



Green University of Bangladesh

Department of Computer Science and Engineering (CSE)

Semester: (Sprng, Year: 2024), B.Sc. in CSE (Day)

E-Commerce Website: SDM Dusal PC Shop

Course Title : Web Programming Lab

Course Code : CSE-302

Section : 213 D21

Students Details

Name	ID
MD Dusal Hossain	213902116

Submission Date: 09 - 06 - 2024

Course Teacher's Name: Most. Rokeya Khatun

[For teachers use only: **Don't write anything inside this box**]

<u>Lab Project Status</u>	
Marks:	Signature:
Comments:	Date:

Contents

1	Introduction	3
1.1	Overview	3
1.2	Motivation	3
1.3	Problem Definition	4
1.3.1	Problem Statement	4
1.3.2	Complex Engineering Problem	4
1.4	Design Goals/Objectives	5
1.5	Application	5
2	Design/Development/Implementation of the Project	6
2.1	Introduction	6
2.2	Project Details	6
2.3	The workflow	8
2.4	Tools and libraries	8
2.5	Implementation / Programming codes	9
2.5.1	Code_portion_CSS	9
2.5.2	Code_portion_Project Image	9
2.5.3	Code_portion_Java Script	10
2.5.4	Code_portion_Uploaded Image	10
2.5.5	Code_portion_PHP	11
2.5.6	Code_portion_SQL	11
2.5.7	Code_portion_Database	12
3	Performance Evaluation	13
3.1	Simulation Environment	13
3.2	Results Analysis/Testing	13
3.2.1	Result_portion_Login Page	14
3.2.2	Result_portion_Register Page	14
3.2.3	Result_portion_Admin Home Page	15
3.2.4	Result_portion_Admin Products Page	15

3.2.5	Result_portion_Admin Users Page	16
3.2.6	Result_portion_Admin Contact Page	16
3.2.7	Result_portion_Costumer Home Page	17
3.2.8	Result_portion_Costumer Products Page	17
3.2.9	Result_portion_Costumer About Page	18
3.2.10	Result_portion_Costumer Contact Page	18
3.2.11	Result_portion_Footer	19
3.2.12	Result_portion_Products Category Page	19
3.2.13	Result_portion_Search Bar	20
3.2.14	Result_portion_Wishlist	20
3.2.15	Result_portion_Cart	21
3.2.16	Result_portion_Order	21
3.2.17	Result_portion_Ordered Place	22
3.2.18	Result_portion_Order Show	22
3.2.19	Result_portion_Admin Ordered Page	23
3.3	Results Overall Discussion	23
4	Conclusion	24
4.1	Discussion	24
4.2	Practical Implications	24
4.3	Limitations	24
4.4	Scope of Future Work	25
4.5	References	25

Chapter 1

Introduction

1.1 Overview

The dynamic e-commerce website project entails the creation of a robust online platform designed to cater to customers' needs seamlessly. Leveraging HTML, CSS, JavaScript, PHP, and MySQL, the system aims to provide a user-friendly shopping experience while offering comprehensive functionalities.

- **Visit and Browse:** Customers can explore the website pages and effortlessly search for desired products.
- **User Registration:** Users have the option to register on the platform, enabling personalized experiences and access to additional features.
- **Product Selection and Cart Management:** Customers can add products to their cart for future purchase and manage their selections conveniently.
- **Admin Panel:** An intuitive admin panel empowers administrators to manage various aspects of the website, including adding, deleting, and updating posts, site content, and user information.
- **Repairing Service:** The website offers a unique repairing service where users can check personalized offers based on their purchase history, enhancing user engagement and satisfaction.

1.2 Motivation

Amidst the shifting landscape of commerce, an e-commerce platform meticulously fashioned with HTML, CSS, JavaScript, PHP, and MySQL stands as a cornerstone solution, delivering unparalleled efficiency and convenience for businesses and customers alike. Here's why building such a system using HTML, CSS, JavaScript, PHP, and MySQL is not just advantageous but imperative:

- **Accessibility:** A web-based system ensures accessibility from anywhere with an internet connection. This means hostel administrators, students, and staff can access the system from their laptops, tablets, or smartphones, facilitating seamless communication and management regardless of location.
- **Real-time Updates:** By leveraging technologies like JavaScript and PHP, real-time updates can be implemented, allowing instant synchronization of data. This ensures that room availability, fee status, and complaints are always up to date, minimizing errors and miscommunications.

- **User-Friendly Interface:** HTML and CSS enable the creation of intuitive and visually appealing user interfaces. A well-designed interface enhances user experience, making it easier for students to navigate through the system, update their profiles, pay fees, and lodge complaints effortlessly.
- **Scalability:** PHP and MySQL provide a robust foundation for scalable solutions. As universities grow and hostel requirements evolve, the system can easily accommodate increased data volume and user load without compromising performance.
- **Data Integrity and Security:** MySQL offers robust data storage capabilities while PHP facilitates secure data handling. Implementing encryption protocols and access controls ensures that sensitive information such as student records and financial transactions are protected from unauthorized access and data breaches.
- **Cost-Efficiency:** Building a web-based system eliminates the need for extensive hardware infrastructure and maintenance costs associated with traditional software installations. Additionally, open-source technologies like PHP and MySQL significantly reduce licensing expenses, making the solution cost-effective for educational institutions.
- **Adaptability and Customization:** The modular nature of web development using HTML, CSS, JavaScript, PHP, and MySQL allows for easy customization and integration of additional features as per specific requirements.
- **Growing demand for convenient online shopping experiences:** With the rise of digitalization and the increasing preference for online transactions, there is a growing demand for user-friendly e-commerce websites. As consumers seek convenience and accessibility, the need for intuitive platforms where they can easily browse, search for products, and make secure purchases becomes paramount.
- **Increasing reliance on digital platforms:** As you delve into the world of web programming, it's important to recognize the significant role of digital platforms in today's commerce landscape. With factors such as busy lifestyles and geographic constraints driving more people towards online shopping, mastering the development of e-commerce websites equips you with valuable skills for meeting evolving market demands.

1.3 Problem Definition

1.3.1 Problem Statement

Existing e-commerce platforms often lack certain features or have usability issues, leading to frustration among users and inefficiencies in online transactions. This project aims to address these shortcomings by developing a dynamic e-commerce website that prioritizes user experience, security, and administrative functionality.

1.3.2 Complex Engineering Problem

The following Table 1.1 summarizes the attributes affected by the dynamic e-commerce website project, highlighting the complexity and interdependence of various aspects involved in its development.

Table 1.1: Summary of the attributes touched by the mentioned projects

Name of the Project Attributes	Explain how to address
P1: Depth of knowledge required	High - Requires expertise in HTML, CSS, JavaScript, PHP, MySQL, and e-commerce principles.
P2: Range of conflicting requirements	Moderate - Balancing user experience, security, and administrative functionality may present conflicting requirements that need to be addressed during the design and development phases.
P3: Depth of analysis required	Moderate - Detailed analysis is needed for designing the user interface, database structure, and admin panel functionality.
P4: Familiarity of issues	Moderate to high - Familiarity with e-commerce principles, web development technologies, and payment gateways is essential. Admin panel management and product/service offerings familiarity is required.
P5: Extent of applicable codes	High - Implementing HTML, CSS, JavaScript, PHP, and MySQL code to develop the website and database functionality. Integrating Stripe API for payment processing requires adherence to applicable coding standards.

1.4 Design Goals/Objectives

- Develop a user-friendly interface for seamless navigation and product discovery.
- Implement a secure registration and authentication system for user accounts.
- Integrate a robust cart management system to facilitate smooth transactions.
- Create an intuitive admin panel for efficient site management, including product, post, and user management.
- Provide a repairing service feature, allowing users to check offers based on their purchase history.
- Ensure scalability, security, and reliability of the website to accommodate future growth and protect user data.

1.5 Application

The dynamic e-commerce website will cater to a diverse audience seeking a convenient and secure online shopping experience. Users will be able to browse through a wide range of products, register securely, add items to their cart, and complete purchases using the integrated Stripe payment system. Additionally, the admin panel will empower site administrators to manage products, posts, and users efficiently, ensuring smooth operation of the platform. The inclusion of a repairing service feature will further enhance user engagement and satisfaction by providing personalized offers based on their purchase history.

Chapter 2

Design/Development/Implementation of the Project

2.1 Introduction

The objective of this project is to develop an e-commerce platform named SDM Dulal PC Shop , which allows users to browse and purchase products online. The platform is designed to be user-friendly, secure, and efficient, providing a seamless shopping experience. It includes features for both customers and administrators, facilitating product management, order processing, and customer communication. The platform supports multiple product categories and offers a streamlined interface for both end-users and administrators. By leveraging modern web technologies, SDM Dulal PC Shop aims to deliver a robust solution that can scale with business growth and adapt to evolving market needs.

2.2 Project Details

In this section, you will elaborate on all the details of your project, using subsections if necessary. This includes a detailed overview of the project name, developers, technologies used, and the features of both the user and admin interfaces.

Features:

User Interface:

- Home Page:**

- Displays a header with navigation links and user account options.
 - Showcases the latest products added to the inventory.

- Shop Page:**

- Lists all available products.
 - Allows users to filter products by category (Laptop, Mobile, PC, Monitor).

- Order Page:**

- Shows a list of orders placed by the user.
 - Provides detailed information about each order.

- About Page:**

- Provides information about SDM Dusal PC Shop .
- Displays reviews from customers.

- **Contact Page:**

- Includes a form for users to send messages or inquiries to the website administrators.

Admin Interface:

- **Admin Home Page:**

- Displays a dashboard with an overview of the website's operations, including total orders, products, and user statistics.

- **Product Management:**

- Allows the admin to add new products to the inventory.
- Displays a list of all existing products with options to update or delete them.

- **Order Management:**

- Enables the admin to view and process user orders.
- Includes functionality to accept and update order statuses.

The SDM Dusal PC Shop project aims to provide a comprehensive and efficient e-commerce solution, ensuring a smooth user experience for customers and streamlined management for administrators.

