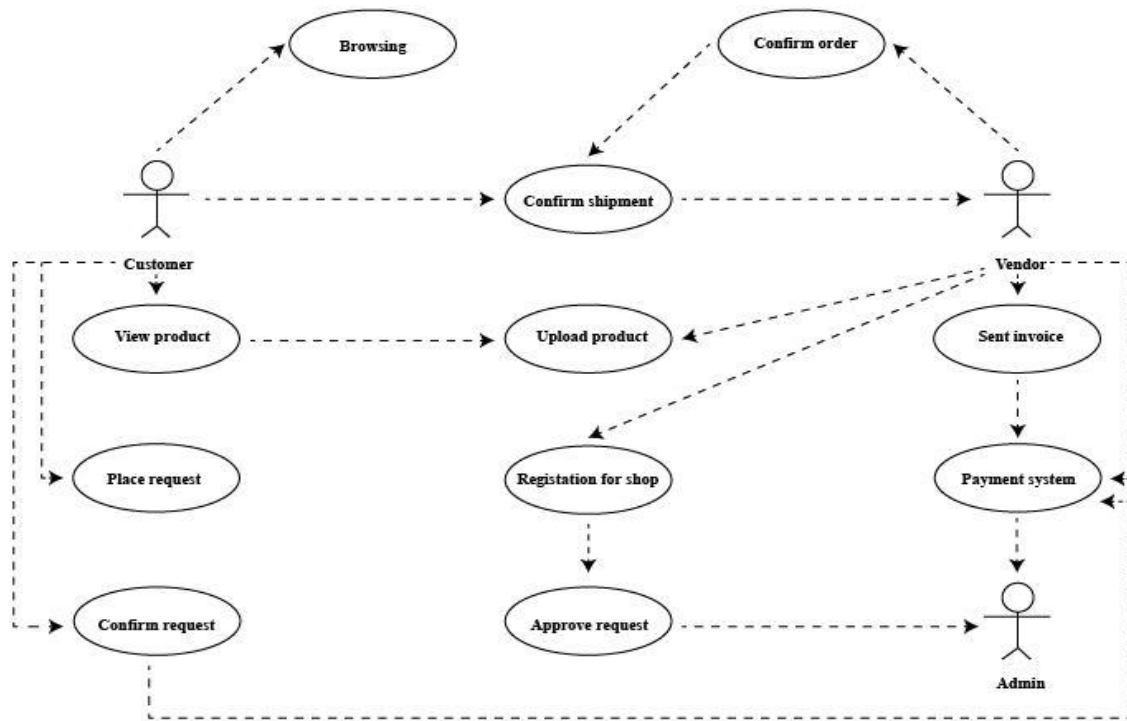


Figure 3.4.1: Use case of Multivendor marketplace shopping system

3.4.2 Description of Use Case Model

Actors: The Actors of the system are Super Admin and vendor and customer.

Use cases: We have explained the set of use cases based upon the functionalities and goals of the shopping system.

Browsing: This use case explains a set of actions required for Institute customers and vendors to browsing into the website.

Upload Product: This use case explains a set of actions required for the vendor to add a new product.

Show product: This use case explains a set of actions required for the customer can search and show the products.

Confirm Request: This use case explains a set of actions required for the customers. Only customer can show the product, confirm the product and give a request to the admin side.

Confirm Order: This use case explains a set of actions required for when the vendor can find any product request and vendor check the payment status if the customer completes there payment process then the vendor sent the product for shipment.

Admin: This use case explains a set of actions required for Super Admin and find vendor registration request and approve that and super admin can access all over the system. Now we are going to show our Data flow diagram in figure-3.5. The whole system has three main actors Customer and vendor and shipping agent. The customer rules are given order and confirm the order and the vendor rules are check the payment process and confirm or reject the order and add product and the shipping agent rules are delivery and confirm the order.

