A WEB-BASED ONLINE SHOPPING: PANDA

 \mathbf{BY}

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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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APPROVAL

This Project/internship named " A Web-Based Online Shopping: Panda", is presented by Md. Obaidul Islam, ID No: 183-15-2255, and Md. Arnob Bhuyain, ID No: 171-15-8970 to the Department of Computer Science and Engineering, Daffodil International University has been acknowledged as acceptable for the incomplete satisfaction of the prerequisites for the level of B.Sc. in Computer Science and Engineering and endorsed concerning its style and items. The show has been hung on 13.09.2022.

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ABSTRACT

This is the web-based e-commerce that name is "A Web-Based Online Shopping: Panda", that seems like a website. We know that web site static and web-based project is dynamic that are already we made. Using this website, people are helping by it to purchase any products from their homes, offices, and workstation that are really needed for them and they will very benefited for it and that product they will buy which are benefited in their daily life. Using this, customers can be reducing their valuable time waste and also, they will get products can be easily to use it. In this project, we are analyzing the results and found that almost 40 percent of the buyer/customer in the country are not aware of the e-commerce online store. In this project that have basically 2 panel that are user interface, that can customer or user can easily buy product but must be login first and then search, order place, choose, comment, review system and so on. and another is admin interface, that can update products, process, order accepts, banner and slider change and also both chatting systems are visible here. Using this, customers will be benefited.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

E-commerce-means is buying and selling goods, it has been many systems starting from the barter system to using precious metals, to using coins to using paper money, and also plastics. Traditional e-commerce means a process of buying and selling goods face to face and business happens face to face and is also limited to particular geographical location. There is persona interaction and delivery of goods is instantons. But online e-commerce is the Internet and the web for business transactions and/or commercial transactions, which typically involve the exchange of money across organizational in return for products and services, online platform is the well-known platform for all kinds of people like from young to old who are continuously busy with their professions. Today's world is up to date, and technology, infrastructure system, and everything is engaged with e-commerce that is updated with the time.

1.2 Motivations

Our more motivations come from our real-life scenarios like: many small and medium-sized business owners like new entrepreneurs in the world are unaware and unconscious of the existence of an e-commerce that why my motivation is a streamlined shopping experience, an appropriate number of choices along the way, social proof to boost confidence, and the power of a compelling discount. This website will be trustworthy that can help in a critical situation like: Covid19, at that time people were unable to go outside. In our perspective, one day, using this website or this website employees will reduce unemployment to zero percent.

1.3 Objectives

There are many objectives that are helped customers by the using this site,

- Easily read all descriptions of products and buy it.
- Users can get updated in discount time or fare time.
- Make their life easier.
- As customers buy any product from home and workstation in their sick times.

1.4 Expected outcomes

The output will be:

- Users can search any products by search options
- Users can live chat with the admin panel.
- This will be a user-friendly website.
- For safety and security, customers will get notifications via email.
- They will be able to add or remove products from the cart before finalizing or confirming the order as their wish.

1.5 Report layout

- Introduction, motivation, objectives, outcomes, report layout.
- Background study, related work, comparative study, scope of problem, challenges all the discussions.
- Requirement's collections, use case model, logical data model, business process model.
- Application of project design.
- Implementation and testing.
- Conclusion and future work.

CHAPTER 2

BACKGROUND STUDY

2.1 Background study

For a project, we can use the more important programming language/code that is really important for this project and the code names are or languages names are php, Laravel platform, Ajax, and so many packages that are really important for us. For code implementation and design, we used Vs Code that a very common platform or notepad that are used for html, php language for better uses that is basically it is an easily accessible code editor for various operating system from Microsoft. Alongside we used many shortcut keyboard instructions and so on. Alongside we used the one platform that is Laravel documentation, stripe from stripe official documentation and finally JavaScript and jQuery documentation for decoration, background support and all are doing edit in the visual studio. vs code is a code editor platform, it supports a variety of programming languages and it's all features. Visual code enables it to run on any device, in any place which is the big opportunity for developer. The most of common programming languages have basic support in Visual Studio Code beside as, Visual Studio Code to build resources and also make drag & drop applications. Then finally we use MySQL. It used only for the database setup, create, update and delete. It's called a crud application. We can see our every product and document via database that are user friendly.

This website is an educational website that provides everything related to coding [1]. But we have created this site that is an e-commerce online store for selling products to the customers. Their project gives any updated information and this hints and idea we have also generated it in my project. This website generates a framework pattern that makes web development very easy [2], for customers who are conscious and know how to use websites & buy any products. The main facility of their project is user and admin interaction. Admin can manipulate all sites that are really needed for customers and customers can use their credentials for payment. Here we use HTML, CSS, JavaScript, jQuery use for frontend design.

2.2 Related project

When we decided to create a website and after that, we decide we will create an e-commerce that are most common and popular e-commerce that are well known to everybody in the world that time we followed plenty of famous readymade project. And follow them their activities and work policy. Those all websites are famous and popular for us like: Amazon, Daraz, Alibaba, and so on. There are 3 websites in the world which we followed most for developing our project for my country like our project [3-5]. But we will show only one below. A related project is present in the flowing Fig 2.1.