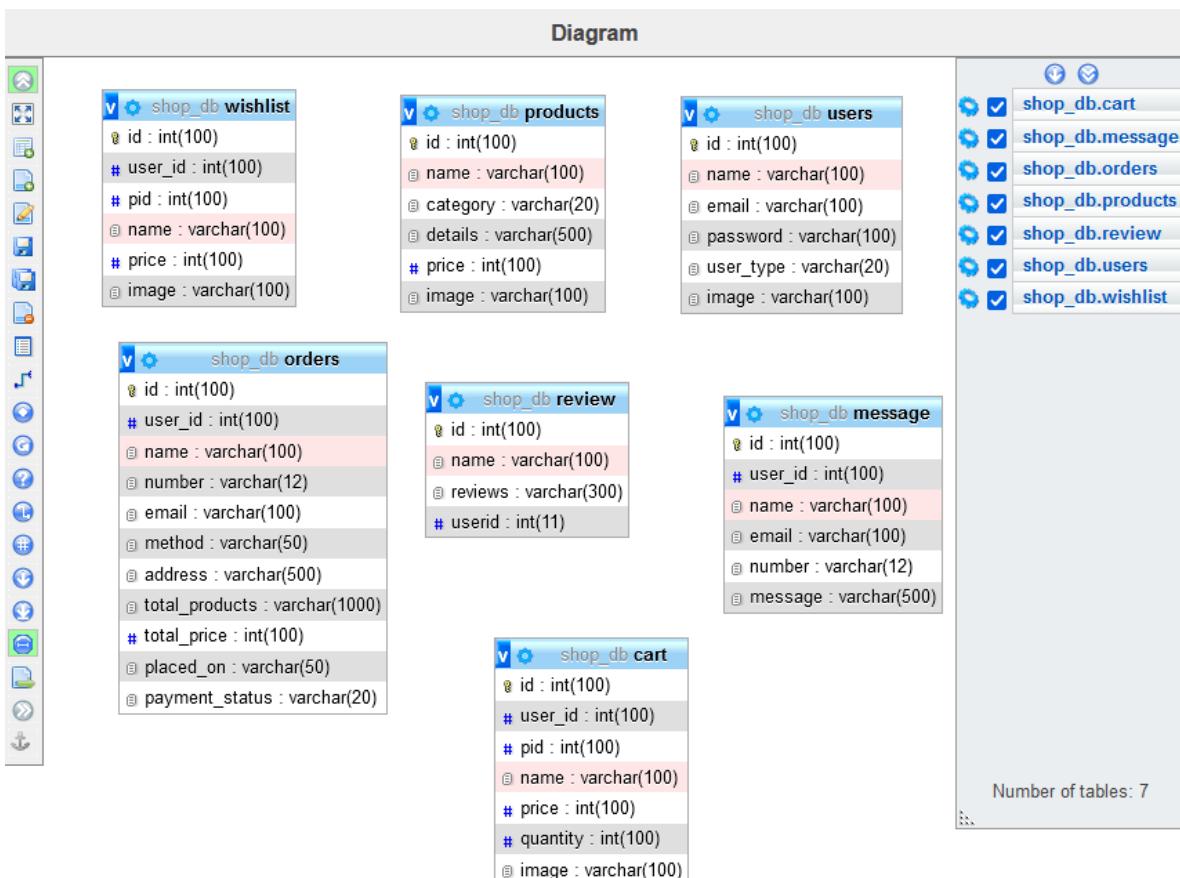


Figure 2.1: My Project Diagram .

2.3 The workflow

The workflow for developing the SDM Dulal PC Shop website begins with *Project Initiation, where detailed requirements are collected from stakeholders to understand the desired features and functionalities. A feasibility study is conducted to analyze technical, operational, and financial aspects. In the **Planning* phase, the project scope is defined, outlining specific objectives and deliverables. A comprehensive project plan is then developed, including timelines, milestones, resource allocation, and risk management. Moving into the *Design* phase, wireframes are created to map out the website's layout and user flow. This is followed by designing the user interface (UI) and user experience (UX) elements to ensure an optimal user experience. A prototype is built for stakeholder review and feedback.

During the *Development* phase, the development environment is set up, and front-end development begins with HTML, CSS, and JavaScript to create the user interface. Key PHP files include index.php for the main landing page, products.php for product listings, product detail.php for detailed product views, cart.php for the shopping cart, and checkout.php for the checkout process. Back-end development follows, involving server-side logic, database schemas, and APIs. Important PHP files for back-end include db.php for database connections, user model.php for user-related operations, product model.php for product-related operations, order model.php for order-related operations, and auth.php for user authentication. Integration ensures that the front-end and back-end, along with third-party services like payment gateway.php, work seamlessly together.

The *Testing* phase includes unit testing of individual components, integration testing to ensure all parts work together, and user acceptance testing (UAT) to validate the system with real users. In the *Deployment* phase, the website is first deployed in a staging environment for final testing, then live for users. *Post-Deployment* involves continuous monitoring of website performance and gathering user feedback, along with regular maintenance, updates, and bug fixes. The final phase is *Documentation and Training*, where comprehensive project documentation is created, and stakeholders and users are trained on the website's functionalities.

2.4 Tools and libraries

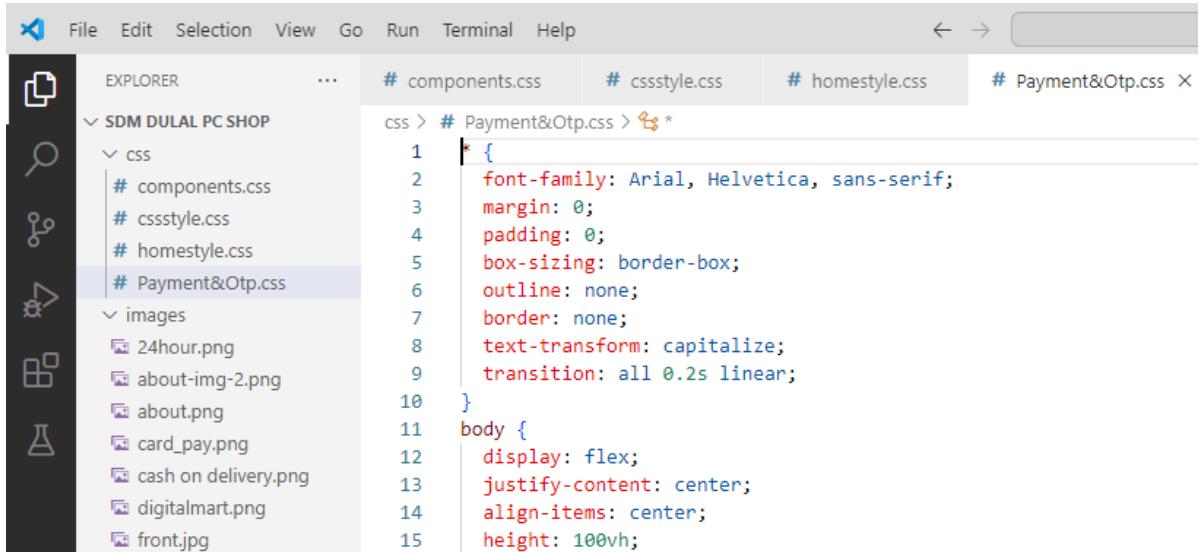
This subsection details the various technologies and development environments utilized in the creation of the SDM Dulal PC Shop e-commerce platform. The project leverages a combination of frontend, backend, and database technologies to provide a comprehensive and robust solution.

- **Frontend:** HTML, CSS, JavaScript
- **Backend:** PHP
- **Database:** MySQL
- **IDE:** Visual Studio Code

We can fix the height, width, position, etc., of the figure accordingly.

2.5 Implementation / Programming codes

2.5.1 Code_portion_CSS



The screenshot shows a code editor interface with a dark theme. The top menu bar includes File, Edit, Selection, View, Go, Run, Terminal, and Help. The title bar shows four tabs: # components.css, # cssstyle.css, # homestyle.css, and # Payment&Otp.css (which is currently active). The left sidebar has icons for Explorer, Search, and others, and displays a file tree for 'SDM DULAL PC SHOP' under 'EXPLORER'. The 'css' folder contains four files: components.css, cssstyle.css, homestyle.css, and Payment&Otp.css. The 'Payment&Otp.css' file is selected and its content is displayed in the main editor area:

```
css > # Payment&Otp.css > *  
1  * {  
2    font-family: Arial, Helvetica, sans-serif;  
3    margin: 0;  
4    padding: 0;  
5    box-sizing: border-box;  
6    outline: none;  
7    border: none;  
8    text-transform: capitalize;  
9    transition: all 0.2s linear;  
10 }  
11 body {  
12   display: flex;  
13   justify-content: center;  
14   align-items: center;  
15   height: 100vh;
```

Figure 2.2: Code for CSS Code part.

2.5.2 Code_portion_Project Image

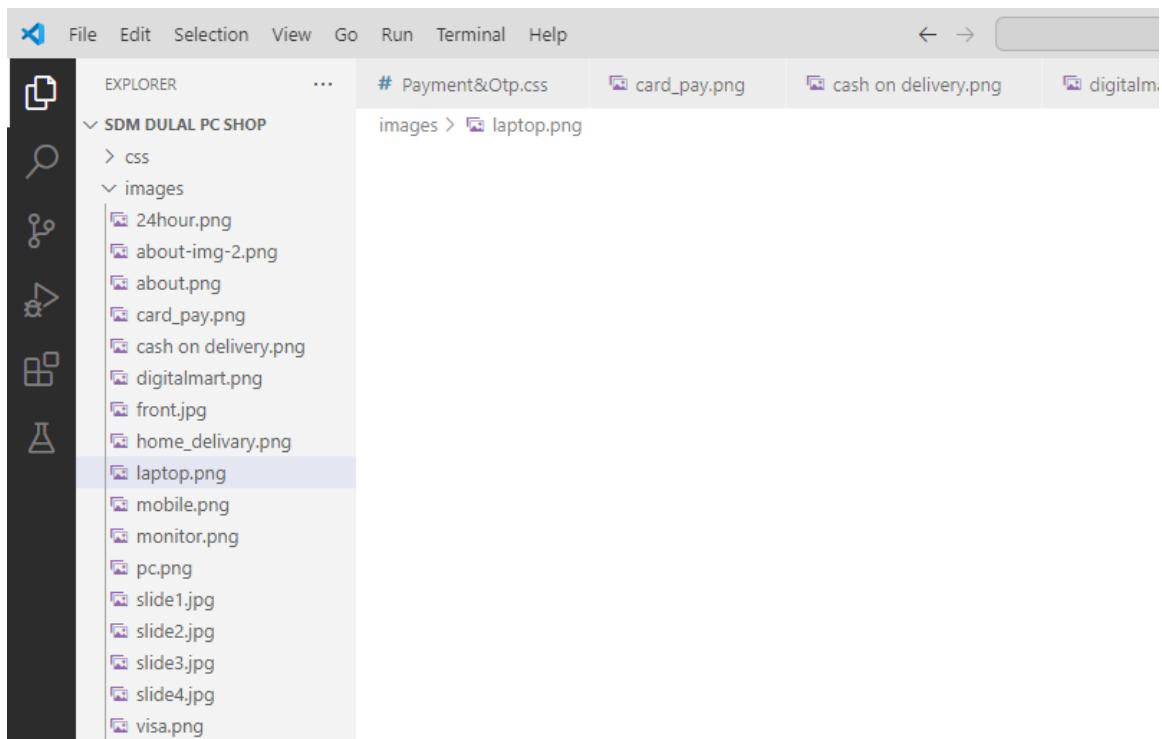
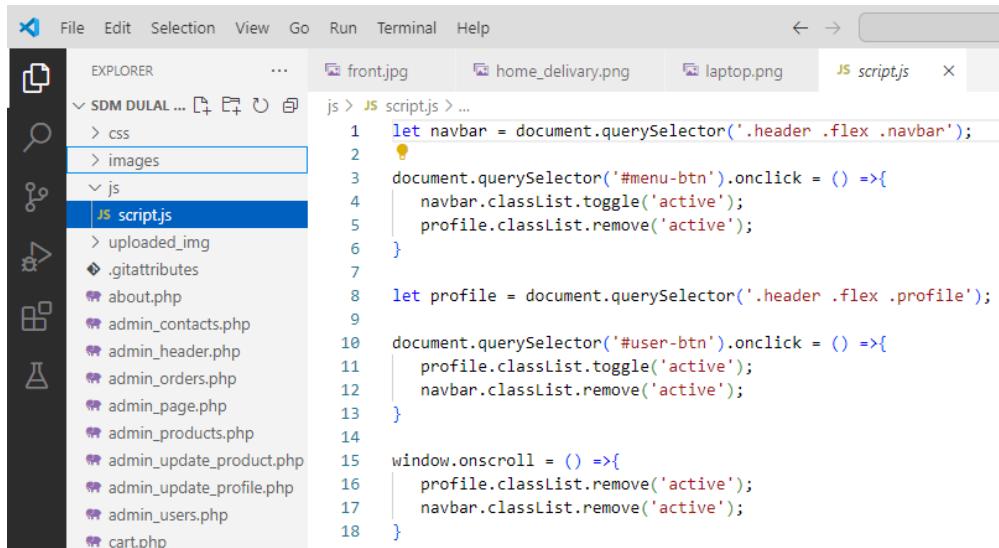