3.5 Data Flow Diagram

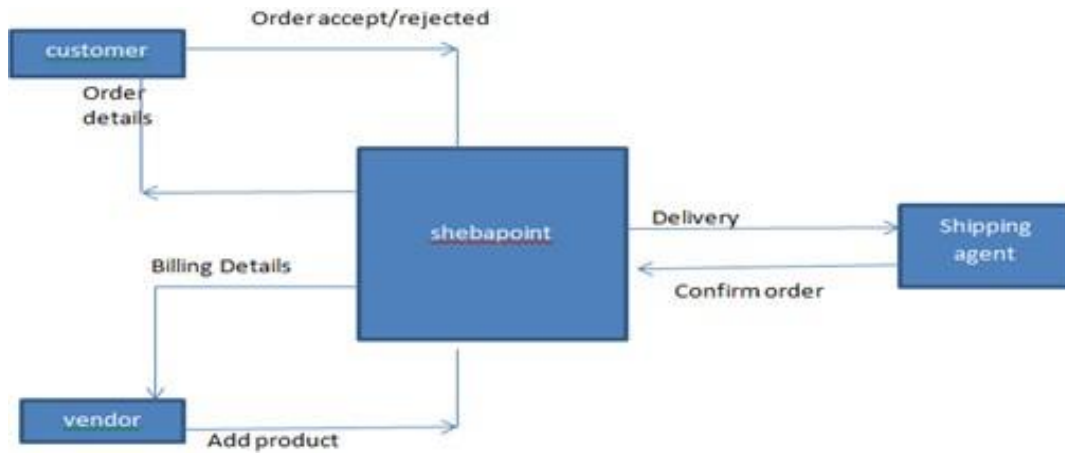


Figure3.5: Data flow diagram

3.6 Er-diagram of the system

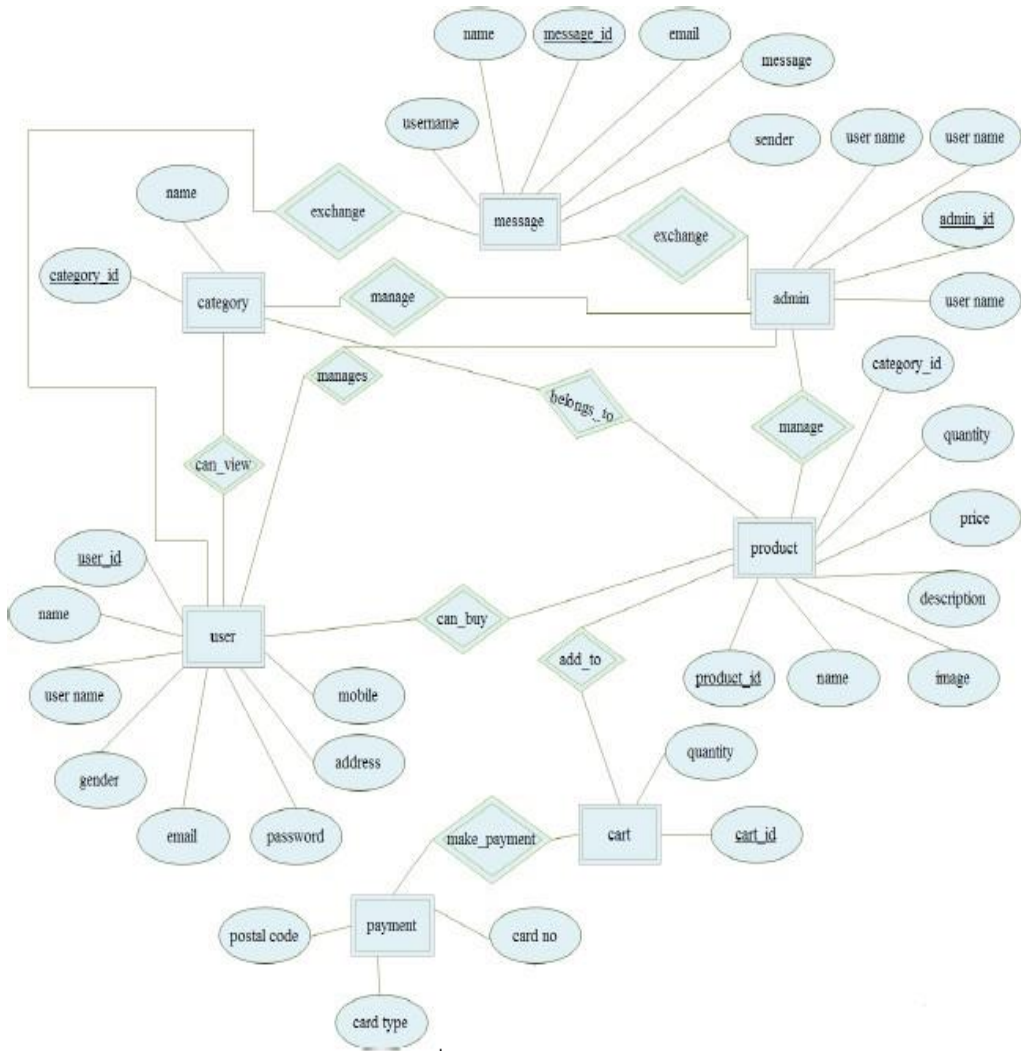


Figure 3.6: Er-diagram

3.7 Design requirement

To develop this project, one had to first think of a design and then put it into account and then buy a specific theme from Theme Forest considering various HTML theme designs on the Internet, and later in the theme that carries C# made use of HTML CSS with the proper use of these projects. The design has been erected. This is a complete projector front end job and the back end SQL Server database is packing work band using the huge C Sharp's language.

3.8 Summary

In this part or chapter, we have discussed the full project using the use case diagram and data flow chart. We have also described them elaborately.

CHAPTER 4

Design Specification

For any kind of website, we have to design two parts. One is front-end design and another one is back-end design.

4.1 Front-End Design: We have used an HTML theme in this part and we used jQuery for more effect and searching, going one page to another page, etc [4].