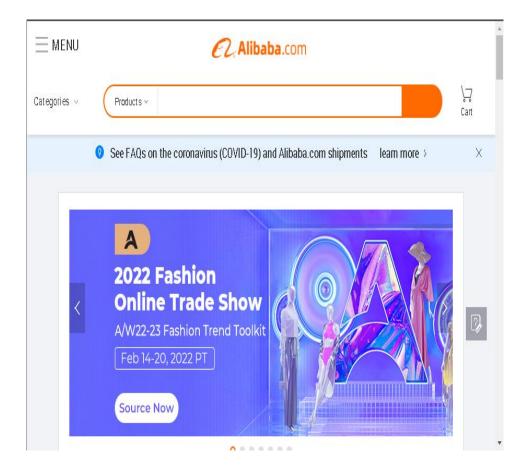


Fig 2.1.: Alibaba.com

We have learned from those websites:

- Good decorum.
- Well organized.
- Smooth to run.
- Safety and security are proper and so on.

2.3 Comparison with existing system

Table 1: Comparative study with another project

Case study	Alibaba	Daraz	Our project
Registration & Login for user and admin	Yes	Yes	Yes
Multilanguage	No	No	Yes
Discount/offer	Yes	Yes	Yes
Profile update, Live chat	No	No	Yes

2.4 Problems analytics

we have faced a lot of problems, when I have decided to create this:

- In the local host, some pages needed to connect the internet connection for shopping pages and other packages.
- Without internet, it's hard to send emails and messages.
- Regular update is so tough though, I am using a Laravel.
- For API connection, the internet is needed.

2.5 Challenges

- Package installation problems in some cases.
- Always check for updating.
- User friendly.
- Data collection and Time maintenance.
- Check System control management.
- Perfect product set up check.
- Database management system.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business process model

This is the moving process of this project it shown how a customer can choose a product to buy, that all are system included they're for user understanding and check the procedure for online shopping. Business process model of this project is present in the following Fig. 3.1.

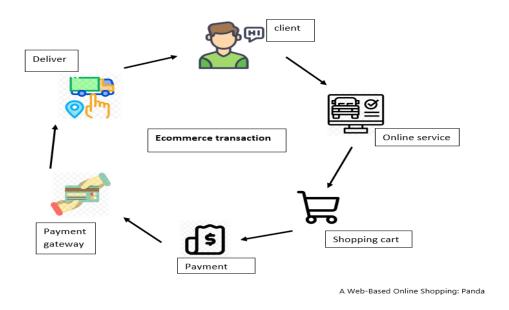


Fig 3.1: Business process model (BPM) of this project

3.2 Analysis & design

It's a most essential for background design in every project for better understanding. Here, we can use the firstly they analyze the BPM and find out the user requirement which is called requirement analysis. After analysis create a pre-design by analyzing that information. And finally draw the e-commerce background and implemented by those models. Some core parts of requirement below:

- To create an account for customers, amount store.
- Enable shopping cart and gateway system.

3.3 Testing & coding

The testing systems are:

- The backend updation.
- Authenticate package.
- Real time uses possibility.
- Ideal performance and capacity utilization.

All are can be checking by the developer that are facing no problem for user.

3.4 Maintaining

The list below maintain points are important:

- Firstly, they can determine then checking the project plan.
- Talking about the website budget, Statistics and financial calculations.
- Create maintenance methods and fiending the error.
- Solving errors with maintaining safety laws.
- Manage equipment.

3.5 Activity diagram

Below flow chart shows the site functional controlling way. The flow chart of this project is present in Fig 3.2

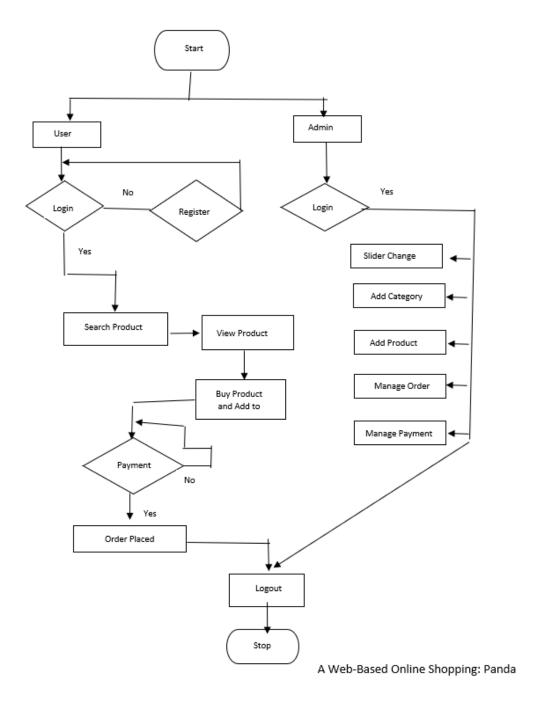
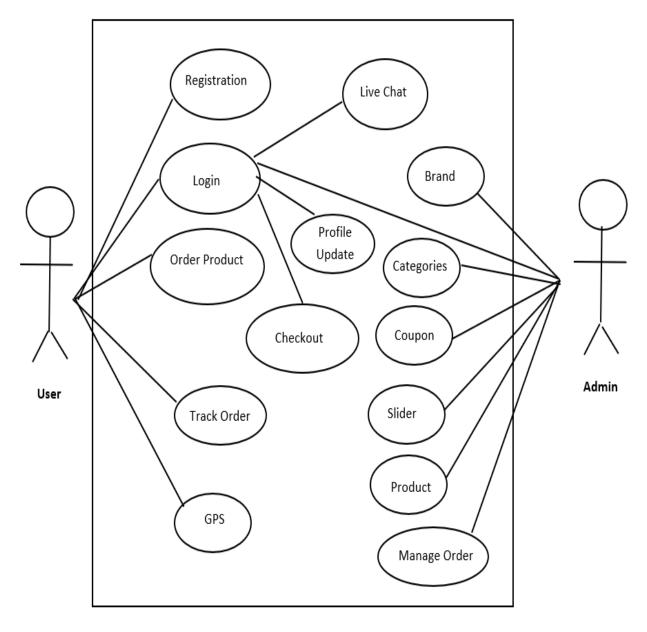


Fig 3.2: Flow diagram for order product

3.6 Use case diagram

This is the basically representation all interaction between the customer and admin that are connect between them as well as user activity from user interfaces alongside admin activity from admin interfaces. The use case diagram of this project is shown in Fig 3.3.



