MULTI-VENDOR E-COMMERCE WEB APPLICATION

 \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 titled "MULTI-VENDOR E-COMMERCE WEB APLICATION", submitted by Md Maruf Ibna Nasim Nishan, ID No: 183-15-2328 and Tusar Kumar Sarder, ID No: 183-15-2327 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 13-Sep-2022.

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DECLARATION

We hereby declare that, this project has been done by us under the supervision of Mohammad Monirul Islam, Sr. Lecturer - Computer Science, 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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We would like to express our heartiest gratitude to Professor Dr. Touhid Bhuiyan Head, Department of CSE, for his kind help to finish our project and also to other faculty member and the staff of CSE department of Daffodil International University.

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

ABSTRACT

Many small sellers have limited inventory, making it too expensive for them to maintain their own online stores. These merchants would be happy to sell on my marketplace. Because they don't invest in the inventory on my site, expanding supply is simpler, faster, and with lower financial risk. Due to the ability to accept buyers and sellers from around the globe, marketplace business models increase the likelihood of beginning international sales, and without taking any risks or conducting a thorough demand analysis, begin selling new products and product categories by simply welcoming new sellers. Multi-vendor marketplaces create new buyer-seller relationships and it becomes their trusted and convenient means of communication. Rich product selection and new experience will attract more customers to my E-Commerce website, which will attract more vendors. Buyers perceive large marketplaces as more secure than smaller online stores and are more likely to pay. Sellers handle their products themselves and less management effort and ship their products themselves. However, Admin has to learn a little bit about vendor management. A customer can easily buy a product, create a wish list and save the product for later purchase. He can review and rate a product if he has already purchased it. Product recommendation is very important for e-commerce. That's why we give great importance to product recommendations on our e-commerce site. So that a customer does not feel bored while searching for the product. Also, we have added live chat for customers to contact with admin. Our commerce site is multilingual, so a customer can use the site in his own language

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This project is all about an online shopping platform where admin sellers and customers everyone will benefit in different ways. A customer can buy products from different sellers at a time. Customers can buy the product from sellers who have good product reviews, ratings, and low prices. It is very important to ensure that the person who is giving reviews and ratings is authenticated person. Because if the reviews and ratings are not genuine then the customers will suffer a lot. We insure that customers can only review and rate a product if he has already purchased it. We also have search, coupons, email invoices, product recommendations, and live chat in our application. The seller can easily register for a store and add show edit update and delete products here is a dashboard for each vendor. Vendors can easily manage his products and orders from the seller dashboard. Rich product selection and new experiences will attract more customers. Buyers perceive large marketplaces as more secure than smaller online stores and are more likely to pay. Our Marketplace business models increase the chances to start global sales as we can welcome buyers and sellers from all over the world. Since there is no investment required, small businessmen can easily run their online businesses from here. Admin will just get a small amount from the profit of each order. Admin can manage all sellers, products, categories, sub-categories, product attributes, sells, sliders, settings, and orders from the admin dashboard. Admin can create and can manage coupons from the dashboard to encourage customers to buy products from our e-commerce website. Our whole project is responsive so it can be used in any device.

1.2 Motivation

There are many small sellers who have little inventory and hence it's too expensive for them to run their own sites. Such vendors will be glad to sell on my marketplace. Our project will help those sellers who have no idea about marketing and how to present a product to the world. We will make product delivery much easier for them. By doing this, small businessmen can expand their business much faster. Since there will be many types of sellers here, many types of products will be available together, so customers will easily get all types of products in one place.

1.3 Objective

- Make a responsive e-commerce website so it can be used on any device.
- ➤ Increasing the number of loyal customers and Vendors because buyers perceive large marketplaces as more secure than smaller online stores and are more likely to pay.
- Smart product recommendations
- Developing business relations so that we can expand our business much faster.
- Making product delivery much easier and faster
- Easy payment system and cash-on-delivery
- > Time-saving both for customer and seller
- Easy return policy
- Customer support
- ➤ Non-stop service 24/7

1.4 Expected Outcome

- 1. Establishing business ties to help us grow our company more quickly. Improving the speed and ease of product delivery.
- 2. Cash-on-delivery and an easy payment system
- 3. Time-saving for both the buyer and the seller
- 4. Make responsive e-commerce website so that it can be accessed from any platform.

5. Increasing the number of sincere customers and vendors because customers are more likely to pay on larger marketplaces than on smaller online shops.

1.5 Project Management and Finance

Each vendor has a dashboard where they can quickly register for a shop, add items, show them, edit them, and delete them. From the seller dashboard, vendors can quickly manage their items and orders. Admin will only receive a little portion of each order's earnings. From the admin dashboard, admin may manage every seller, item, category, subcategory, attribute, sale, slider, coupon, setting, and order. Both cash-on-delivery and a quick online payment system is available.

1.6 Report Layout

We describe the complete implementation of our project "MULTI-VENDOR E-COMMERCE WEB APPLICATION" in this project report.

Chapter 1: The project's introduction, inspiration, goal, and expected outcomes have all been covered very first.

Chapter 2: This chapter shows background process

Chapter 3: This chapter shows Use case modeling, flow chart diagram.

Chapter 4: We can know about Front-end design, back-end design, implementation requirement.

Chapter 5: Database implementation, Front-end design, test were described.

Chapter 6: This chapter covered Sustainability and the Social Impact on Society.

Chapter 7: The scope of our project and its prospects for further development are discussed in the last chapter.

CHAPTER 2

BACKGROUND

2.1 Preliminaries/Terminologies

We use Laravel [1], which beats other web frameworks due to its powerful features and development tools that speed up the development of web applications. We have tried to make the entire project responsive so that it can be used on any device and is very user-friendly, which will help us get more customers.

2.2 Related Works

- Daraz.com
- ➤ Bikroy.com
- ➤ Alibaba.com
- > Amazon.com

2.3 Comparative Analysis

Most of the e-commerce platforms in our country are single vendors there is some popular multivendor e-commerce which we have mentioned in related works. Many e-commerce platforms use fake reviews and ratings to boost their sales but we ensure genuine reviews and ratings. Many e-commerce platforms don't ensure after-sales services but we do and we have live chat for that too.

2.4 Scope of the Problem

In our project, we have made an effort to integrate all necessary components for an e-commerce website. We place a lot of emphasis on real reviews and ratings, which are crucial. Product recommendations are another essential component of online buying thus, we have also addressed this issue. A consumer won't become bored while buying in this approach. Customers are encouraged to purchase products using online support, thus we have live chat available for that.

2.5 Challenges

- > Requirement collection and analysis
- Requirement
- > Front-end design
- Back-end design
- Product recommendation
- Ensure genuine review and rating

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

The following figure 3.1 shows the Business Process Model of our system.