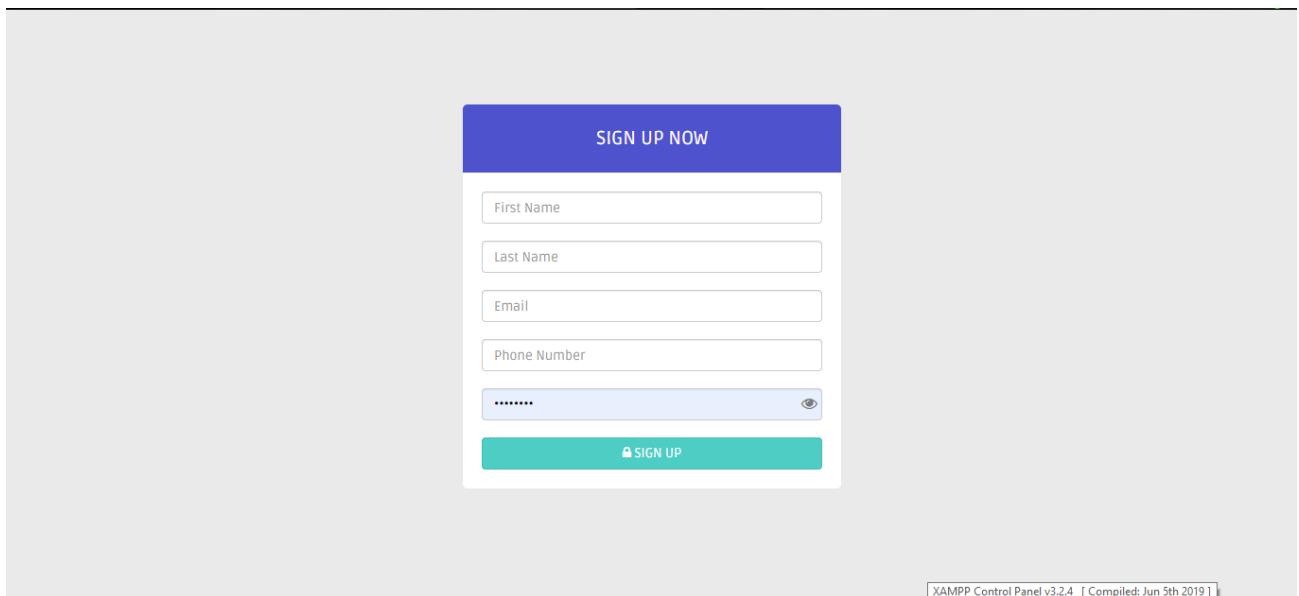
4.2 Back-end Design

This part we design of the Backside of our system that can be viewed by the Dashboard of Admin Panel and Vendor Dashboard we use the Laravel framework for the backend.

4.2.1 Admin Sign In page

This is our admin sign in page. Admin can sign in from here.

Figure 4.2.1 shows the admin login page of the system.



The image shows a web form for signing up as an admin. The form is centered on a light gray background. At the top of the form is a blue header with the text "SIGN UP NOW" in white. Below the header are five input fields: "First Name", "Last Name", "Email", "Phone Number", and a password field. The password field is filled with dots and has a small eye icon to its right. At the bottom of the form is a green button with a white lock icon and the text "SIGN UP". In the bottom right corner of the page, there is a small footer that reads "XAMPP Control Panel v3.2.4 [Compiled: Jun 5th 2019]".

Figure 4.2.1: Admin Sign Up Page

4.2.2 Vendor Sign In page

This is our vendor sign in page. Vendor can sign into our system from here.

Figure 4.2.2 shows the Vendor Sign-in page of the system.

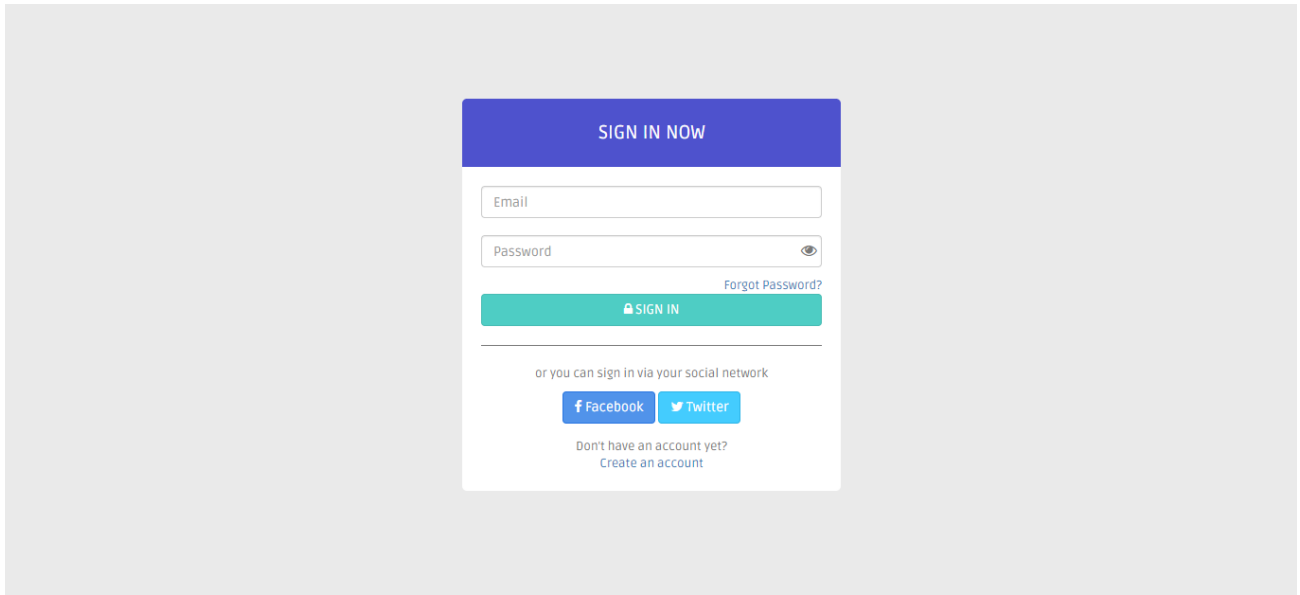
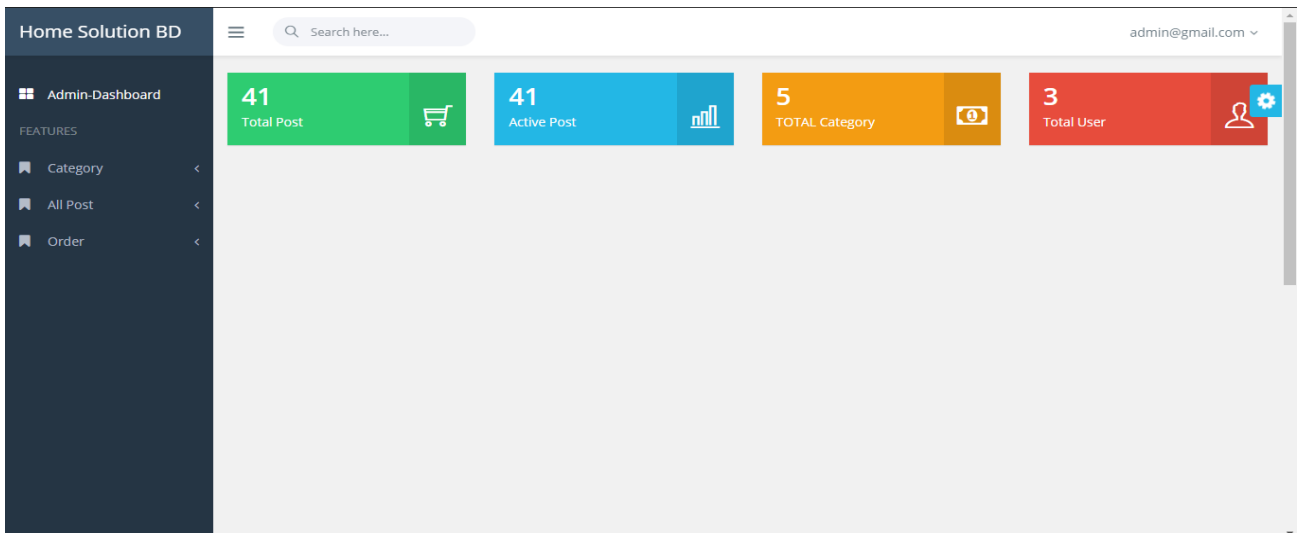