A Web-Based Online Shopping: Panda

Fig 3.3: Use case diagram of this project

3.7 Class diagram

This is our project use case diagram which shows a domain model for online shopping. The purpose of the diagram is to introduce some common terms, "dictionary" for online shopping - Customer, Web User, Account, Shopping Cart, Product, Order, Payment, etc. and relationships between. The Class diagram of this project is shown in Fig 3.4.

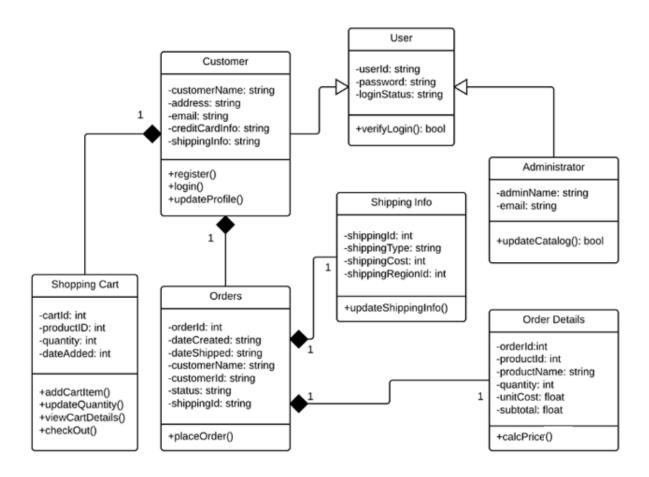


Fig 3.4: Class diagram of this project

3.8 Requirement of design

Table 2: Design requirement of this project

SL NO	Parameter	Admin page	User page
01	Registration	No	Yes
02	Password change	Yes	Yes
03	View	Yes	Yes
04	User service	Yes	No
05	Product update	yes	No
06	Log in page	Yes	Yes
07	Take action	Yes	No
08	Update info	Yes	No
09	Profile	Yes	Yes
10	Logout	Yes	Yes

CHAPTER 4 DESIGN SPECIFICATION

4.1 Project overview

Home page

The home page of this project is shown in Fig 4.1.

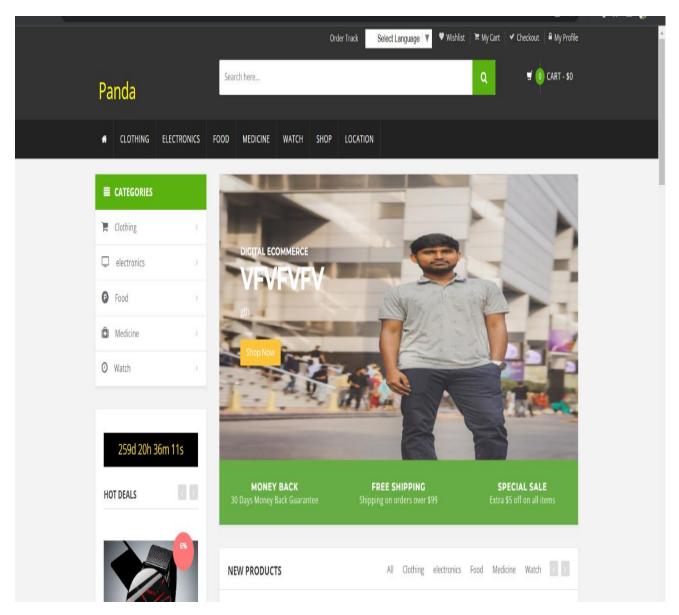


Fig 4.1: Home page

User can firstly view this page and seen the all products that are already visible in their home page.

Login/Registration page

The Login/Registration page of this project is shown in Fig 4.2.

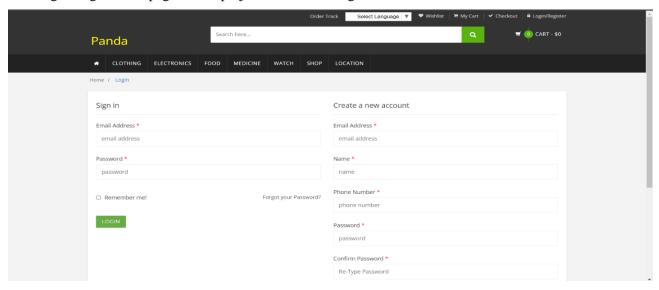


Fig 4.2: Login registration page

User profile page

The user profile page of this project is shown in Fig 4.3.