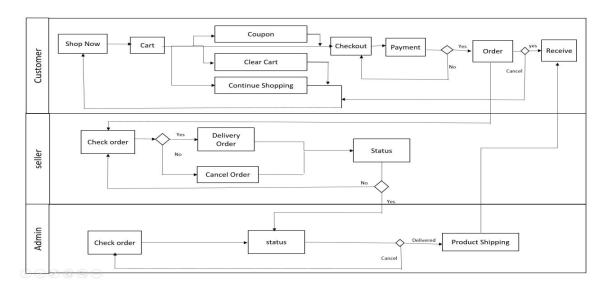


Figure 3.1: Business Process Model of our system

3.2 Requirement Collection and Analysis

Used Tools and Technology

- 1. Windows 10 Operating System
- 2. Visual Studio code for code editor
- 3. Php Version ^7.3|^8.0 [5]
- 4. Livewire ^2 it's a full-stack framework for Laravel [2]
- 5. Laravel 8 framework for backend [1]
- 6. XAMPP server software environment for testing MYSQL, PHP
- 7. Composer, it is a tool for dependency management in PHP

- 8. Bootstrap ^4 [3], HTM, CSS, JavaScript JQuery[4] for front-end
- 9. Mailtrap for email testing [7]

3.3 Use Case Modeling and Description

The following figure 3.2 shows the Use Case Diagram of our system.

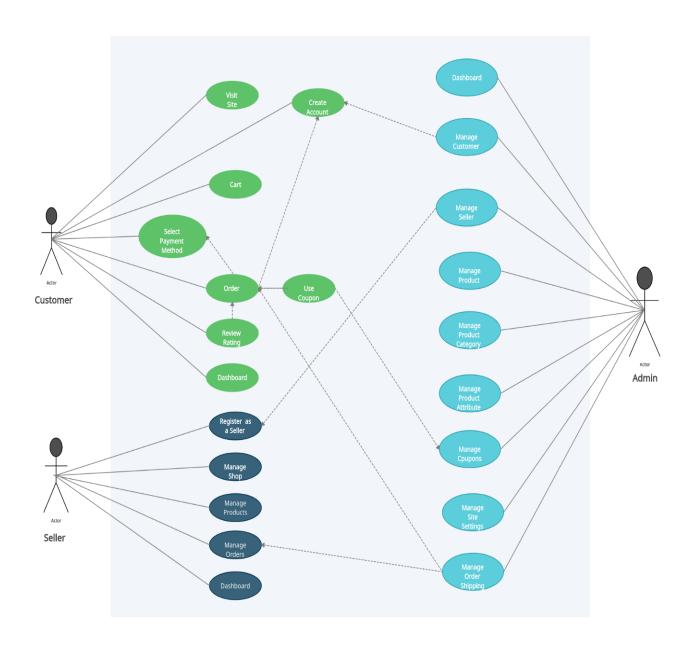


Figure 3.2: Use Case Diagram of our system

3.4 Flow Chart Diagram

The following figure 3.3 shows the Flow Chart Diagram of our system.

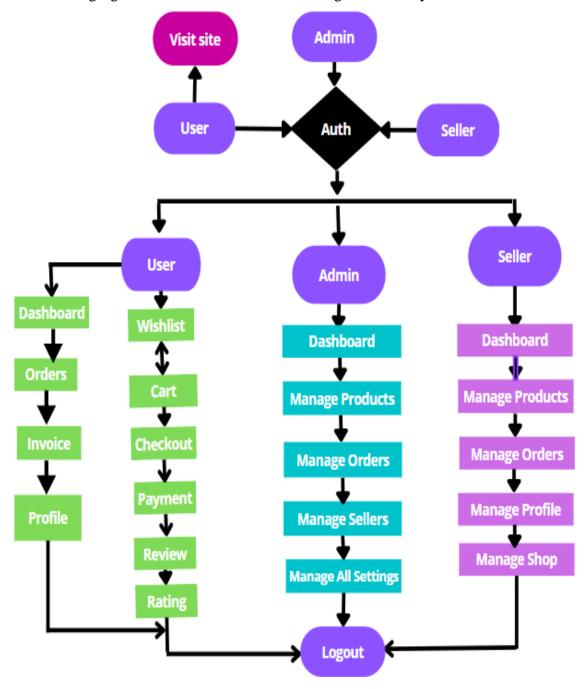


Figure 3.3: Flow Chart Diagram of our system

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3.5 Logical Data Model

The following figure 3.4 shows the Logical Data Model of our system.

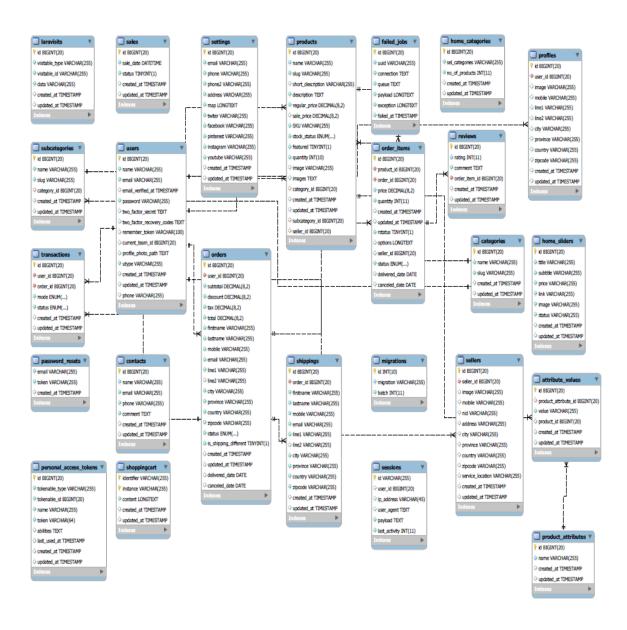


Figure 3.4: Logical Data Model of our system

3.6 Design Requirement

In this project, we have used Visual Studio code as our primary code editor. Visual Studio Code is a popular code editor these days. For databases, we used MySQL, it's an open-source relational database management system. For the front-end, we use the bootstrap framework [3]. It helps us to create a responsive design. For the backend of our project, we used the Laravel framework [1], which is based on PHP [5] and also, we use Livewire [2], it's a full-stack framework for Laravel that helps us to build dynamic interfaces simply, without leaving the comfort of Laravel. It's a library that makes it simple to build modern, reactive, dynamic interfaces using Laravel Blade as templating language. We have used a variety of Laravel packages that have helped us to create various functionalities in our project. Also, we used JavaScript to perform some tasks.