Figure 4.2.2: Vendor Login Page

4.2.3 Admin and Vendor Dashboard

This is admin and vendor dashboard. Admin and vendor can monitor and control all the things from the dashboard.

Figure 4.2.3 shows the Admin and Vendor Dashboard.



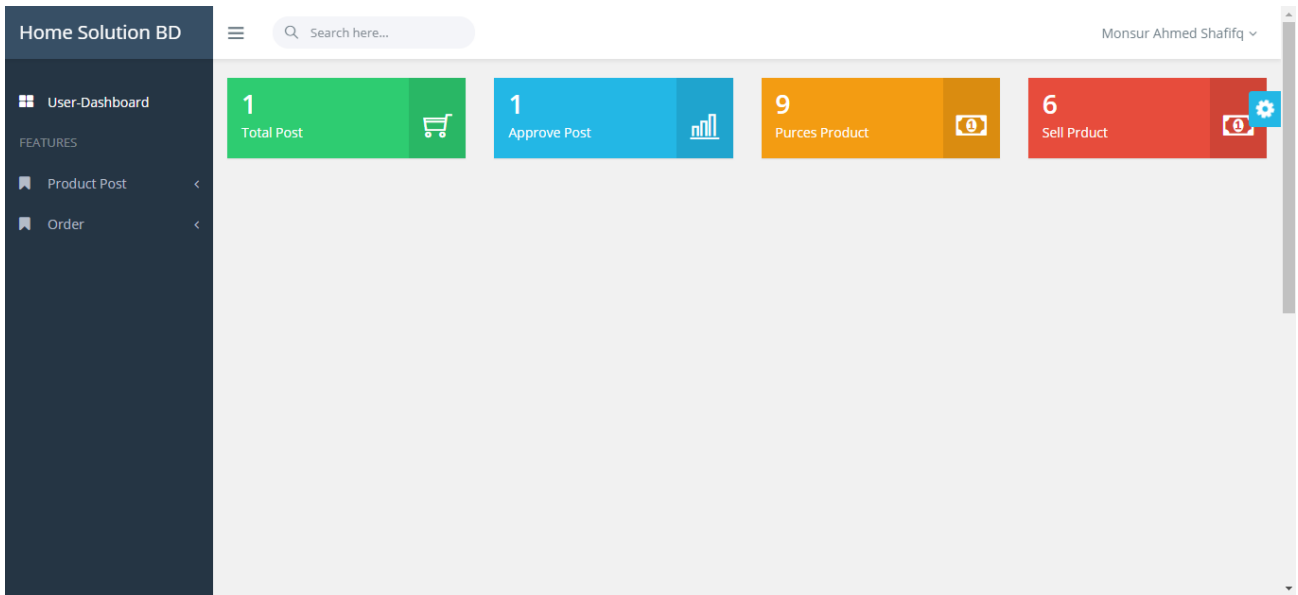
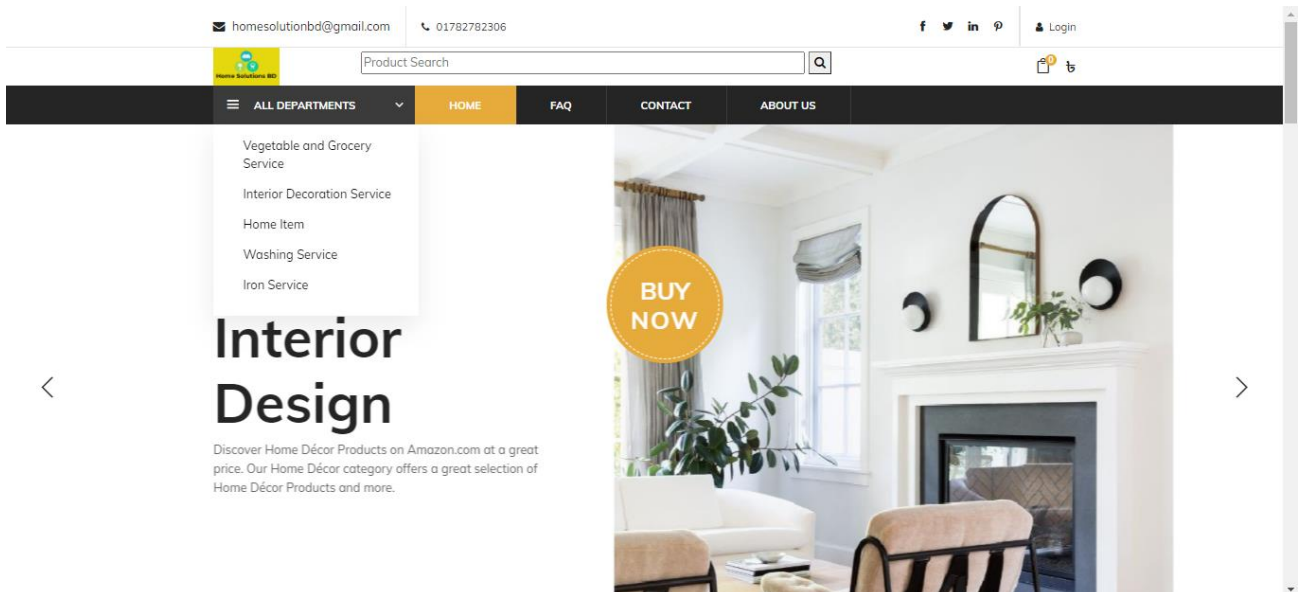