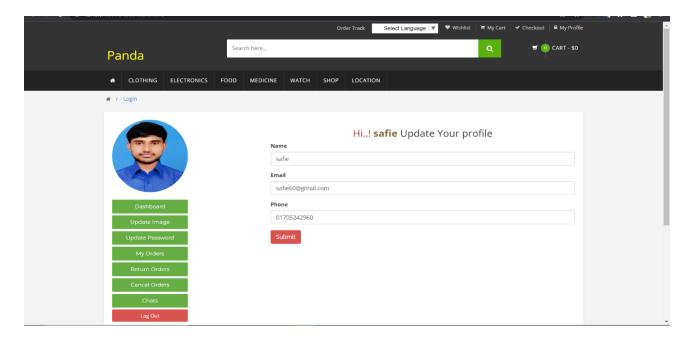


Fig 4.3: User profile page

This is the user profile page. User can change his profile picture at any time and he can see what he ordered, cancel, and return.

Footer page

The footer page of this project is shown in Fig 4.4.

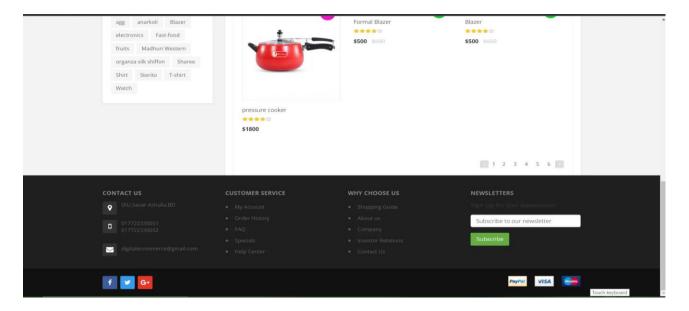


Fig 4.4: Footer page

Description page

The description page of this project is shown in Fig 4.5.

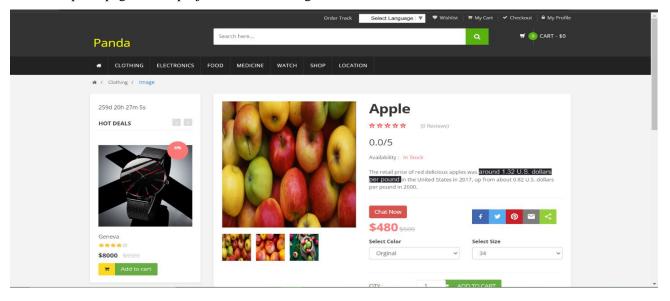


Fig 4.5: Description page

This is the footer page and the description page. User will see all the description of his product at the time of ordering.

Cart page and discount coupon

The Cart page and discount coupon page of this project is shown in Fig 4.6.

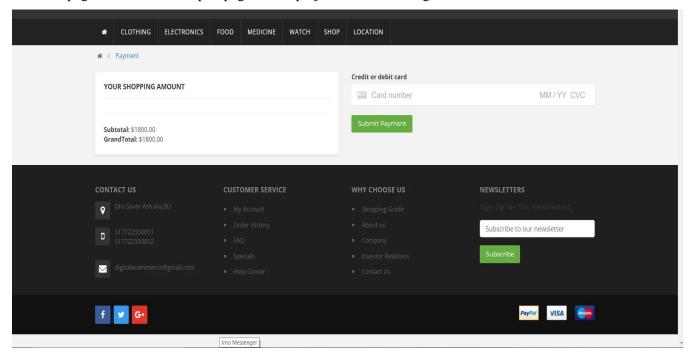


Fig 4.6: Cart page and discount coupon

Checkout page

The checkout page of this project is shown in Fig 4.7.

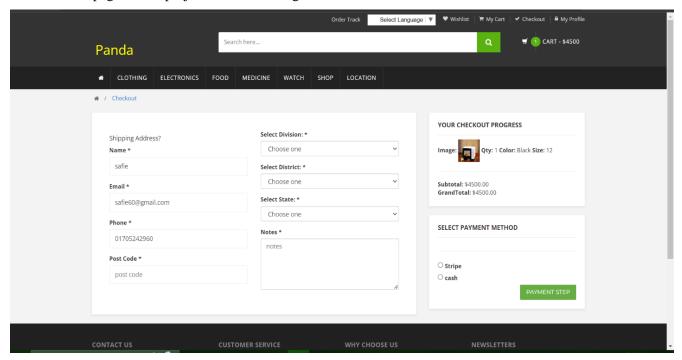


Fig 4.7: Checkout page

Wishlist page

The Wishlist page of this project is shown in Fig 4.8.

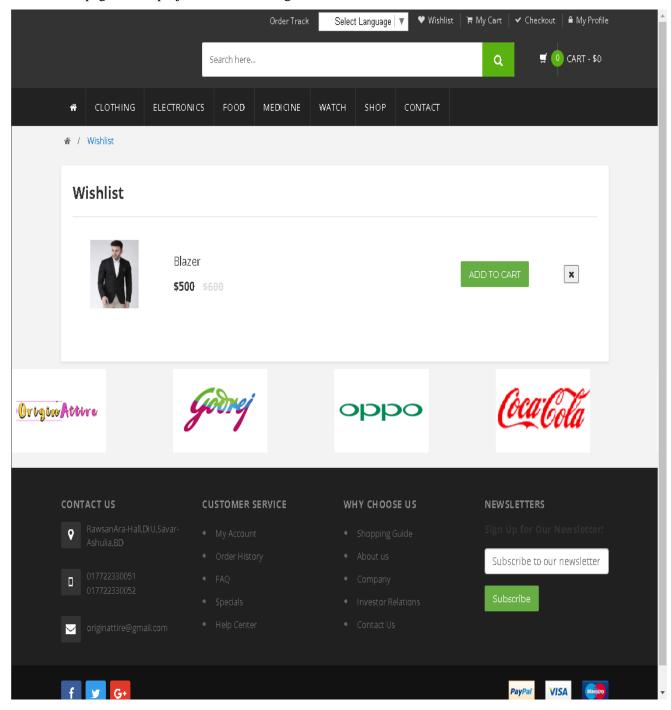


Fig 4.8: Wishlist page

User can save all his favorite products through Wishlist and he can easily order it later. They can any time add to cart from the Wishlist.