CHAPTER 4

DESIGN SPECIFICATION

4.1 Front-End Design

Front-end is very important for this type of shopping platform, to attract more customers. So, we have given great importance to the front-end. We have tried to make the entire project responsive so that our project can be used on any device so that we can get more customers. We used the bootstrap framework [3]. It's a very popular front-end framework used to create modern websites and web applications. It's a free front-end framework, with the purpose to make web development faster and easier. It also includes HTML and CSS-based design templates for forms, typography, buttons, navigation, tables, modals, image carousels, and many other components along with other optional JavaScript plugins.

4.2 Back-End Design

We used the Laravel framework [1] for the backend programming language in our project. Laravel is a free and open-source very popular PHP[5] web framework[1]. From small projects to very large projects can be done with the Laravel framework [1]. Laravel scores better than other web frameworks due to its powerful features and development tools that facilitate fast web application development. Laravel [1] helps website developers simplify the development process with clean, reusable code that follows the MVC architecture. Since it is a very mature web framework and has a large community of developers, So the solution to any problem can be found very easily that's why we used this framework.

4.3 Interaction Design and User Experience (UX)

Login Page

The following figure 4.1 shows Login Page

There is three types of user in our project Customer, Seller and Admin.

Here customer admin and sellers can login to our site with email and password.

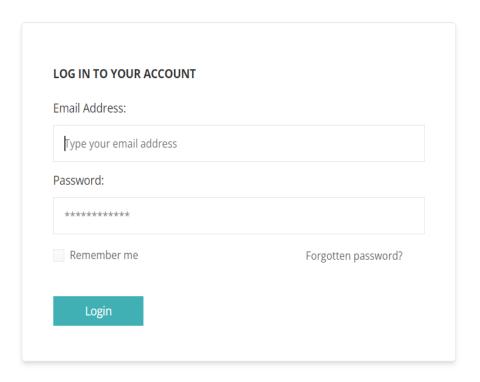


Figure 4.1: Login Page of our system

Registration Page

The following figure 4.2 shows Registration Page

Here users and sellers can register in our site with name, email, password, phone and user-type.

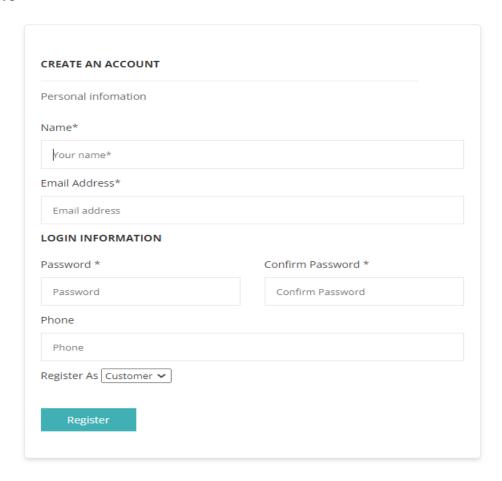


Figure 4.2: Registration Page of our system

Home Page

The following figure 4.3 shows Home Page

Here products category, latest product, sale product and popular product is available.

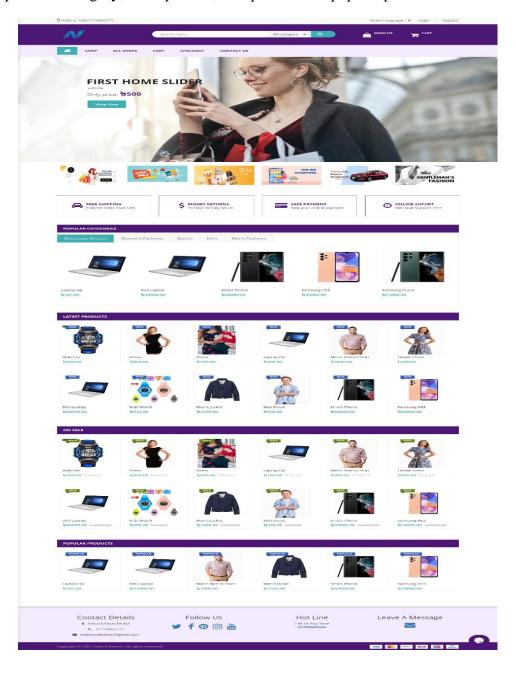


Figure 4.3: Home Page of our system

Shop Page

The following figure 4.4 shows Shop Page

Here products category, sub-category, sale products, products, price-range picker, filter with newness and price are available. This page is infinity scroll enable

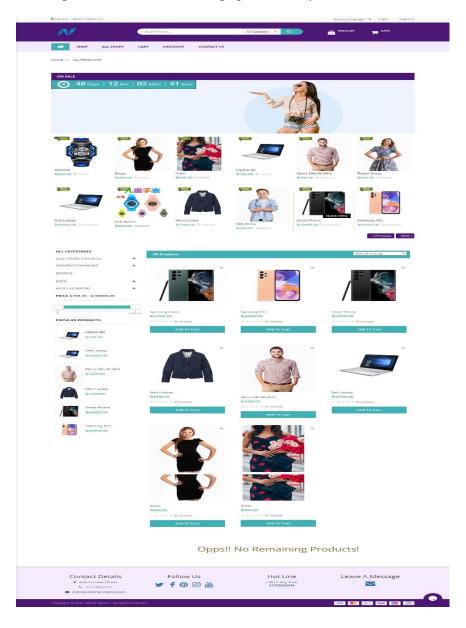


Figure 4.4: Shop Page of our system

All Seller Shop Page

The following figure 4.5 shows All Seller Shop Page

Here all seller shop is available. We can see here how many products available in a shop

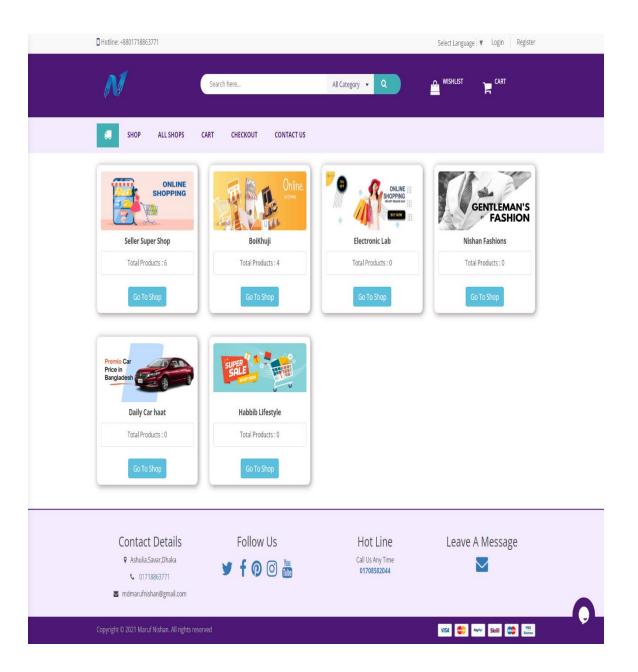


Figure 4.5: All Seller Shop Page of our system

Seller Shop Page

The following figure 4.6 shows Seller Shop Page

This is seller shop for individual seller. We can see here all products available in this shop