Figure 2.3: Code for Project Image part.

2.5.3 Code_portion_Java Script



```
File Edit Selection View Go Run Terminal Help ← →
EXPLORER ... front.jpg home_delivery.png laptop.png JS script.js ×
SDM DULAL ...
> css
> images
js > JS script.js > ...
1 let navbar = document.querySelector('.header .flex .navbar');
2
3 document.querySelector('#menu-btn').onclick = () =>{
4     navbar.classList.toggle('active');
5     profile.classList.remove('active');
6 }
7
8 let profile = document.querySelector('.header .flex .profile');
9
10 document.querySelector('#user-btn').onclick = () =>{
11     profile.classList.toggle('active');
12     navbar.classList.remove('active');
13 }
14
15 window.onscroll = () =>{
16     profile.classList.remove('active');
17     navbar.classList.remove('active');
18 }
```

Figure 2.4: Code for Java Script part.

2.5.4 Code_portion_Uploaded Image

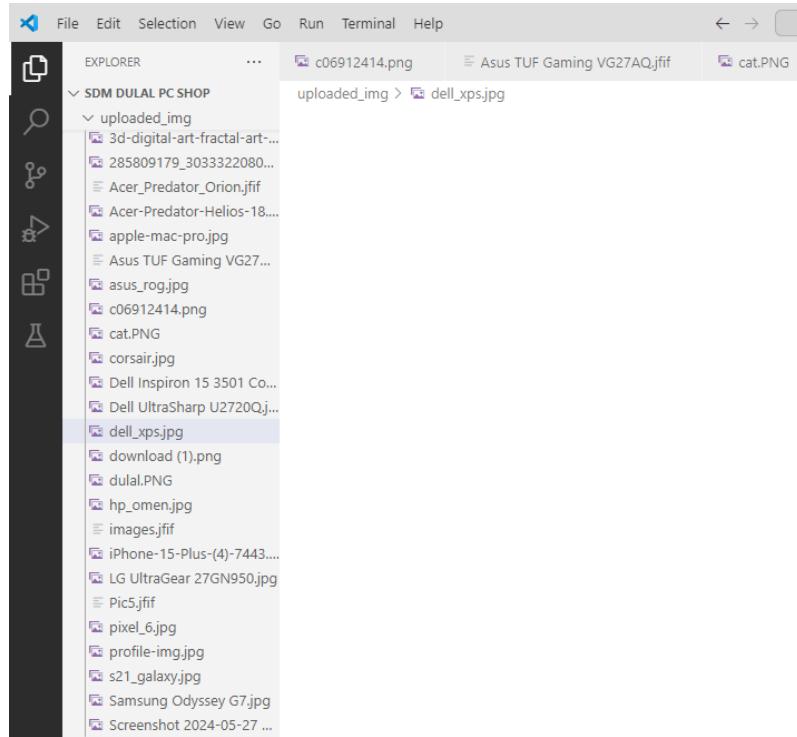


Figure 2.5: Code for Uploaded Image part.

2.5.5 Code_portion_PHP

```

File Edit Selection View Go Run Terminal Help
SDM DUAL PC SHOP
EXPLORER ... about.php header.php home.php login.php register.php wishlist.php Payment.php
about.php
1 <?php
2
3 @include 'config.php';
4
5 session_start();
6
7 $user_id = $_SESSION['user_id'];
8
9 if (!isset($user_id)) {
10 | header('location:login.php');
11 }
12 ?>
13
14 <!DOCTYPE html>
15 <html lang="en">
16
17 <head>
18 <meta charset="UTF-8">
19 <meta http-equiv="X-UA-Compatible" content="IE=edge">
20 <meta name="viewport" content="width=device-width, initial-scale=1.0">
21 <title>SDM Dual PC Shop</title>
22
23 <!-- font awesome cdn link -->
24 <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.1.1/css/all.min.css"/>
25
26
27 <!-- custom css file link -->
28 <link rel="stylesheet" href="css/homestyle.css">
29
30 </head>
31
32 <body>
33 <?php include 'header.php'; ?>
34
35 <section class="about">
36
37 
38
39 <div class="row">
40
41
42

```

Figure 2.6: Code for Find-Books part.

2.5.6 Code_portion_SQL

```

File Edit Selection View Go Run Terminal Help
SDM DUAL PC SHOP
EXPLORER ... shop_db.sql admin_header.php admin_orders.php admin_page.php admin_products.php
shop_db.sql
1 -- phpMyAdmin SQL Dump
2 -- version 5.2.0
3 -- https://www.phpmyadmin.net/
4 --
5 -- Host: 127.0.0.1
6 -- Generation Time: May 31, 2024 at 05:02 PM
7 -- Server version: 10.4.27-MariaDB
8 -- PHP Version: 8.0.25
9
10 SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
11 START TRANSACTION;
12 SET time_zone = "+00:00";
13
14
15 /*I40101 SET @OLD_CHARACTER_SET_CLIENT=@CHARACTER_SET_CLIENT */;
16 /*I40101 SET @OLD_CHARACTER_SET_RESULTS=@CHARACTER_SET_RESULTS */;
17 /*I40101 SET @OLD_COLLATION_CONNECTION=@COLLATION_CONNECTION */;
18 /*I40101 SET NAMES utf8mb4 */;
19
20 --
21 -- Database: 'shop_db'
22 --
23
24 --
25
26 --
27 -- Table structure for table 'cart'
28 --
29
30 CREATE TABLE `cart` (
31 | `id` int(100) NOT NULL,
32 | `user_id` int(100) NOT NULL,
33 | `pid` int(100) NOT NULL,
34 | `name` varchar(100) NOT NULL,
35 | `price` int(100) NOT NULL,
36 | `quantity` int(100) NOT NULL,
37 | `image` varchar(100) NOT NULL
38 ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci;
39
40 --
41 -- Dumping data for table 'cart'
42 --
43
44 INSERT INTO `cart` (`id`, `user_id`, `pid`, `name`, `price`, `quantity`, `image`) VALUES
45 (72, 41, 80, 'Beetroot', 120, 1, 'beetroot.jpg'),
46 (82, 45, 51, 'lime', 100, 1, 'lime.jpg'),
47 (86, 47, 30, 'Beetroot', 120, 9, 'Beetroot.jpg'),
48 (87, 47, 29, 'Carrot', 268, 1, 'carrot.png'),
49 (88, 45, 29, 'Carrot', 268, 1, 'carrot.one');

```

Figure 2.7: Code for Remove-Books part.

2.5.7 Code_portion_Database

The screenshot shows the phpMyAdmin interface for the 'shop_db' database. The left sidebar lists various databases, and the main area displays the structure of the 'shop_db' database, which contains seven tables: cart, message, orders, products, review, users, and wishlist. The 'Structure' tab is selected, showing columns for each table. A search bar at the top allows filtering by word. Below the table list, there are buttons for printing and creating new tables.

Table	Action	Rows	Type	Collation	Size	Overhead
cart	Browse Structure Search Insert Empty Drop	5	InnoDB	utf8mb4_general_ci	16.0 KiB	-
message	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_general_ci	16.0 KiB	-
orders	Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_general_ci	16.0 KiB	-
products	Browse Structure Search Insert Empty Drop	19	InnoDB	utf8mb4_general_ci	16.0 KiB	-
review	Browse Structure Search Insert Empty Drop	5	InnoDB	utf8mb4_general_ci	16.0 KiB	-
users	Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_general_ci	16.0 KiB	-
wishlist	Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_general_ci	16.0 KiB	-
7 tables	Sum	39	InnoDB	utf8mb4_general_ci	112.0 KiB	0 B

Figure 2.8: Code for View-Books part.

Chapter 3

Performance Evaluation

3.1 Simulation Environment

To simulate the outcomes of our project, me and my teammate have set up different experimental setups based on my PC configurations. In this section, we will discuss the specific requirements and environment installation needed for each simulation.

RAM: 16GB ,

Storage: 512 GB SSD and 1TB HDD,

Processor: Intel Core i5 10th generation.

3.2 Results Analysis/Testing

The result analysis and testing phase for the SDM Dulal PC Shop website project is crucial to ensure the website meets the required standards and functions smoothly. Initially, *Unit Testing* is conducted to test individual components of the website, such as forms, buttons, and scripts, ensuring they work as intended. Each PHP file, including index.php, products.php, product detail.php, cart.php, checkout.php, db.php, user model.php, product model.php, order model.php, and auth.php, undergoes rigorous testing to check for any errors or bugs.