Payment method page

There are two type of payment: here are.

- Stripe
- Cash

The payment method page of this project is shown in Fig 4.9.

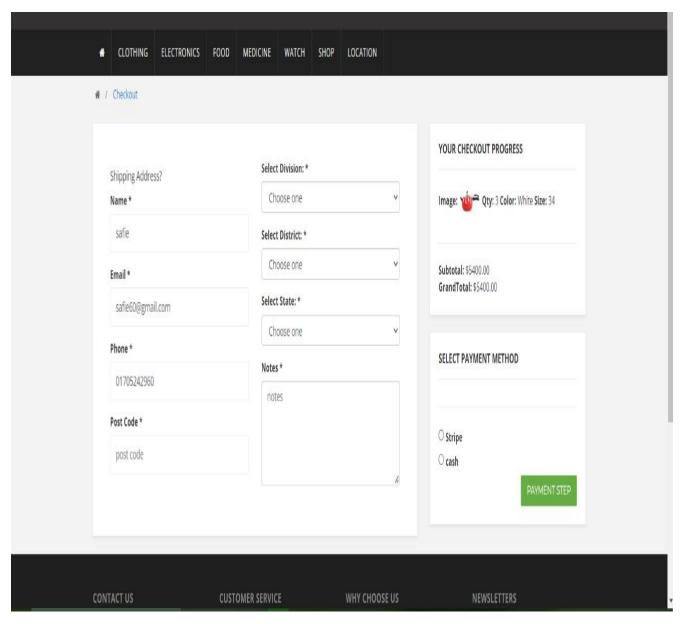


Fig 4.9: Payment method page

Here is a payment method page and all users can make payments very easily.

User order page

The user order page of this project is shown in Fig 4.10.

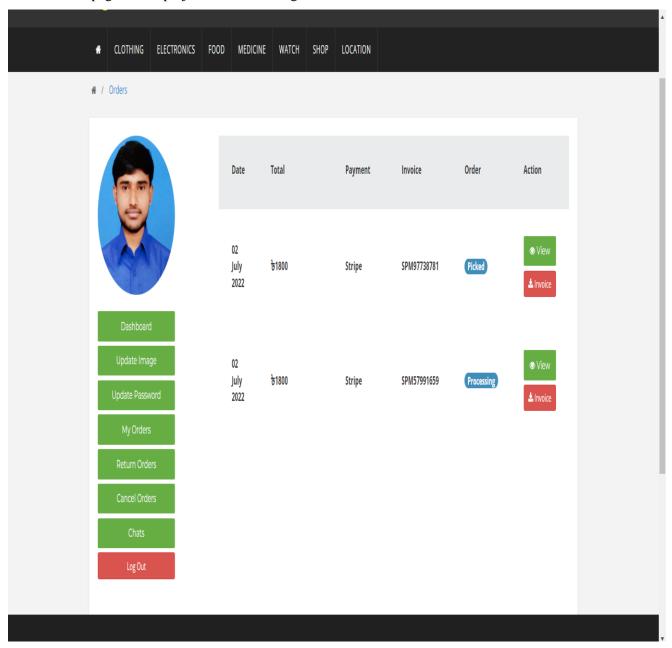


Fig 4.10: User order page

User can see any time his ordered all product and he will see the details of all the products he has ordered.

Product model

The product model page of this project is shown in Fig 4.11.

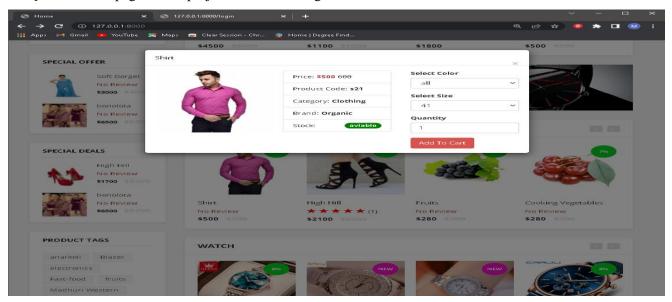


Fig 4.11: Product model

Dynamic chat

The dynamic chat page of this project is shown in Fig 4.12.

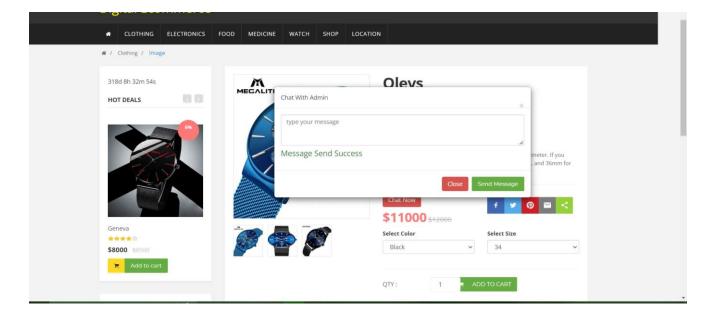


Fig 4.12: Dynamic chat

Here is a product model and dynamic chat. Through the product model, the user can provide all information such as product code, category, brand, color, size. And user can chat admin.

Mini cart

The mini cart page of this project is shown in Fig 4.13.