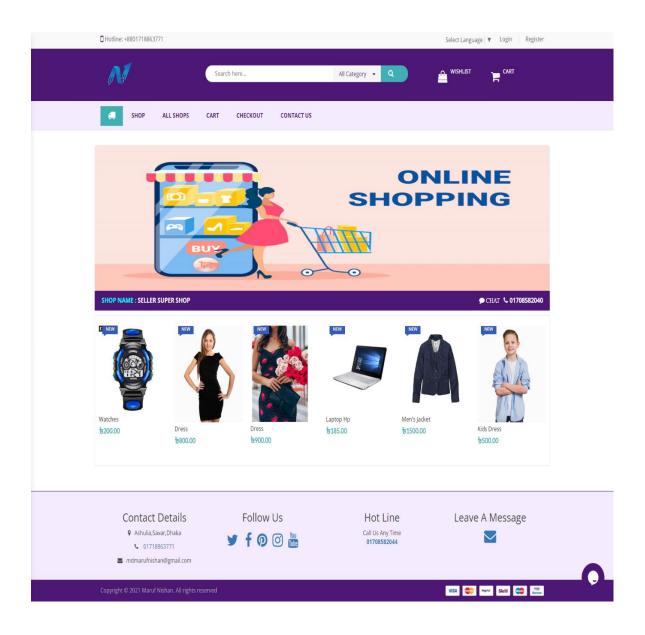


Figure 4.6: Seller Shop Page of our system

Product Details Page

The following figure 4.7 shows product details page

Here products image gallery, product attributes, popular products, related products, product description, product reviews, ratings, stock status all are available

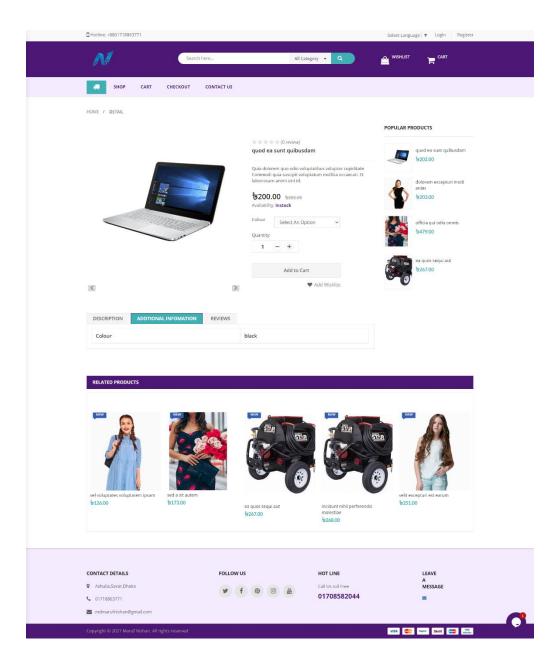


Figure 4.7: Product Details Page of our system

User Dashboard

The following figure 4.8 shows user dashboard

User can see order details like pending orders, cancel orders, can manage profile from dashboard

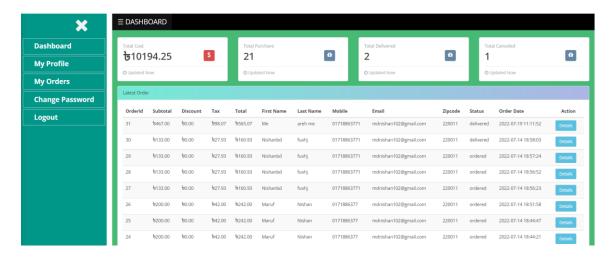


Figure 4.8: User Dashboard

User Profile

The following figure 4.9 shows user profile

User can see and update profile info from here

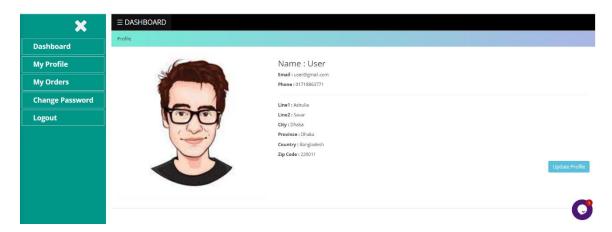


Figure 4.9: User Profile

Cart Page

The following figure 4.10 shows cart page

From here all cart products are available with Quantity and Price. Quantity can be increase and decreased from here also we can save any items for later purchase and can go for checkout from here with coupon.

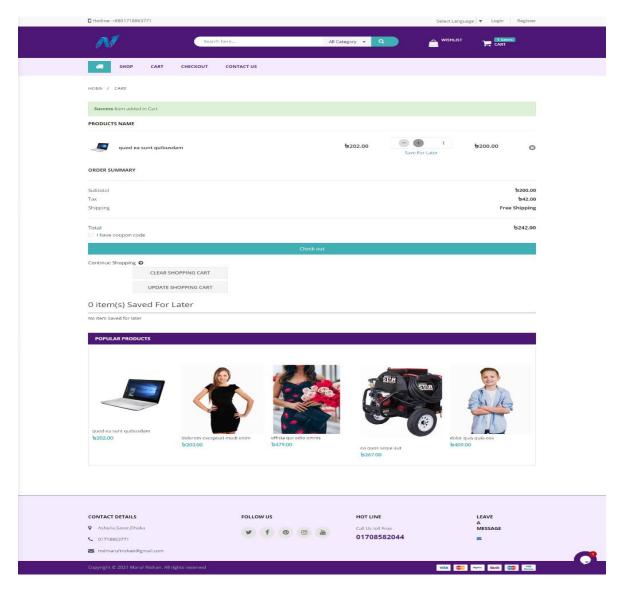


Figure 4.10: Cart Page of our system

Checkout Page

The following figure 4.11 shows checkout page

From here customer can checkout with cash on delivery or card Payment

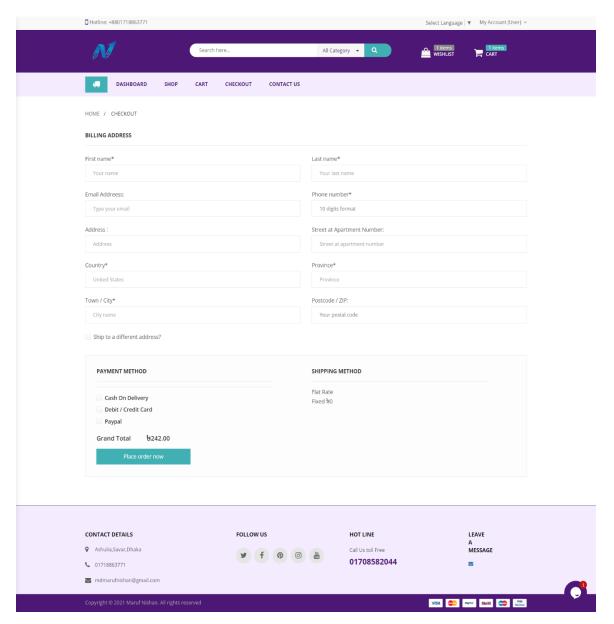


Figure 4.11: Checkout Page of our system

Checkout with Ship to Different Page

The following figure 4.12 shows checkout page

From here customer can check out with cash on delivery or card Payment And can Ship in Different Address