Following unit testing, *Integration Testing* is performed to verify that different components of the website work together seamlessly. This includes ensuring the front-end and back-end communicate effectively and that the payment gateway integration (payment gateway.php) functions correctly. *User Acceptance Testing (UAT)* is then carried out, involving real users to validate the entire system. This phase focuses on the user experience, ensuring that the website is intuitive, responsive, and performs well under various conditions.

Performance Testing is conducted to assess the website's speed, scalability, and stability under load. This involves simulating multiple users accessing the site simultaneously to identify any potential bottlenecks. *Security Testing* ensures that user data is protected and that the website is safe from vulnerabilities such as SQL injection, cross-site scripting (XSS), and other potential threats.

The results from these tests are thoroughly analyzed, and any identified issues are addressed promptly. Regular monitoring and maintenance are implemented post-deployment to ensure continuous optimal performance and user satisfaction. This comprehensive testing and result analysis phase ensures the SDM Dulal PC Shop website is reliable, secure, and user-friendly.

3.2.1 Result_portion_Login Page

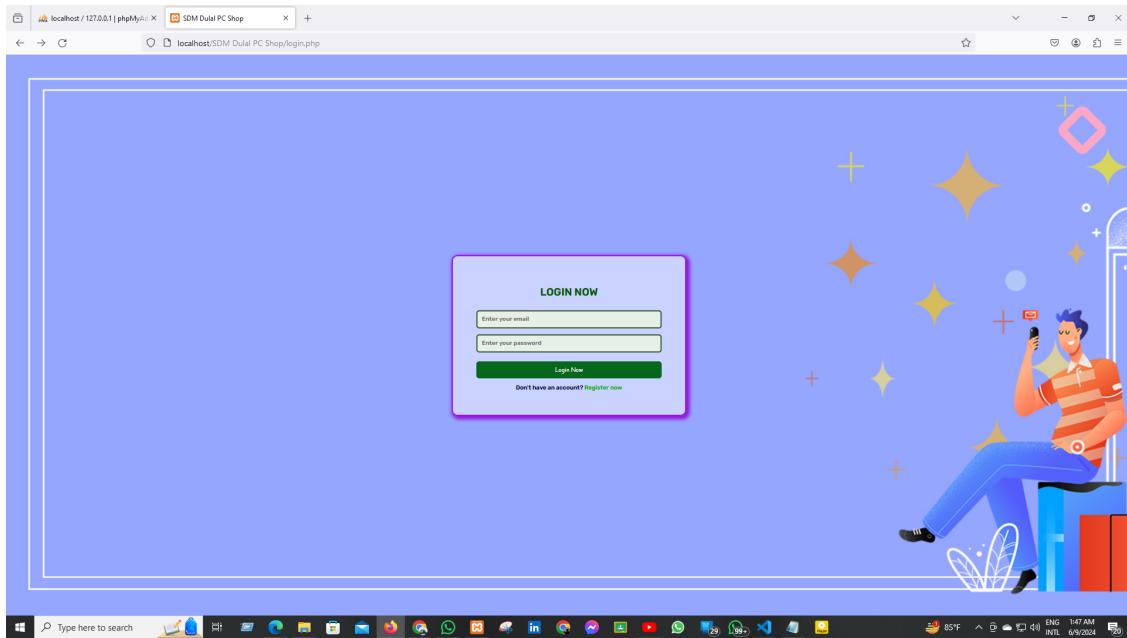


Figure 3.1: Login Page Part .

In this Figure 3.1 we see that its my project login page .

3.2.2 Result_portion_Register Page

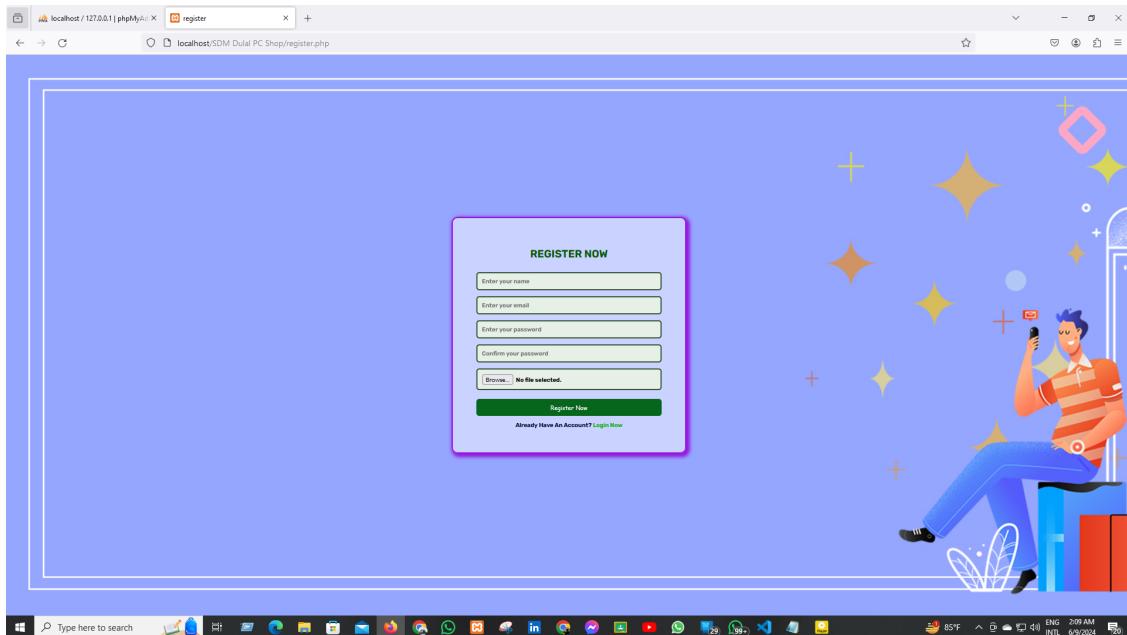


Figure 3.2: Register Page Part .

In this Figure 3.2 we see that this is the register page.

3.2.3 Result_portion_Admin Home Page

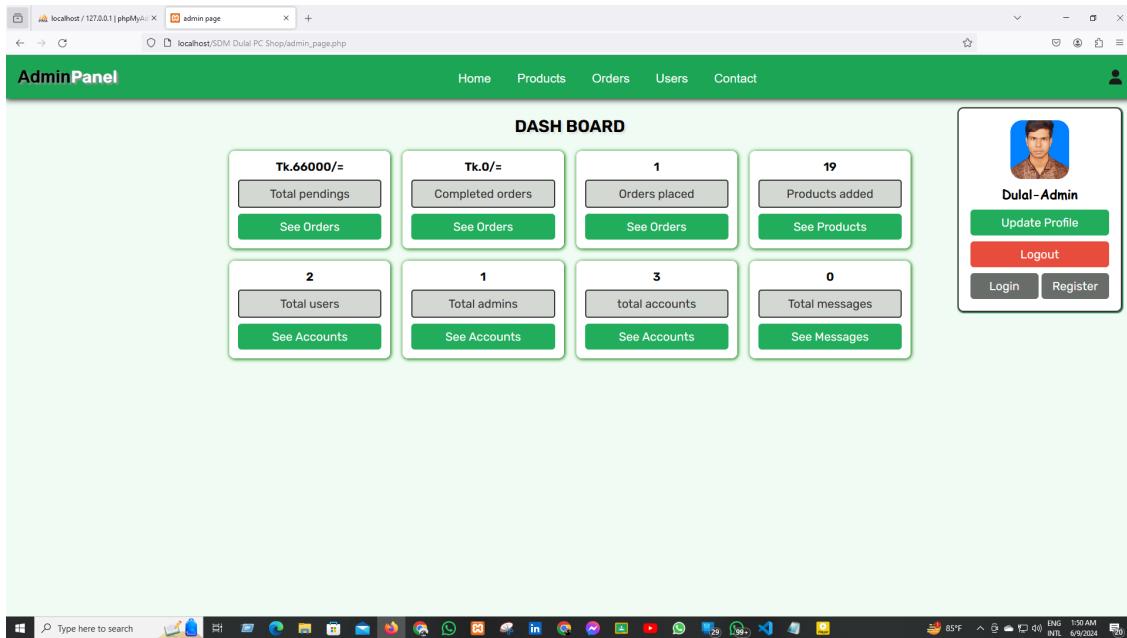


Figure 3.3: Admin Home Page Part .

In this Figure 3.3 ,see that the admin home page . where some option like order list , user list or etc .