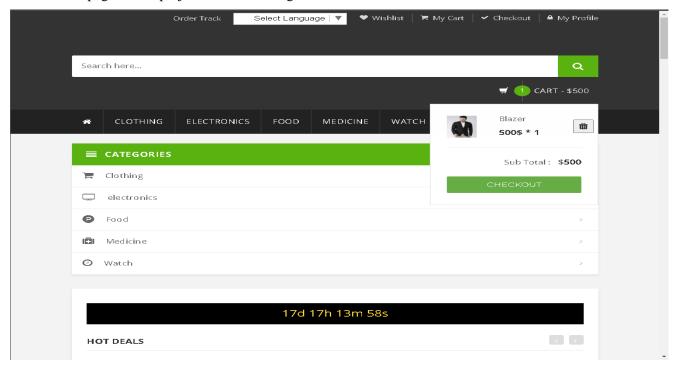


Fig 4.13: Mini cart page

Admin dashboard

The admin dashboard page of this project is shown in Fig 4.14.

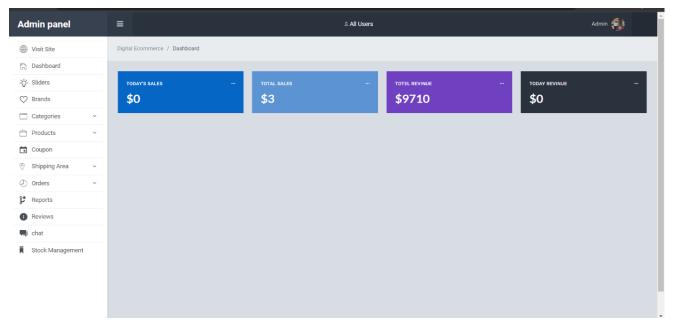


Fig 4.14: Admin dashboard

Here is a mini cart and admin dashboard. Here all user's purchase information can be seen.

Slider

The slider page of this project is shown in Fig 4.15.

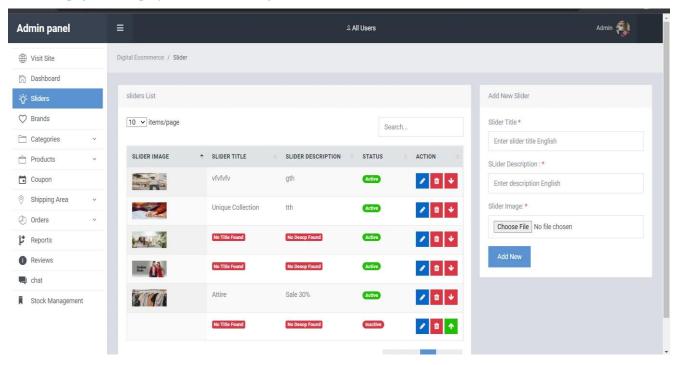


Fig 4.15: Slider page

Brand

The brand page of this project is shown in Fig 4.16.

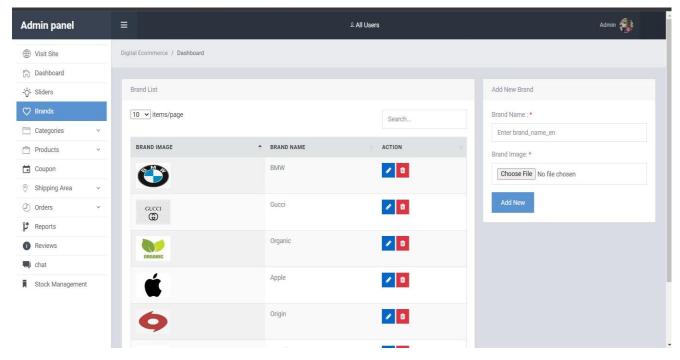


Fig 4.16: Brand page

Admin coupon

The admin coupon page of this project is shown in Fig 4.17.

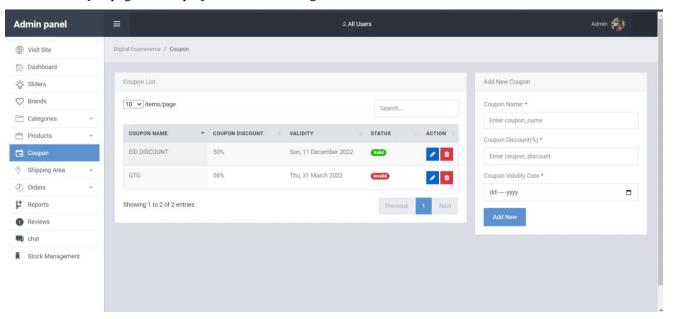


Fig 4.17: Admin coupon page

Location

The location page of this project is shown in Fig 4.18.

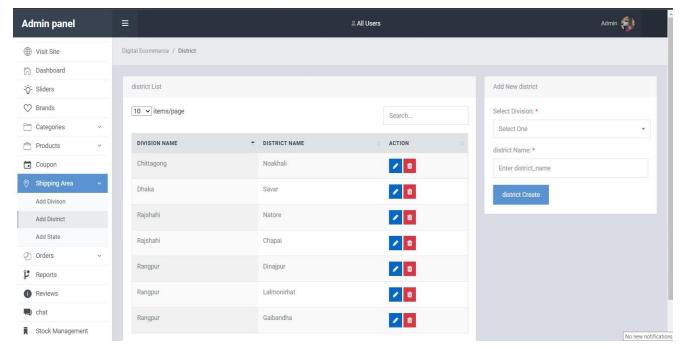


Fig 4.18: location page

Here is a admin coupon and location. Admin coupon is how much percent discount is being given.