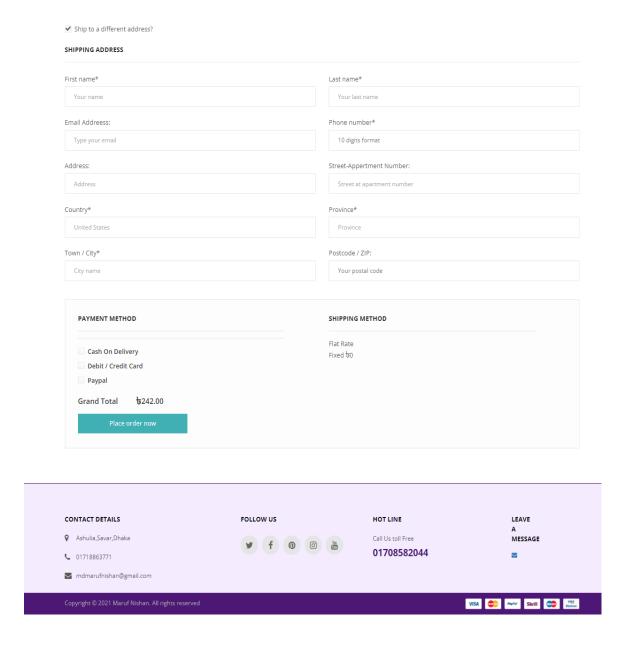


Figure 4.12: Checkout with Ship to Different Page of our system

Coupon

The following figure 4.13 shows Apply Coupon in checkout page

From here customer can check out with coupon which will reduced from total amount



Figure 4.13: Checkout with Coupon

Reviews and Ratings

The following figure 4.14 shows reviews and ratings of product

From product details page customer can check all reviews and ratings

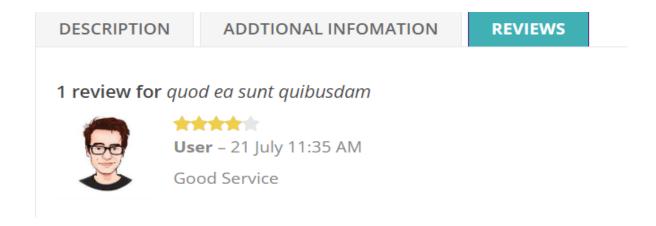


Figure 4.14: Reviews and Ratings

Product Attribute

The following figure 4.15 shows product attributes, customer can easily select an attribute from product details page

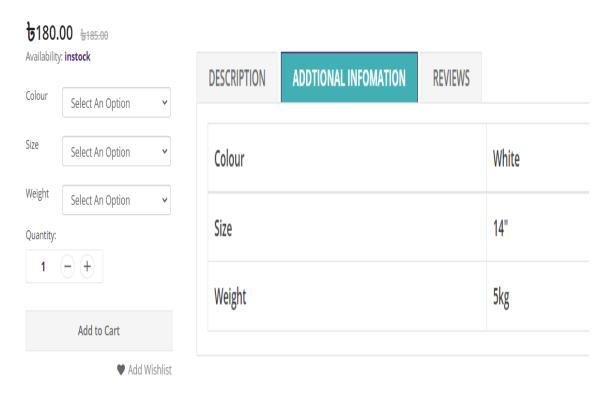


Figure 4.15: Product Attributes

Related Products

The following figure 4.16 shows related products, we are trying to suggest related products which are in same category in product details page

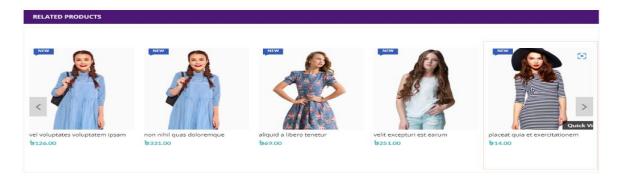


Figure 4.16: Related Products

Multi Language

The following figure 4.17 shows that our project is multilingual. We can use it in any language

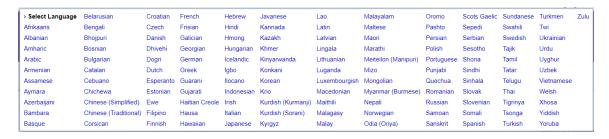


Figure 4.17: Multi Language

Popular Products

The following figure 4.18 shows Popular Product, which is a very important feature of our project we are recommending popular products based on how many times user visits a product

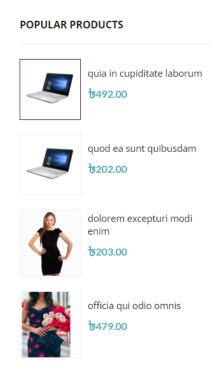


Figure 4.18: Popular Products

Home Page Products Category

The following figure 4.19 shows home page products category, customers can find random products using category

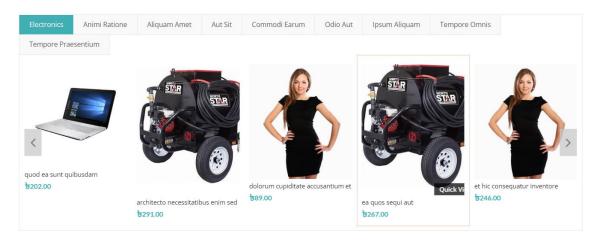


Figure 4.19: Home Page Products Category

Shop Page Products Category and Sub Category

The following figure 4.20 shows shop page products category with sub category



Figure 4.20: Sale Page Products Category and Sub Category

Seller Dashboard

The following figure 4.21 shows seller dashboard

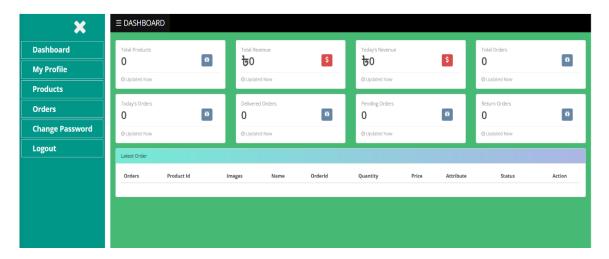


Figure 4.21: Seller Dashboard

Seller Profile

The following figure 4.22 shows seller profile



Figure 4.22: Seller Profile

Seller Products Page

The following figure 4.23 shows seller products page from here seller can manage all of his products, can add, update and delete products