Figure 4.2.3: Admin and Vendor Dashboard Page

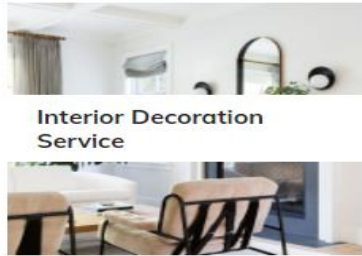
4.2.4 Front Page

In this part of 4.2.4, we show the front page. A vendor can buy and sell his/her desired products.





Vegetable and Grocery Service



Interior Decoration Service



Home Item

All Product



Brass Figurine of an Owl Seated on a Perch Statue Sculpture for Home Decor Size: 3x2.25x1 Inch
₹ 890



Classique Polystone Multi Beautiful Big Long Feng Shui Vastu Sleeping Lord Budha Statue Size :7(L) x 34(B) x 19(H) cms for Living Room|| Home Decor|| Office Gift (RDBMS08)
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₹ 60/kg



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₹ 65999



LG F1496ADP24 8 Kg Fully Automatic Front Load Washing Machine
₹ 19999



Hotpoint NSWM743UGG 7KG 1400 Spin Washing Machine
₹ 30000

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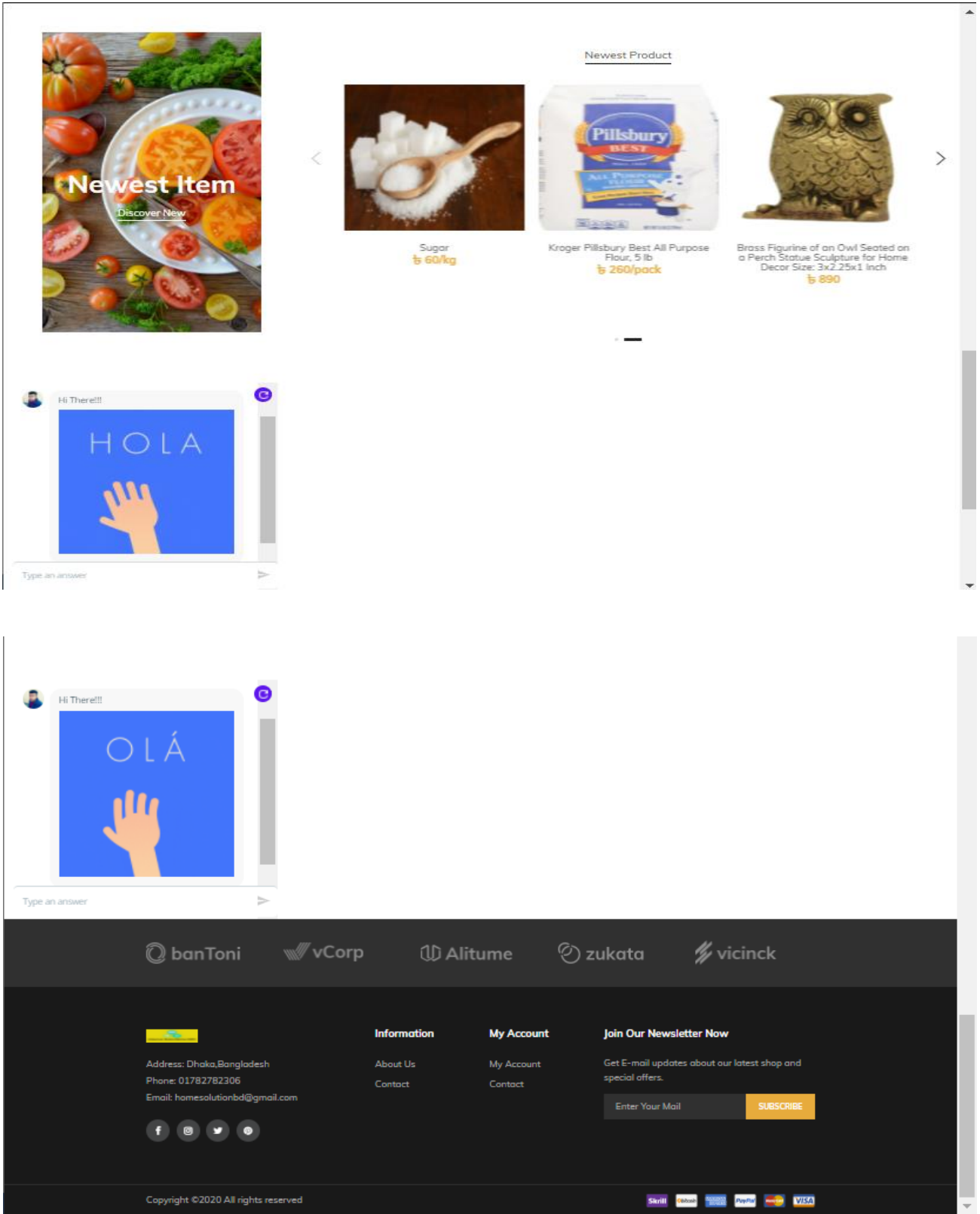


Figure 4.2.4: Front Page

4.2.5 Category

Admin can Access in this section. This section has the Category option. An admin can add or delete any kind of category.