3.2.4 Result_portion_Admin Products Page

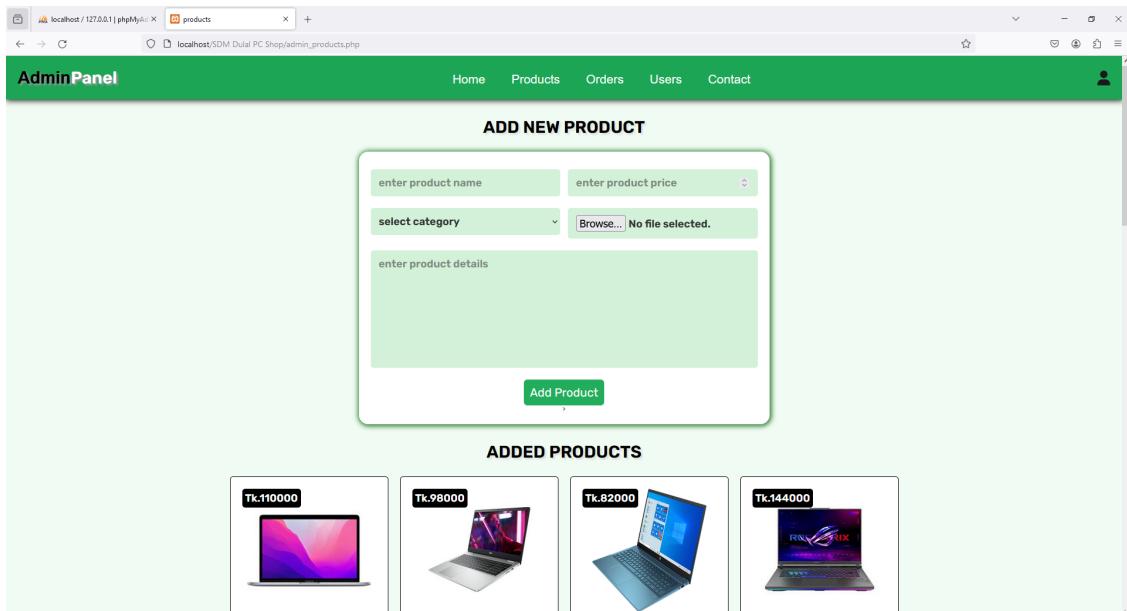
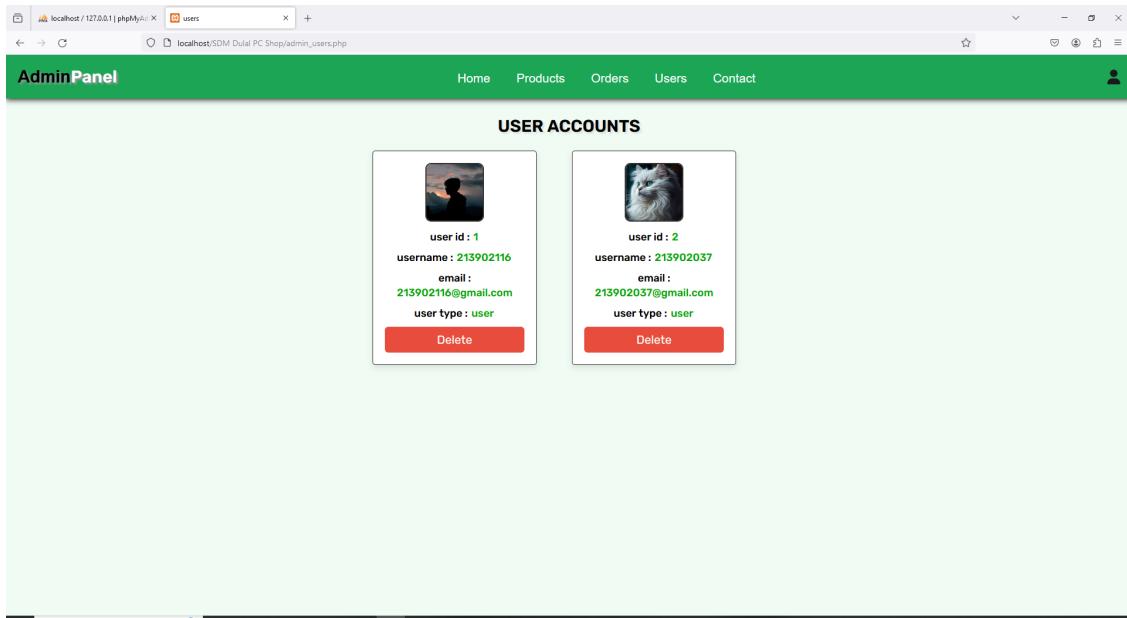


Figure 3.4: Admin Products Page Part .

In this Figure 3.4 ,see that this the admin product page . admin can add a new product with some option .

3.2.5 Result_portion_Admin Users Page



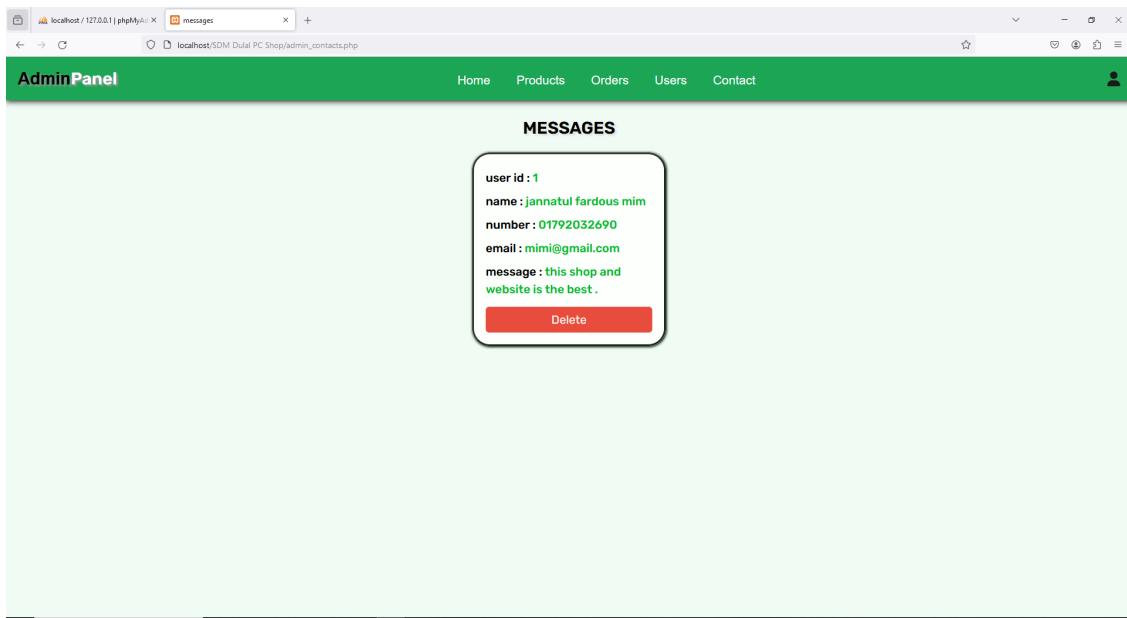
The screenshot shows a web browser window with two tabs: 'localhost / 127.0.0.1 | phpMyAdmin' and 'users'. The main content area is titled 'USER ACCOUNTS' and displays two user profiles. Each profile card contains a small thumbnail image, user ID, username, email, and user type, followed by a red 'Delete' button.

User ID	Username	Email	User Type
1	213902116	213902116@gmail.com	user
2	213902037	213902037@gmail.com	user

Figure 3.5: Admin Users Page Part .

In this Figure 3.5 ,see that this is the user accounts list .

3.2.6 Result_portion_Admin Contact Page



The screenshot shows a web browser window with two tabs: 'localhost / 127.0.0.1 | phpMyAdmin' and 'messages'. The main content area is titled 'MESSAGES' and displays one message card. The card contains the user ID, name, number, email, and message text, along with a red 'Delete' button.

user id	name	number	email	message
1	jannatul fardous mim	01792032690	mimi@gmail.com	this shop and website is the best.

Figure 3.6: Admin Contact Page Part .

In this Figure 3.6 ,see that this the user message for this website .

3.2.7 Result_portion_Costumer Home Page

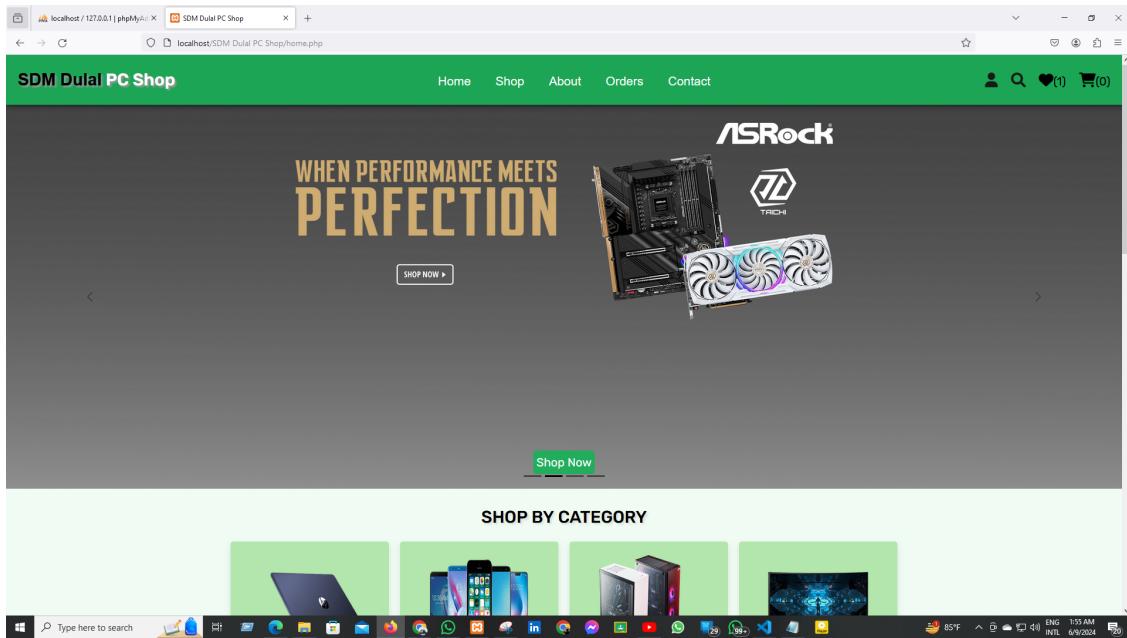


Figure 3.7: Costumer Home Page Part .

In this Figure 3.7 ,see that this is the costumer home page .

3.2.8 Result_portion_Costumer Products Page

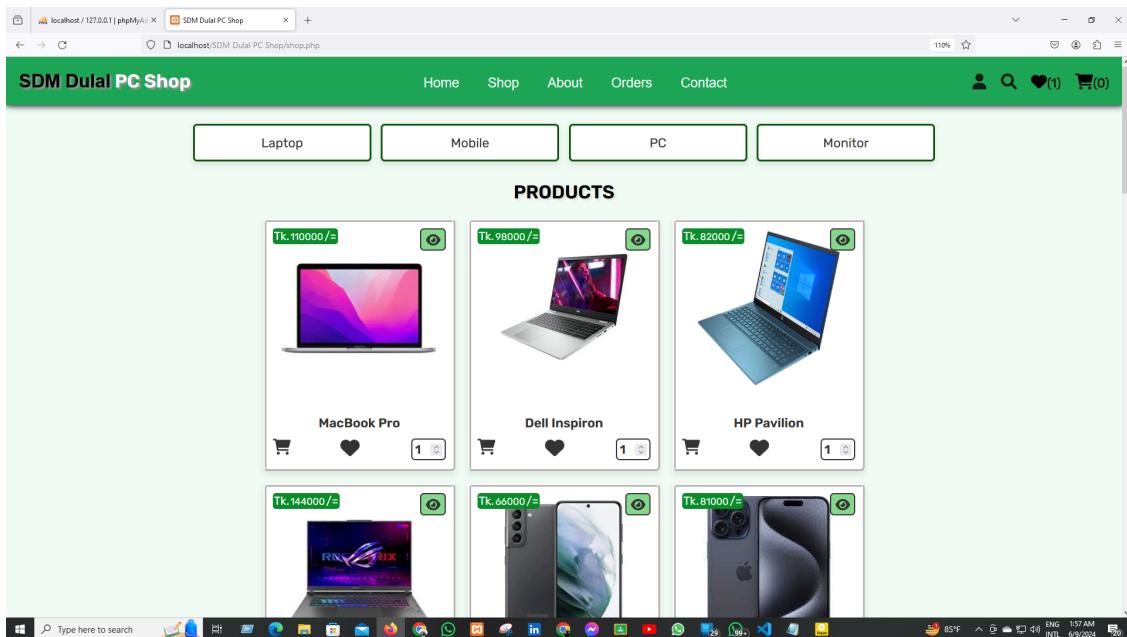


Figure 3.8: Costumer Products Page Part .