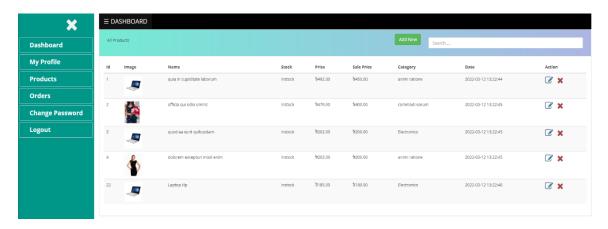


Figure 4.23: Seller Products

Seller Update Products Page

The following figure 4.24 shows seller can update products

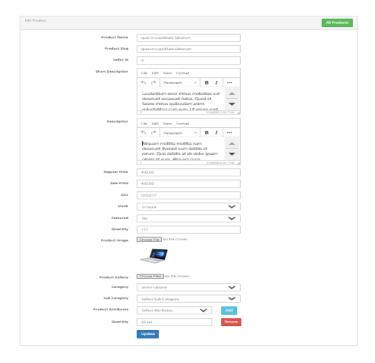


Figure 4.24: Seller Update Products

Seller Order Page

The following figure 4.25 shows seller order page, from here seller can update order status, can search order and can download orders pdf

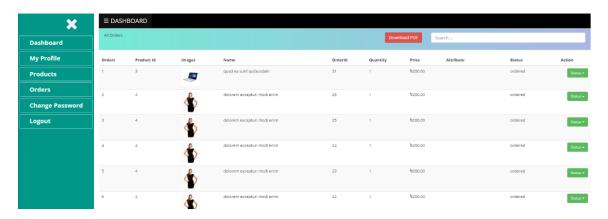


Figure 4.25: Seller Order Page

Seller Order pdf

The following figure 4.26shows seller orders pdf

Nishanbd.com Date :21-07-22

Seller All Orders



Figure 4.26: Seller Orders pdf

Admin Dashboard

The following figure 4.27 shows admin dashboard from here admin can control entire system, can manage seller, products, categories, orders and all settings

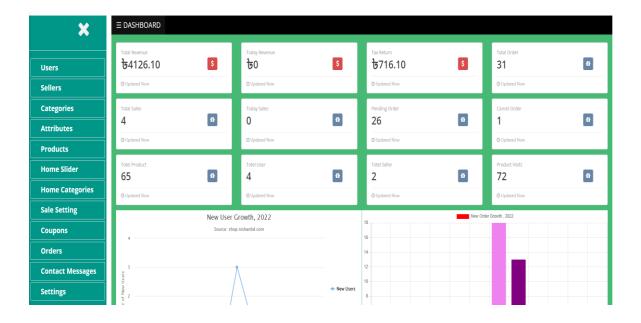


Figure 4.27: Admin Dashboard

High-Charts

The following figure 4.28 shows high-charts of user growth and orders

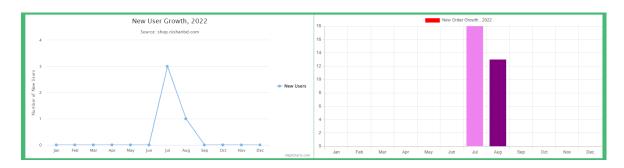


Figure 4.28: High-Charts of User and Orders

Admin Users Page

The following figure 4.29 shows users page where admin can manage all users

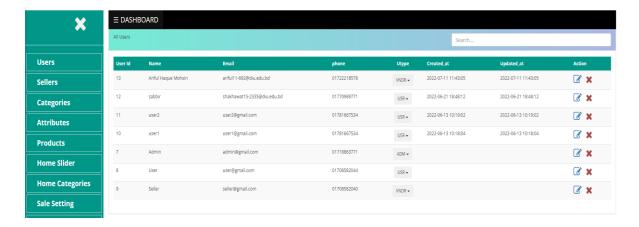


Figure 4.29: Admin Users Page

Admin Sellers Page

The following figure 4.30 shows sellers page where admin can manage all sellers, can search, update and delete seller information

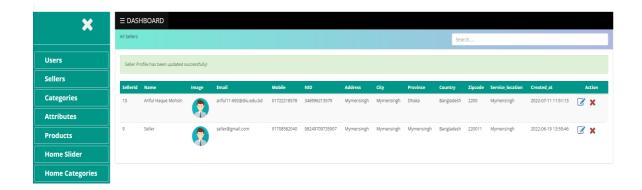


Figure 4.30: Admin Seller Page

Admin Category Page

The following figure 4.31 shows admin category page where admin can add category, sub category and can also update and delete

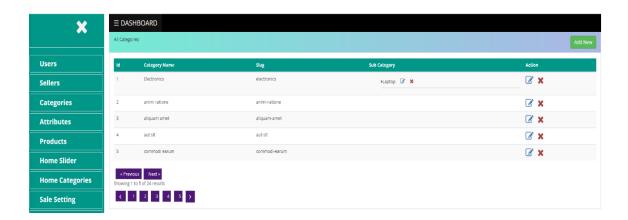


Figure 4.31: Admin Category Page

Admin Product Attributes Page

The following figure 4.32 shows product attribute page where admin can manage all attribute of products can add new attributes

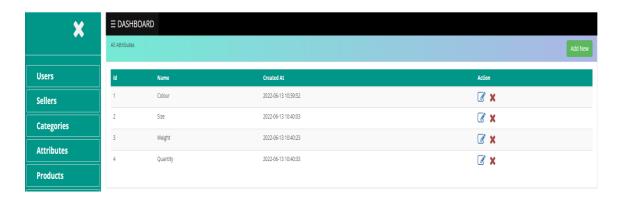


Figure 4.32: Admin Products Attributes Page

Admin Products Page

The following figure 4.33 shows admin products page. Where admin can manage all sellers' products can add new products can update and delete any products

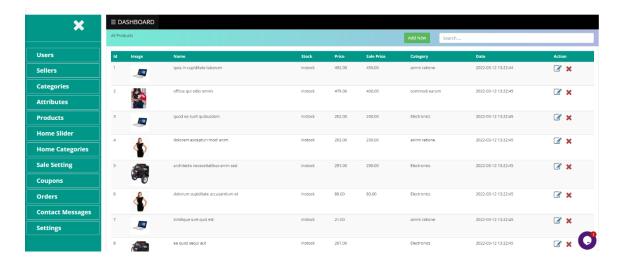


Figure 4.33: Admin Products Page

Admin Add Products Page

The following figure 4.34 shows admin add products page.