Figure 4.2.5 shows that admin can add or delete any category on the settings page.

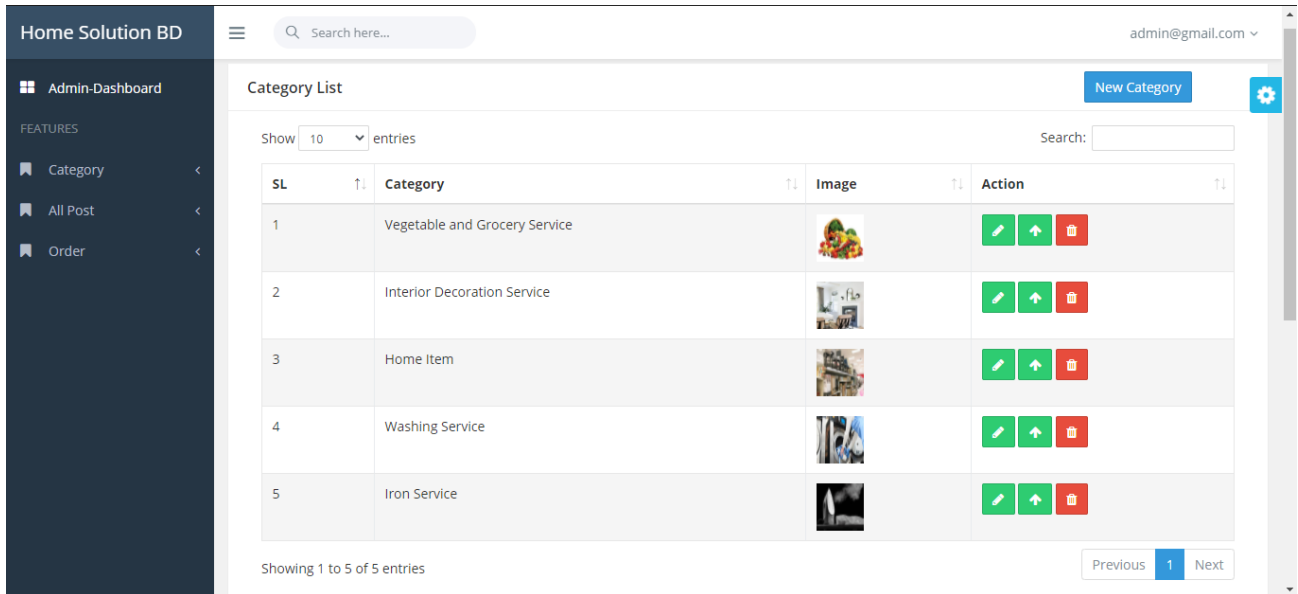


Figure 4.2.5: Category List Page

4.2.6 Product Upload Page

This is our product upload page. Admin can upload or delete any product at any time. When the Admin upload any product then the product is shown in the website for sell.

Figure 4.2.6 shows the Product Upload Page of the system.

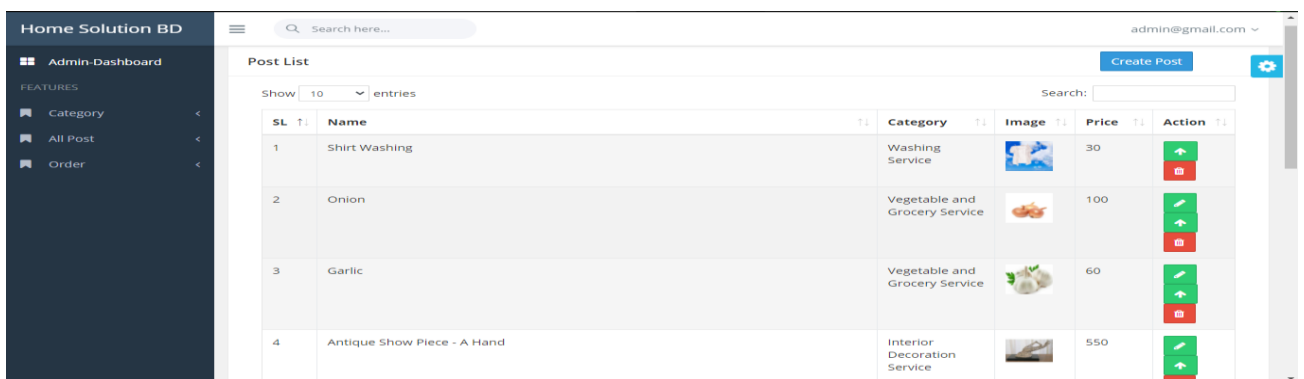
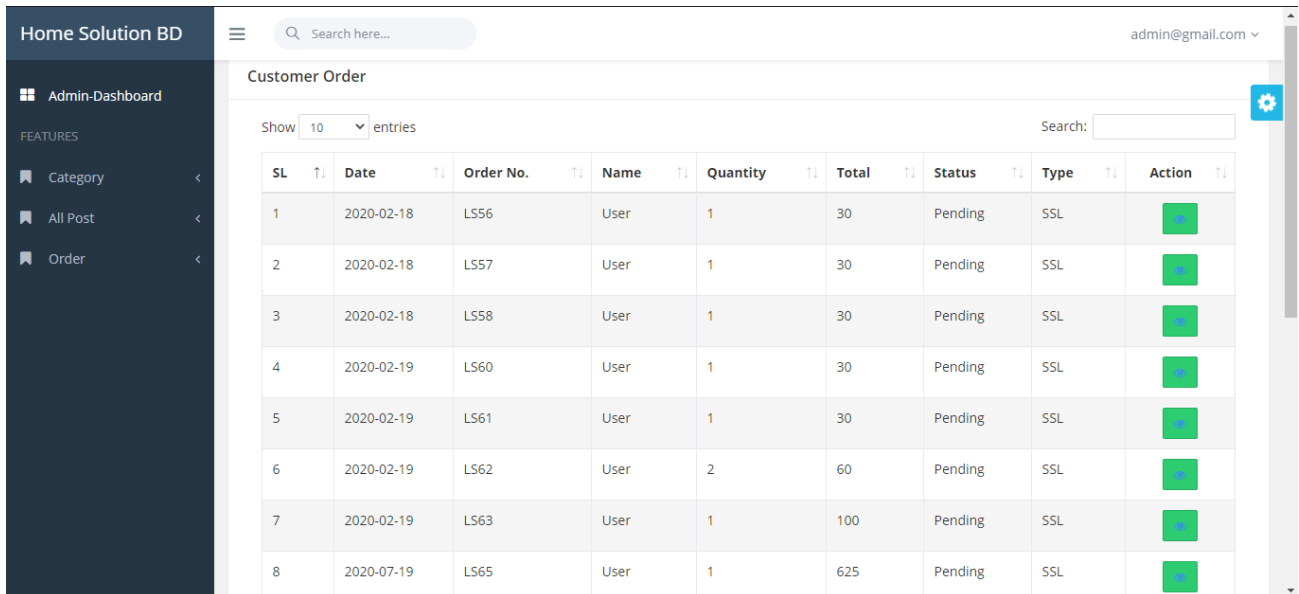