In this Figure 3.8 ,see that this is the costumer products page , user can select laptop , mobile PC and monitor.

3.2.9 Result_portion_Costumer About Page

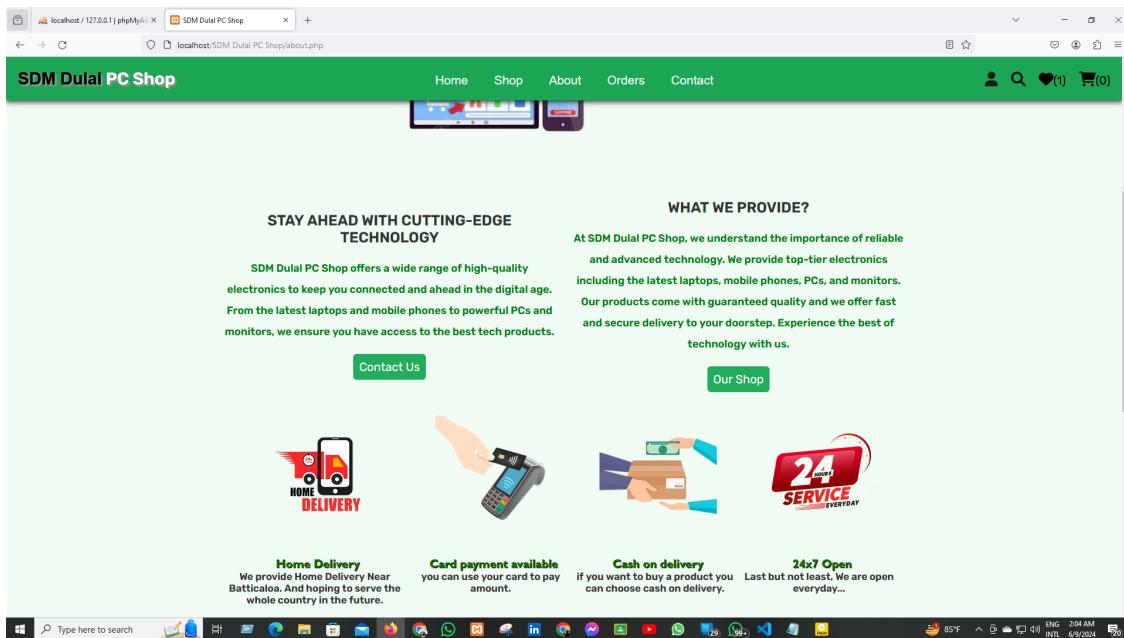


Figure 3.9: Costumer About Page Part .

In this Figure 3.9 ,see that this is the costumer about page . also user known about the my website .

3.2.10 Result_portion_Costumer Contact Page

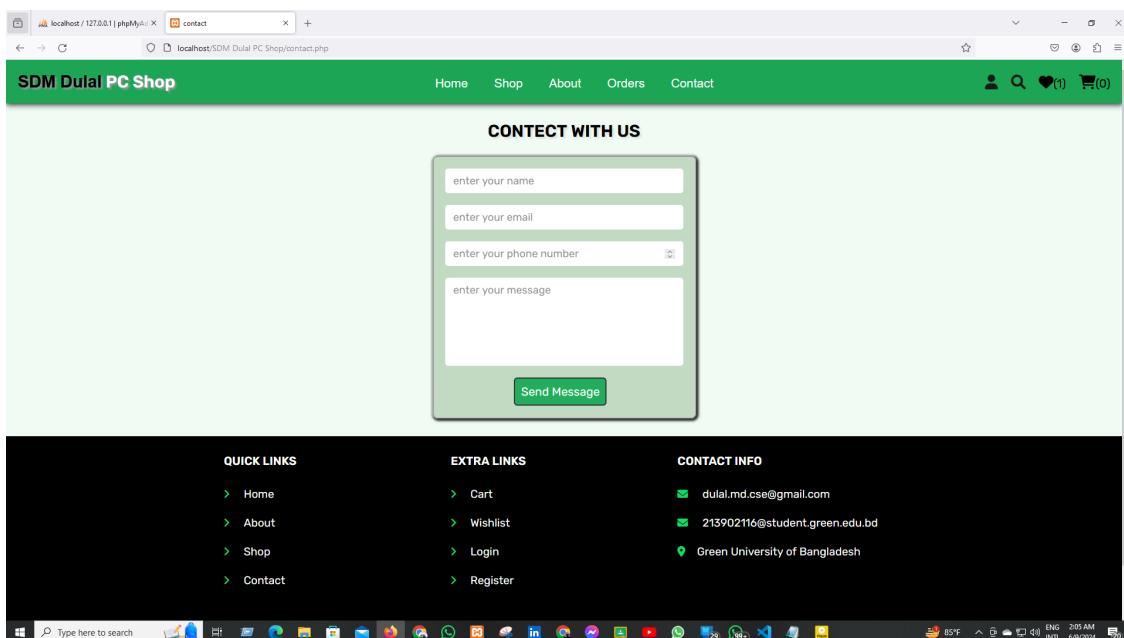


Figure 3.10: Costumer Contact Page Part .

In this Figure 3.10 ,see that this is the costumer contact message . user can sent the message the for the website .

3.2.11 Result_portion_Footer

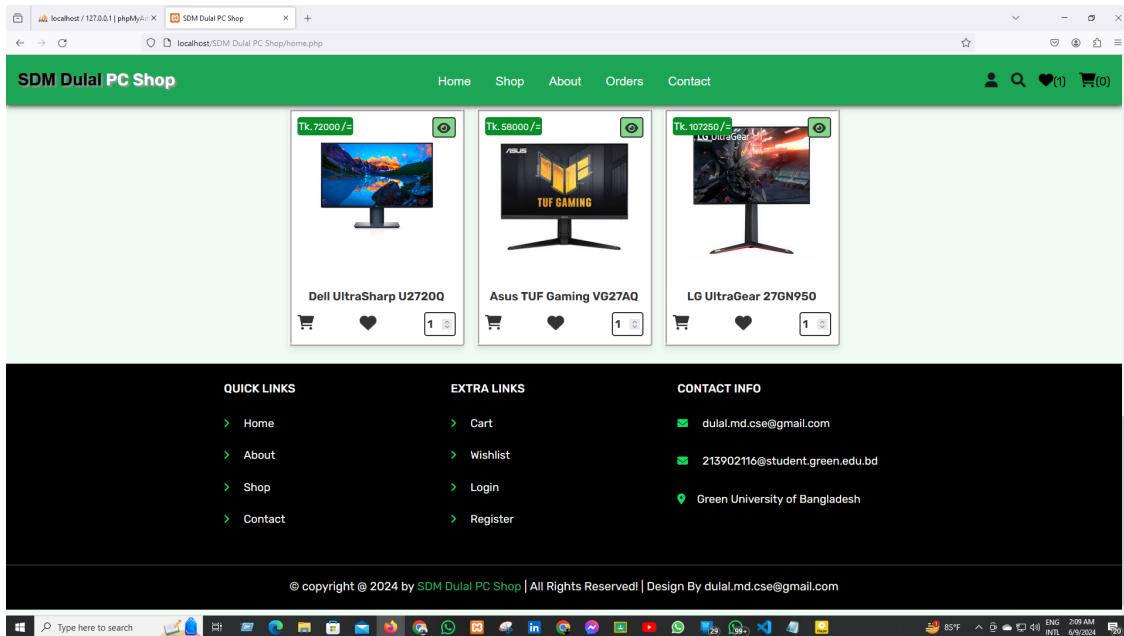


Figure 3.11: Footer.

In this Figure 3.11 ,see that this is the footer for my website .

3.2.12 Result_portion_Products Category Page

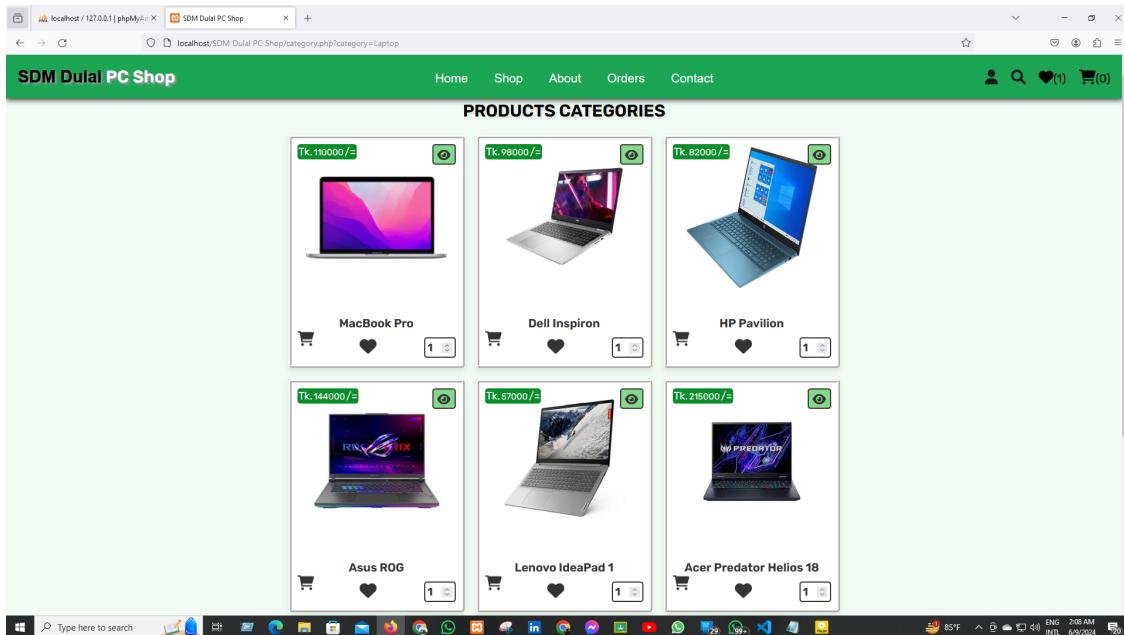


Figure 3.12: Products Category Page Part .

In this Figure 3.12 ,see that this is the costumer the laptop category . also show the only laptop list .