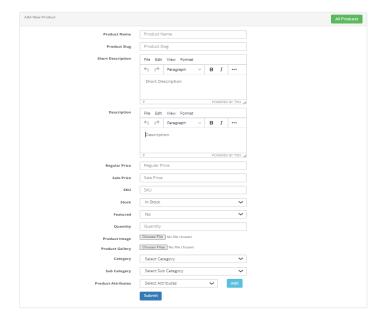


Figure 4.34: Admin Add Products Page

Admin Home Slider Page

The following figure 4.35 shows admin home slider page. Where admin can add home slider image link and title, also can update and delete



Figure 4.35: Admin Home Slider Page

Admin Home Category Page

The following figure 4.36 shows admin home category page. Where admin can control home categories

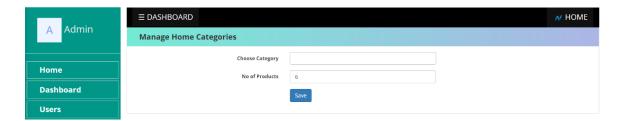


Figure 4.36: Admin Home Categories Page

Admin Sale Settings Page

The following figure 4.37 shows admin sales settings page. Where admin can control sale settings

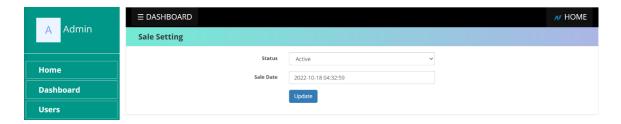


Figure 4.37: Admin Sale Settings Page

Admin Coupons Page

The following figure 4.38 shows admin coupon page. Where admin can control coupon settings



Figure 4.38: Admin Coupons Page

Admin Orders Page

The following figure 4.39 shows Admin order page, from here seller can update order status, can search order and can download orders pdf

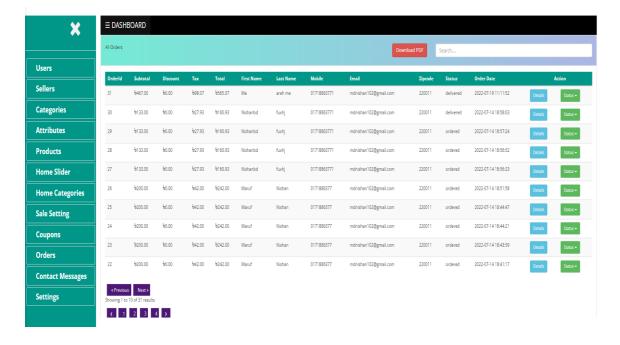


Figure 4.39 Admin Orders Page

Admin Order Details Page

The following figure 4.40 shows admin order details page

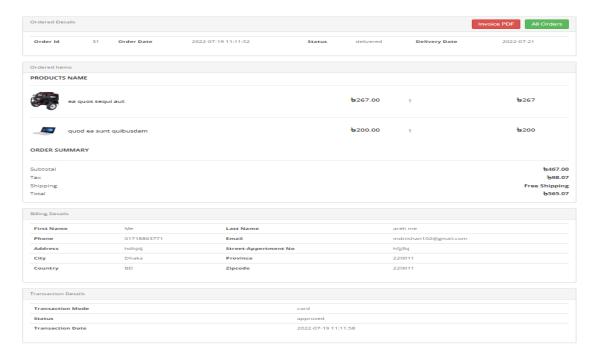


Figure 4.40: Admin Order Details Page

Customer Order Confirmation Mail

The following figure 4.41 shows order confirmation mail



Figure 4.41: Order Confirmation Mail

Contact Us Page

The following figure 4.42 shows Contact us page, where customer can send cements and complains

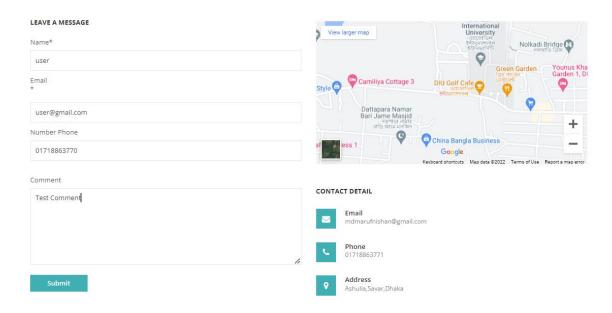


Figure 4.42: Contact Us Page

Admin Contact Us Page

The following figure 4.43 shows admin contact us page, where admin can see all comments messages



Figure 4.43: Admin Contact Us Page

Admin Settings Page

The following figure 4.44 shows admin settings page where admin can set entire system settings

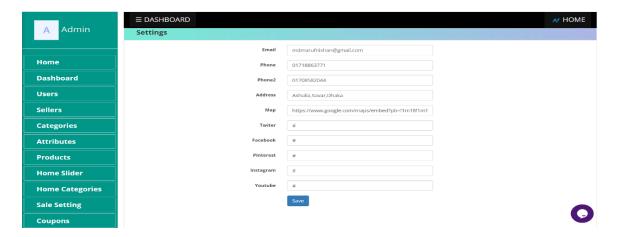


Figure 4.44: Admin Settings Page

Live Chat

The following figure 4.45 shows that user can chat with admin

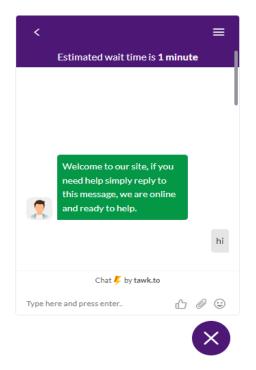


Figure 4.45: Live Chat

Mobile View

The following figure 4.46 shows mobile view of our project



Figure 4.46: Mobile View

4.4 Implementation Requirements

Used Packages

- 1. Laravel Jetstream package for Authentication ^2.3
- 2. Shopping Cart package hardevine/shoppingcart ^3.0
- 3. For Pdf Download barryvdh/laravel-dompdf ^1.0
- 4. For Payment Gateway cartalyst/stripe-laravel ^13.0
- 5. For Tracking user activity coderflexx/laravisit ^1.0
- 6. Laravel Tinker laravel/tinker ^2.5
- 7. Laravel sanctum laravel/sanctum ^2.6
- 8. Laravel-Mix laravel-mix ^6.0.6

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Implementation of Database

For databases, we used MySQL, it's an open-source relational database management system. It is used for a wide range of purposes, including data warehousing, e-commerce, and logging applications this is the most common use for MySQL[6] however, it is used for the purpose of a web database. MySQL[6] is a system that helps store and manage data efficiently. Also, we have used XAMPP, it is a software distribution that provides the Apache web server, With XAMPP, we can use phpMyAdmin to create & use our XAMPP MySQL[6] Database in minutes. XAMPP software is an open-source localhost server it provides a number of functionalities through the package of software it contains. XAMPP is simply a local host or server that is used to test websites before publishing them to a remote web server. The XAMPP server software on a local computer provides an appropriate environment for testing MYSQL[6], PHP[5] and Apache projects. This method might sometimes help us avoid issues on our live website.