Figure 4.2.6: Product Upload Page.

4.2.7 Order Confirmation sheet

This is our order confirmation sheet. The admin can confirm all the orders of the customers from here. When a admin confirm the orders then the orders are shipped to the customers.

Figure 4.2.7 shows the Order Confirmation Sheet page of the system.











SL	Date	Order No.	Name	Quantity	Total	Status	Type	Action
1	2020-02-18	LS56	User	1	30	Pending	SSL	
2	2020-02-18	LS57	User	1	30	Pending	SSL	
3	2020-02-18	LS58	User	1	30	Pending	SSL	
4	2020-02-19	LS60	User	1	30	Pending	SSL	
5	2020-02-19	LS61	User	1	30	Pending	SSL	
6	2020-02-19	LS62	User	2	60	Pending	SSL	
7	2020-02-19	LS63	User	1	100	Pending	SSL	
8	2020-07-19	LS65	User	1	625	Pending	SSL	

Figure 4.2.7: Order Confirmation Sheet Page

4.2.8 Order Details Page

This is our order details page. The admin can see the customer details and payment details from here. When a admin approve all the informations then the products are ready to be shipped to the customers.

Figure 4.2.8 shows the order details page of the system.



Customer Details	
Order ID	LS66
Customer Name	Monsur Ahmed
Customer Phone	12345678
Customer Email	monsurahmedshafiq@gmail.com

Payment History	
Total Amount	Tk. 1150
Pay Amount	Tk. 1150

Customer Payment Info	
Payment Type	SSL
Transaction NO.	9f1578735a6cc
Payment Amount	Tk. 1150
Payment Status	Pending

Shipping Info	
Name	Md. Faizur Rahman Khan
Phone	01689442411
Email	shan.nayem8662@gmail.com
Address	Uttara

Figure 4.2.8: Order Details Page

CHAPTER 5

Implementation and Testing

5.1 Introduction

We'll be discussing how we apply this design in this chapter. In our project, we will include Front end & back end implementation. All the execution will be discussed with appearance with different figures.

5.2 Database

This is the database of our system. We have used My SQL for maintaining the database. The part of 5.2 shows the backend database of our developed system [1].