3.2.13 Result_portion_Search Bar

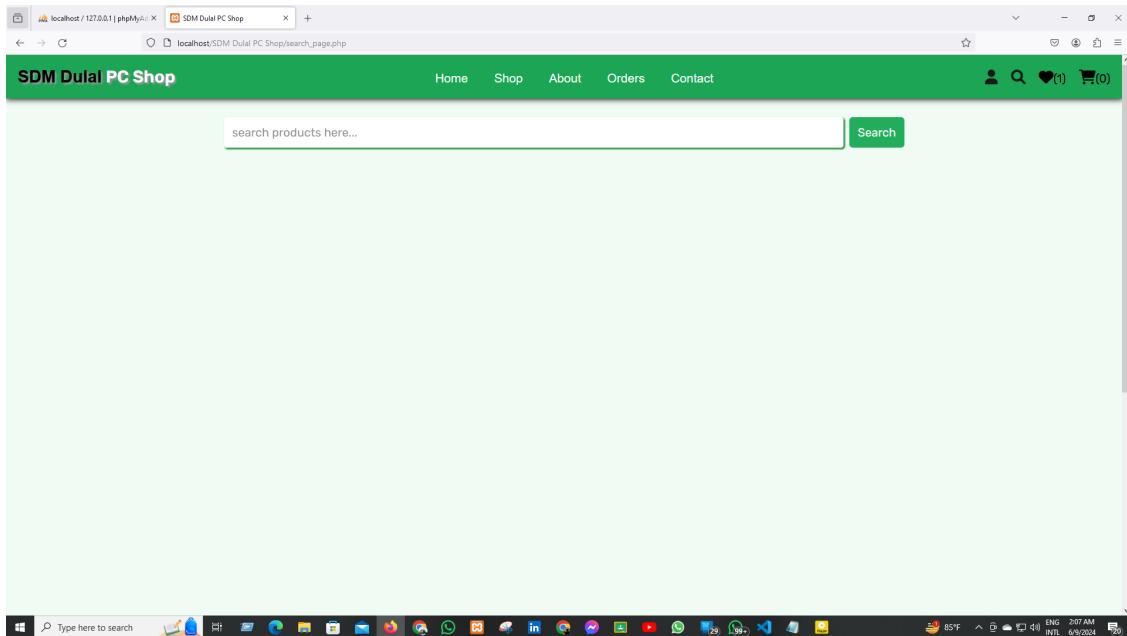


Figure 3.13: Search Bar Part .

In this Figure 3.13 ,see that this is the costumer search bar . user can search anything for my website

3.2.14 Result_portion_Wishlist

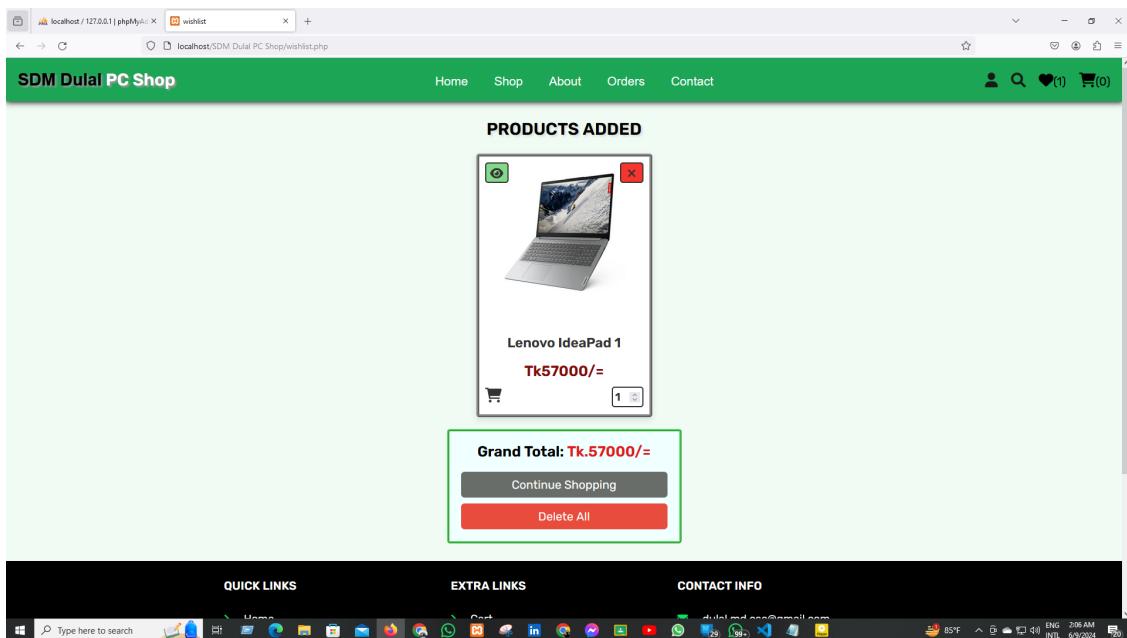


Figure 3.14: Wishlist Part .

In this Figure 3.14 ,see that this is the costumer wishlist . costumer can select the any product also added the wishlist .

3.2.15 Result_portion_Cart

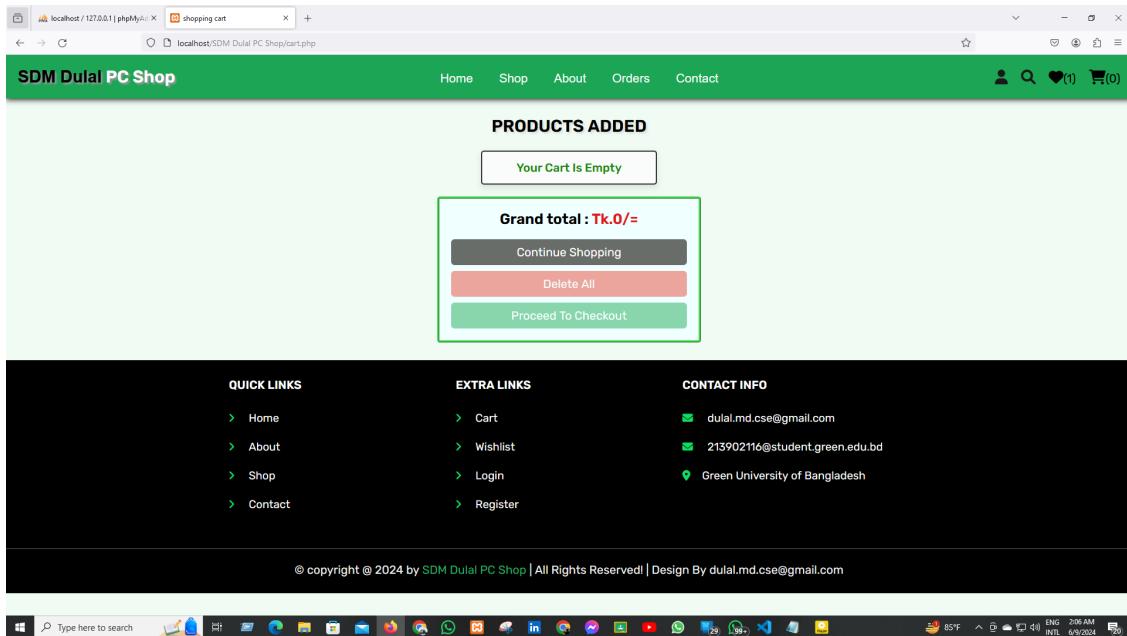


Figure 3.15: Cart Part .

In this Figure 3.15 ,see that this is the costumer cart . costumer can select the any product also added the act list .

3.2.16 Result_portion_Order

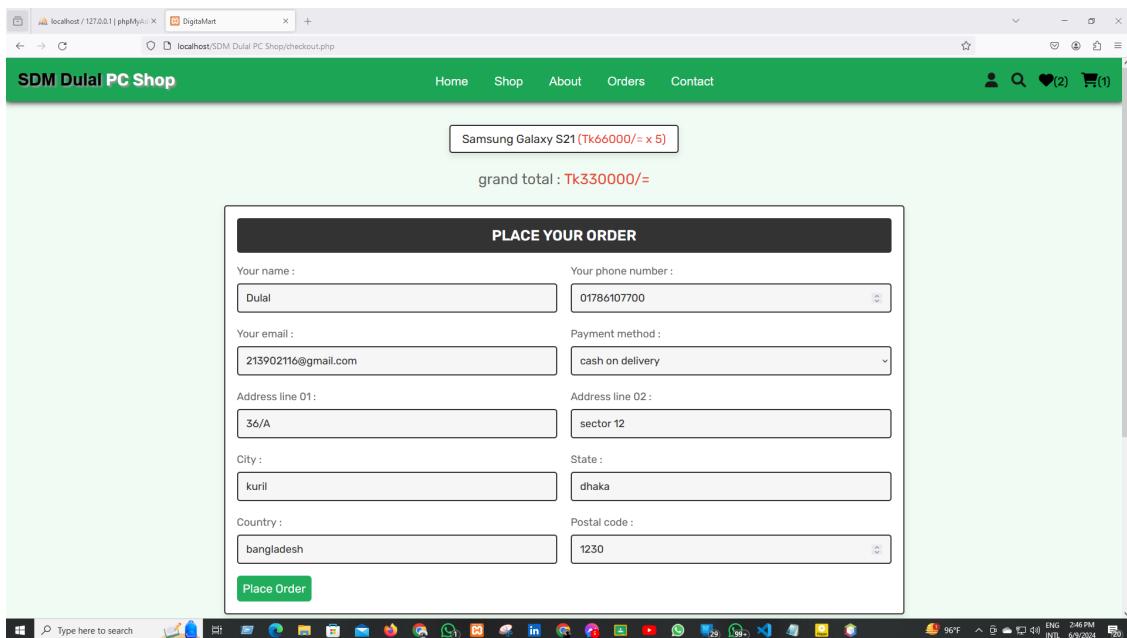


Figure 3.16: Order Part .

In this Figure 3.16 ,see that this is the costumer ordered page . also we see that user order some exchecoris .