5.2 Implementation of Font-end Design

For this type of shopping platform, the front-end is crucial to attracting more customers. Therefore, the front-end has been given a lot of importance. In an effort to increase our customer base, we have made every effort to make the project responsive, making it usable on any device. A framework called bootstrap [3] was employed. A lot of contemporary websites and web applications are made using this front-end framework. With the aim of accelerating and simplifying web development, it is a free front-end framework. In addition, it comes with additional optional JavaScript plugins and HTML and CSS-based design templates for forms, typography, buttons, navigation, tables, modals, image carousels, and many other elements.

5.3 Testing Implementation

Thorough e-commerce website testing is very essential. It assures that our customers are interacting with a bug-free website, which will enhance user experiences. E-commerce testing can be defined as a process of testing various elements such as design, specifications, functions, pages and features to check their purity and ensure that they do not harm the performance of the site in any way.

Unit Testing

We have done unit testing in our entire project. Unit testing is a software development process in which the smallest testable parts of an application, called units, are individually and independently verified to operate correctly. This testing procedure is performed by software developers and sometimes QA personnel during the development process.

Testing Objectives

- Preventing errors during shopping and digital transactions.
- Determining how well our e-commerce applications fulfill all requirements.
- * Evaluate whether the application complies with all of the required procedures.
- ❖ Analyzing the website performance, loading speed, how it handles huge traffic, etc.
- To enhance the efficiency of the site by decreasing all possible errors.

5.4 Test Results and Reports

The following figure 5.1 shows unit test result of our project

```
C:\Users\Maruf Nishan\Desktop\Defance\Laravel-E-Commerce>php artisan test
Warning: TTY mode is not supported on Windows platform.
  PASS Tests\Unit\ExampleTest
 example
  PASS Tests\Feature\ApiTokenPermissionsTest
 2 api token permissions can be updated
  PASS Tests\Feature\BrowserSessionsTest
  other browser sessions can be logged out
  PASS Tests\Feature\CreateApiTokenTest
 api tokens can be created
  PASS Tests\Feature\DeleteAccountTest
  user accounts can be deleted
 correct password must be provided before account can be deleted
  PASS Tests\Feature\DeleteApiTokenTest
 api tokens can be deleted
  PASS Tests\Feature\EmailVerificationTest
 email verification screen can be rendered
  email can be verified
  email can not verified with invalid hash
        Tests\Feature\PasswordConfirmationTest
 confirm password screen can be rendered
 password can be confirmed
 password is not confirmed with invalid password
      S Tests\Feature\ProfileInformationTest
 current profile information is available
 profile information can be updated
      Tests\Feature\TwoFactorAuthenticationSettingsTest
 two factor authentication can be enabled
 Precovery codes can be regenerated
  two factor authentication can be disabled
  PASS Tests\Feature\UpdatePasswordTest
  password can be updated
 current password must be correct
 new passwords must match
  Tests: 21 passed
         2.54s
  Time:
```

Figure 5.1: Unit test result

CHAPTER 6

IMPACT ON SOCITY, ENVIRONMENT AND SUSTAINABLITY

6.1 Impact of Society

Small business owners may effortlessly operate their businesses from our website without having to make any investments. The administrator will receive a very little percentage of the revenue from each order. We believe that our concept will help small business owners greatly, as well as consumers, admin, and our society as a whole.

6.2 Impact on Environment

Global research by Generation IM found that e-commerce is 17% more carbon-efficient than conventional retail outlets. The business's carbon-efficient operations cover sectors including product transportation, construction, warehousing, product packaging, and manufacturing so it will be a great impact environment.

6.3 Ethical Aspects

Customers may purchase products from vendors who have positive product reviews and ratings. It is crucial to make sure the individual providing evaluations and ratings is a real person. Because clients would suffer greatly if the reviews and ratings are fake. We make sure that customers may only rate and review products they have previously bought. Popular development platform Laravel [1] which we have used is renowned for its security.

6.4 Sustainability Plan

The vendors who don't know anything about marketing or how to offer a product to the public, they can benefit from our project. We will make it simpler for customers to receive products. In doing so, Small business owners can grow their companies considerably more quickly. Customers will quickly find what they're looking for because there will be a wide variety of Sustainable merchants and products here.

CHAPTER 7

CONCLUSION AND FUTURE SCOPE

7.1 Discussion and Conclusion

In the end, we want to say that, hope our project will be very helpful for small sellers and customers will also be benefited in many ways. We started thinking about this project almost last year. Later all by the grace of Allah we just made it. We have tried to include everything that is required for an e-commerce site in our project. We emphasize on genuine reviews and ratings which is very important. In online shopping product recommendation is another one of the crucial parts, so we have taken care of this aspect too. In this way, a customer will not feel bored while shopping. Online support encourages customers to buy products, so we have included live chat for that. We have learned a lot since starting this project. We hope that one day it will be a popular application for online shopping.

7.2 Scope for Future Developments

In the future, we may use machine learning models to analyze data generated by our site. We can make customer support more accessible by using messaging systems between sellers and customers. We can improve the seller's store interface and integrate the delivery service

Reference:

- [1] Laravel.com, available at << https://laravel.com/ >>, last accessed on 05-Aug-2022 at 8:14 pm.
- [2] Laravel-livewire.com, available at << https://laravel-livewire.com/ >>, last accessed on 05-Aug-2022 at 8:30 pm.
- [3] Getbootstrap.com, available at << https://getbootstrap.com/ >>, last accessed on 07-May-2022 at 8:34 am
- [4] Releases.jquery.com, available at << https://releases.jquery.com/">>>, last accessed on 08-May-2022 at 10:00 am.
- [5] W3schools.com, available at << https://www.w3schools.com/php/">>>, last accessed on 10-Aug-2022 at 9:20 pm.
- [6] W3schools.com, available at << >>, last accessed on 05-Janu-2022">>>, last accessed on 05-Janu-2022 at 11:14 am.
- [7] Mailtrap.io, available at << https://mailtrap.io/>>, last accessed on 05-Aug-2022 at 10:25 pm.
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- [10] Wikipedia, available at << >>, last accessed on 01-Aug-2022 at 10:00 pm

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