Through location, the user can understand where his product is.

Report

The report page of this project is shown in Fig 4.19.

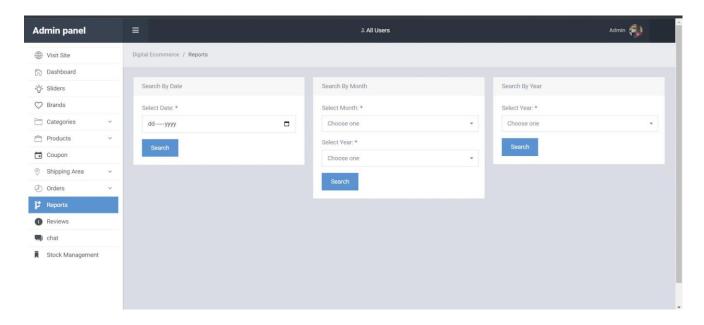


Fig 4.19: Report page

Categories

The categories page of this project is shown in Fig 4.20.

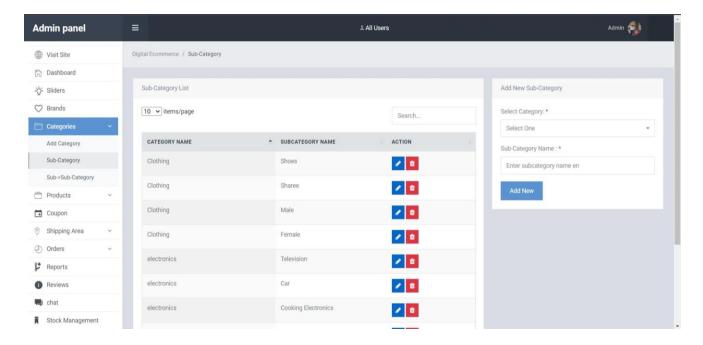


Fig 4.20: Categories page

Order track

The order track page of this project is shown in Fig 4.21.

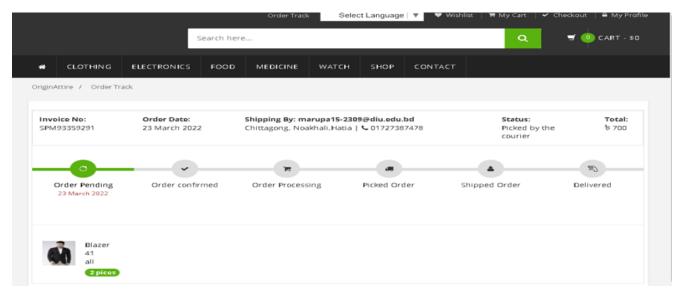


Fig 4.21: Order track page

4.1.1 Unique features

There are some unique features which I have already add my project there are:

- Multilanguage system.
- Time countdown policy.
- Payment method system using stripe and cash.
- Live chatting system.
- User/ admin personal profile updating.

Multi-language adding

Through multi-language user can visit our website by selecting the preferred language. The multi-language adding page of this project is shown in Fig 4.22.



Fig 4.22: multi-language of this project

Time countdown

Through the time count down, the user can see how long the discounted products will be available. The time countdown page of this project is shown in Fig 4.23.



Fig 4.23: Time countdown of this project

4.2 HTML5

HTML5 stands for Hyper Text Markup Language and stands for HTML. HTML serves as the foundation for all websites. I use Html for code structure design and their well decorum. It's a common part for all websites its needed badly. HTML5 is a new version of HTML and I followed w3 school documentation [4].

4.3 CSS

CSS is stands for Cascading Style Sheets [5]. The styles for web pages were defined using CSS.

- CSS for decoration
- CSS for design
- CSS use for style

4.4 Bootstrap

Bootstrap is a framework for creating web pages that makes them easier and faster to create [6]. It provides the design templates for forms, buttons, tables, navigation, images and more in HTML and CSS.

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Database table for the different purpose

Data is the important for e-commerce. Name of database uses in this site:

- Admin.
- Category.
- Customer.
- Manufacturer.
- Order.
- Order details.
- Payment.
- Product.
- Temporary cart.
- Shipping.
- User profile and so on.

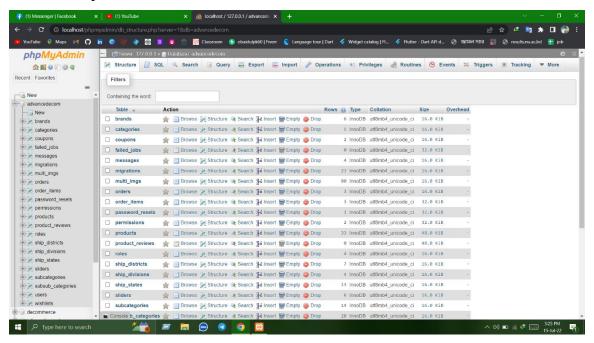


Fig 5.1: Database table

Admin database

The admin database page of this project is shown in Fig 5.2.

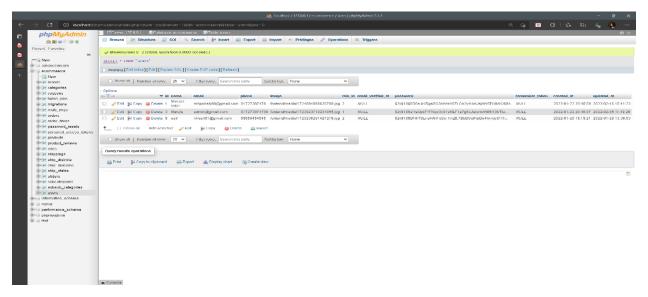


Fig 5.2: Admin database

Brand database

The brand database page of this project is shown in Fig 5.2.