3.2.17 Result_portion_Ordered Place

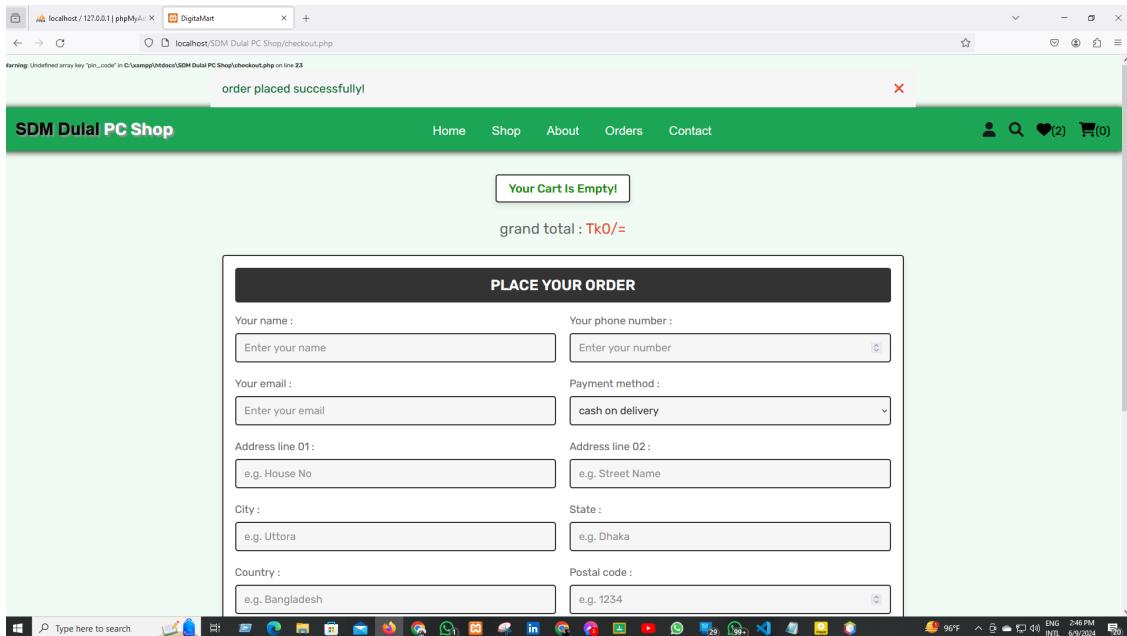


Figure 3.17: Ordered Place Part .

In this Figure 3.16 , we see that user fill up the order from . in figure 3.17 we see that use place the ordered ans our project is show the message successfully.

3.2.18 Result_portion_Order Show

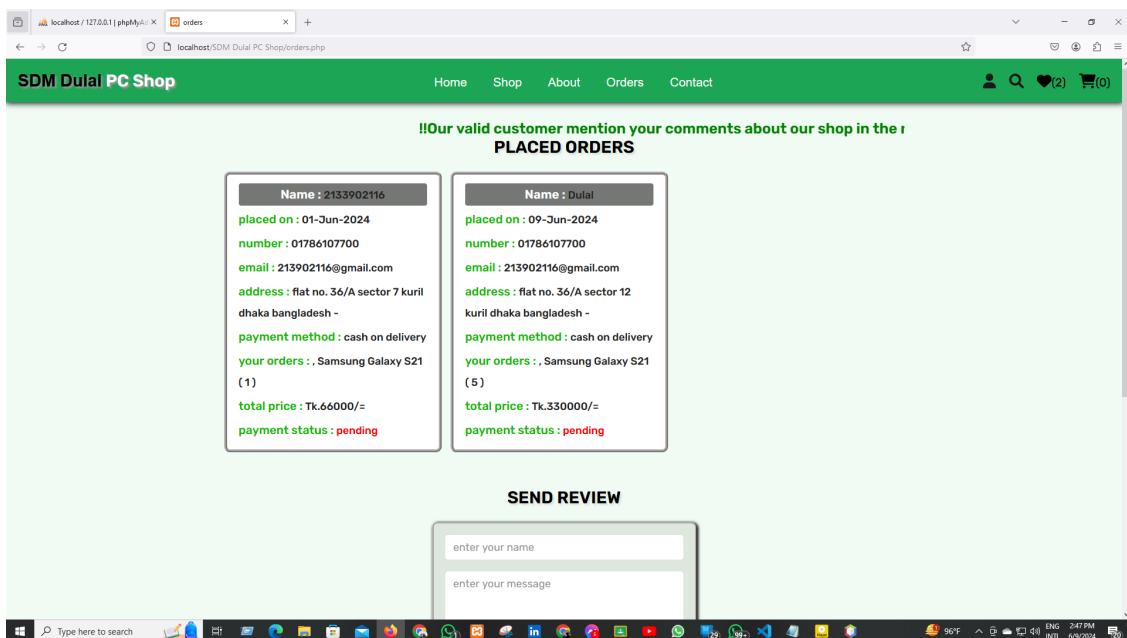


Figure 3.18: Order Show Part .

In this Figure 3.17 , we see that user place the order. in figure 3.18 we see that in admin page the order list see the our order in figure 3.16, 3.17. so tell that our project work successfully.

3.2.19 Result_portion_Admin Ordered Page

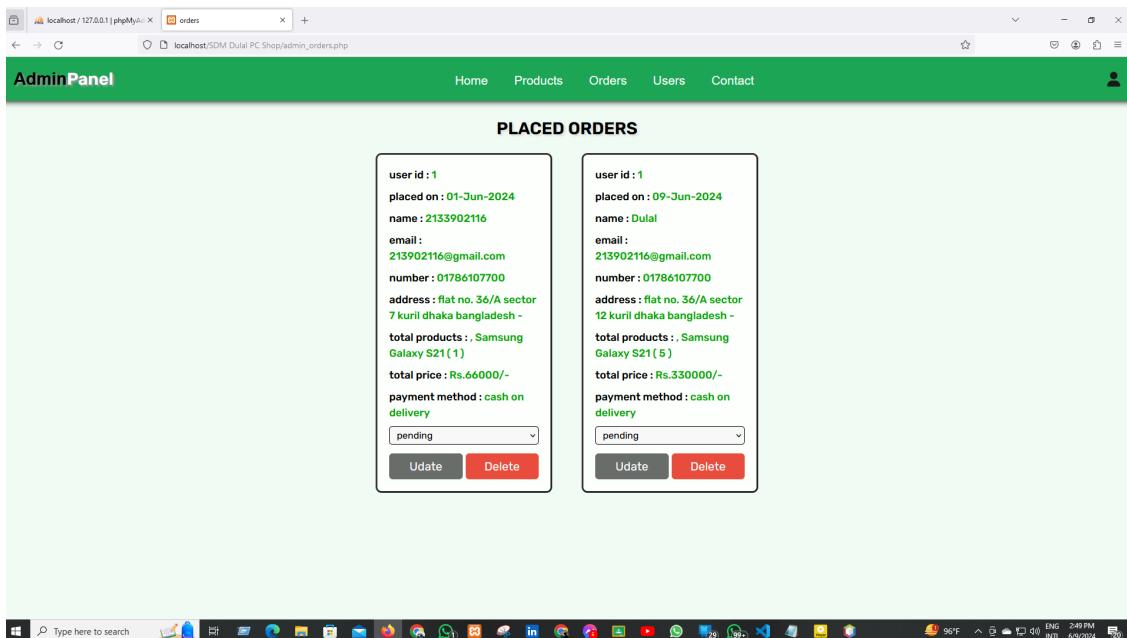


Figure 3.19: Admin Ordered Page Part .

In this Figure 3.19 ,see that admin accept the ordered from the user and he update the status list .like pending or completed . so tell that our website 100 percentage work successfully.

3.3 Results Overall Discussion

The successful culmination of the SDM Dulal PC Shop website project stands as a testament to meticulous planning and execution, underscored by stringent testing methodologies. Extensive unit and integration testing rigorously assessed each component, affirming their flawless operation. User acceptance testing further validated the website's intuitive interface and responsiveness, solidifying user satisfaction. Evaluations in performance and security bolstered the platform's ability to scale and resist potential threats, establishing a robust defense infrastructure. Ultimately, the project achieved its goals seamlessly, delivering a reliable, secure, and user-friendly e-commerce platform. To ensure the platform's ongoing effectiveness, a framework for continuous monitoring and maintenance has been implemented, guaranteeing sustained efficiency for all users. This comprehensive approach underscores a commitment to excellence, reinforcing the platform's position as a dependable and secure avenue for online commerce. By prioritizing ongoing vigilance and upkeep, the project team ensures that the website remains resilient and responsive to the evolving needs of its users, thereby upholding its reputation as a trusted destination for purchasing PC-related products.

Chapter 4

Conclusion

4.1 Discussion

The SDM Dulal PC Shop e-commerce project is a valuable tool for businesses aiming to establish an online presence and expand their market reach. The application offers a user-friendly interface for both customers and administrators and is designed to scale with business growth. I am confident that SDM Dulal PC Shop will be a valuable asset in the digital marketplace.

4.2 Practical Implications

The SDM Dulal PC Shop e-commerce project has several practical implications that can positively impact the efficiency and productivity of online store operations. Some of the practical implications of implementing this project are as follows:

1. Streamlined Product Management
2. Enhanced User Experience
3. Improved Sales Tracking and Analysis
4. Efficient Order Processing
5. Enhanced Customer Engagement
6. Secure Transaction Processing

In summary, the practical implications of the SDM Dulal PC Shop e-commerce project include optimized product management, enhanced user experience, improved sales tracking and analysis, efficient order processing, enhanced customer engagement, and secure transaction processing. These implications contribute to overall operational efficiency, customer satisfaction, and business success.

4.3 Limitations

1. **Scalability:** Challenges may arise in handling increased user traffic and data loads, impacting system performance.
2. **Data Quality:** Reliability depends on accurate product information and user-provided data, affecting order accuracy and customer satisfaction.

3. **Security Risks:** Despite encryption measures, continuous monitoring is essential to address emerging threats and vulnerabilities.
4. **Technical Dependencies:** Integration with third-party services introduces dependency on external providers, potentially affecting system reliability.

Recognizing these limitations allows for strategic planning and continuous improvement efforts to address and mitigate potential issues in the SDM Dusal PC Shop e-commerce platform.

4.4 Scope of Future Work

The SDM Dusal PC Shop e-commerce platform can be enhanced in the following ways:

1. Integration of Advanced Search Functionality to improve product discovery.
2. Implementation of Recommendation Systems to personalize the shopping experience for users.
3. Integration with Payment Gateways to support multiple payment methods and enhance transaction security.
4. Development of Mobile Applications to provide a seamless shopping experience on mobile devices.
5. Implementation of a Loyalty Program to incentivize repeat purchases and customer retention.
6. Introduction of Social Media Integration to allow users to share product recommendations and reviews.

These enhancements will further elevate the SDM Dusal PC Shop e-commerce platform, making it more competitive in the digital marketplace and better meeting the evolving needs of users.

4.5 References

1. <https://www.w3schools.com/>
2. <https://www.tutorialspoint.com/>
3. <https://www.javatpoint.com/>
4. <https://www.geeksforgeeks.org/>
5. <https://www.udemy.com/course/>
6. <https://www.tutorialrepublic.com/>