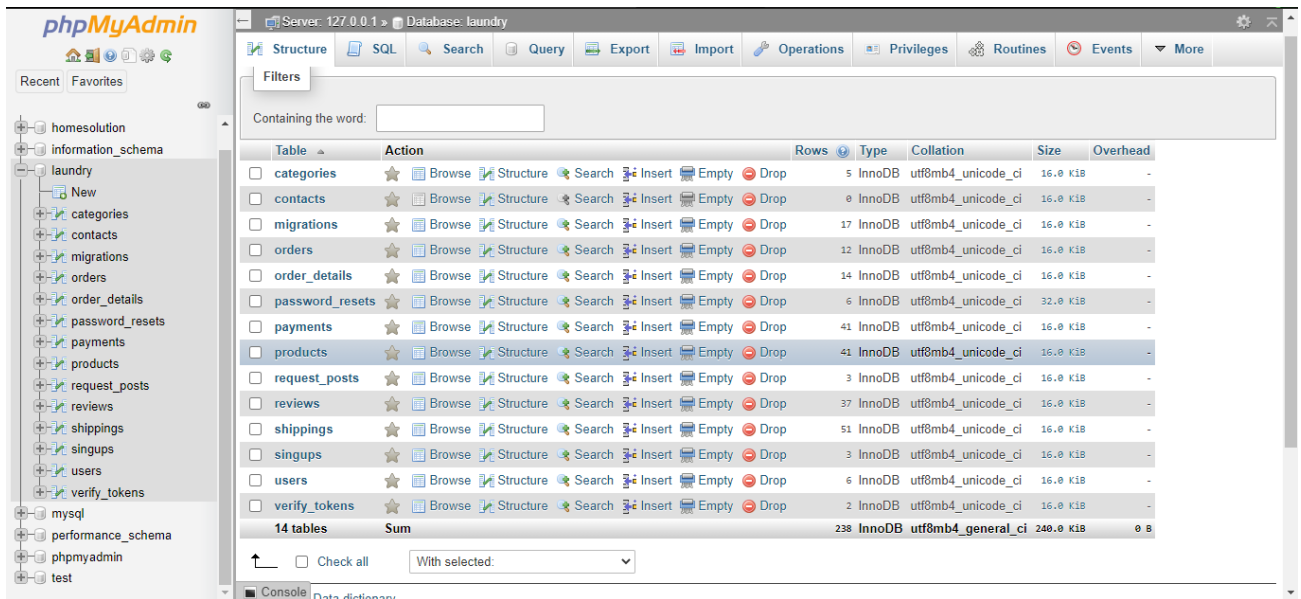


Figure 5.2: Database Connection

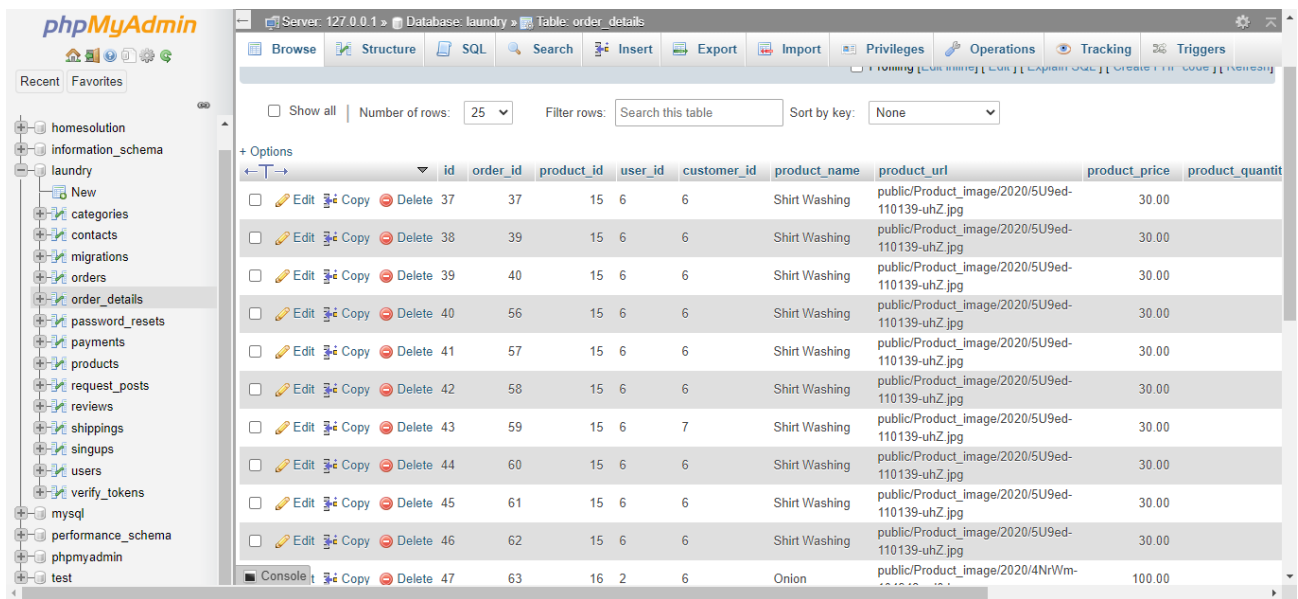


Figure 5.2: Database Connection

5.3 Implementation of Back-end Design

Our service program is an internet-based only. So that there are several working with the front layout. So for the internet-based challenges we've got HTML theme, CSS, jQuery for the front end execution [3].

5.4 Test Execution

For this is a web project that's why testing is very much essential for this system to deploy the application. It will amount overall operational and could fix the knowledge that app by input and output measurement. On the other hand, a trial run may afford the feedback that however a good deal time they put uphold off to run and could enforce exact operation. There is systematic a lot of essays that could follow as a coating. As this coating, we have done some testing. They are given here:

5.4.1 Unit Test

This formula represents applied as when the code is applying then the-developer checked out since his own up first errors. So, in our case, we get ensured while we are doing code and arbitrated to discover the initial faults.

5.4.2 Integration Test

We integrated all back-end code and front- end. Then we have checked this and if any kinds of the layout are broken or not broken.

5.4.3 Function Test

Completely this serves that we selected for our covering at first. We have completed all initial prerequisites from these projects that require to be. And all the purposes are tried one by one. Because the roles are the main important part of a system. If the function does not exploit by rights and then the system will be wasted.

CHAPTER 6

FUTURE SCOPE AND CONCLUSION

6.1 Conclusion

In the conclusion, we just say about our project that is to manufacture such as a dynamic web application that will assist to oversee any kind of web system. We started thinking about almost this project last year. Later all by the grace of Allah we just create it. We just make these projects as the easiest way to manage any kind of web system. We think this application will be very helpful for people whole over the world. In the end, we want to tell something's almost this project which was set up and accomplished to a good extent. From the first of this project, we just learn many things. We hope one day this application will be an almost popular application for any shopping website system.

6.2 Scope for Further Development

This project fills the primary quill requirements of a shopping web system. If we can provide the system in mobile applications than it will become easier for the user. We can allow information on the vendor and customer by their mail. As we know some kind of information can be updated. So, they can check their updated information. We already know that this system is only accessed by admin and vendors. So, we plan to do a customer access page for this system. The Web application has been developed executing the functionalities of the Multivendor Shopping website system.

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