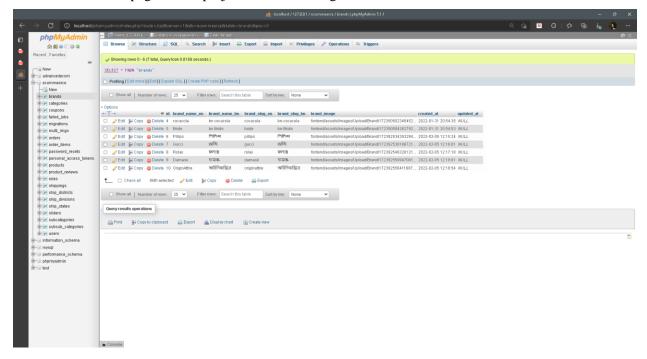


Fig 5.3: Brand database

Categories database

The categories database page of this project is shown in Fig 5.4.

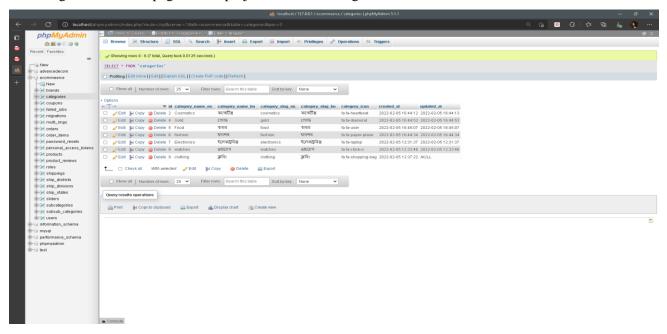


Fig 5.4: Categories database

Shipping database

The shipping database page of this project is shown in Fig 5.5.

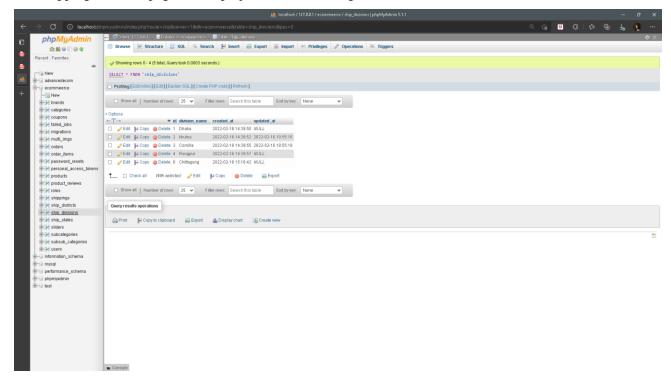


Fig 5.5: Shipping database

All table migrations database

The table migrations database page of this project is shown in Fig 5.6.

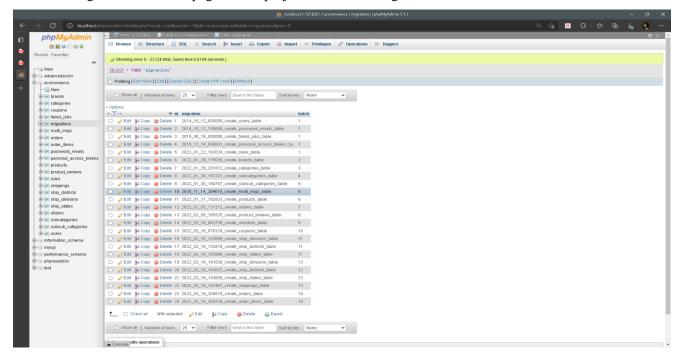


Fig 5.6: All table migrations database

5.2 Testing implementation

Testing is most important for bugging and checking the errors.

Table 3: Test case of sign-in of this project

Test case-01	Checking the signin/login
Test input	User data
Short description	Handles the sign in feature
Expected outcomes	Authenticated login properly
Tested on	19-06-2022
Result	passed

Table 4: Test case of registration of this project

Test case-02	Registration
Test input	Without registration
Result	Passed
Expected outcome	Not allow checkout
Actual output	Registration now

5.3 Test result of this project

These results are below:

- Easy to handle.
- Security level is fine.
- User friendly.
- Customer high ranking site.

CHAPTER 6

IMPACT ON SOCIETY AND ENVIRONMENT

6.1 Impact on society

This e-commerce is well known or this type of website are really famous for the world. It's really can affect to us, our nature as well as our economically and our environmentally. The e-commerce can be help to the general people who are the very busiest in the world for their jobs and their circumstances work.

6.2 Problems

- It can only use the Bangladeshi people because we are unable to deliver the order in internationally.
- It's can be made for high-speed internet connections.

6.3 Obstacles and problems

- Time was too short.
- For me, as a new developer it was a tough for me.
- Learning and updating new platforms uses.

CHAPTER 7

CONCLUSION AND FUTURE SCOPE

7.1 Discussion and conclusion

Finally, we have completed it using my own experiences and also our proper techniques that we have learned from google and others internet way that are really helpful for us and our systems as well as our websites.

7.2 Scope for further developments

In future we will do this below task:

- Move to android apps.
- Develop A update time keeper.
- Update their delivery systems in internationally.
- Add the products video as well as proper description.
- Auto geographical location adds.

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Test

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