“Shokher Mart” E-COMMERCE WEBSITE

BY

ANINDHO BISWAS

ID: 192-15-13345

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

Supervised By

Nishat Sultana
Senior Lecturer
Department of CSE
Daffodil International University

Co-Supervised By

Zerin Nasrin Tumpa
Senior Lecture
Department of CSE
Daffodil International University

DAFFODIL INTERNATIONAL UNIVERSITY
DHAKA, BANGLADESH
DECEMBER 2019

APPROVAL

This Project titled "Shokher Mart" E-COMMERCE WEBSITE, submitted by Anindho Biswas to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 06 August 2023.

BOARD OF EXAMINERS

Dr. S.M Aminul Haque (SMAH) **Chairman**
Associate Professor and Associate Head
Department of CSE
Faculty of Science & Information Technology
Daffodil International University

Nazmun Nessa Moon (NNM) **Internal Examiner**
Associate Professor
Department of CSE
Faculty of Science & Information Technology
Daffodil International University

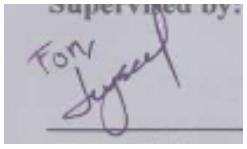
Md Hafizul Imran (MHI) **Internal Examiner**
Senior Lecture
Department of CSE
Faculty of Science & Information Technology
Daffodil International University

Dr. Md. Arshad Ali (DAA) **External Examiner**
Professor
Department of CSE
Hajee Mohammad Danesh Science & Techonology University

DECLARATION

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

Supervised by:

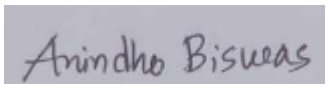


Nishat Sultana
Senior Lecturer
Department of CSE
Daffodil International University

Co-Supervised by:

Zerin Nasrin Tumpa
Senior Lecturer
Department of CSE
Daffodil International University

Submitted by:



Anindho Biswas
ID: 192-15-13345
Department of CSE
Daffodil International University

ACKNOWLEDGEMENT

First, I express our heartiest thanks and gratefulness to almighty God for His divine blessing makes us possible to complete the final year project/internship successfully.

I am really grateful and wish our profound our indebtedness to **Nishat Sultana**, **Senior Lecturer**, Department of CSE, Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of "*Web Development*" to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior drafts and correcting them at all stage have made it possible to complete this project.

I would like to express our heartiest gratitude to **Dr. Touhid Bhuiy**, 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.

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

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

ABSTRACT

E-commerce's explosive rise has changed how consumers and firms conduct business. The growth of internet marketplaces has given buyers and sellers a quick and easy way to connect and complete deals. In keeping with this development, the project's goal is to create and launch "**Shokher Mart**" an e-commerce website that supports both **B2B (Business to Business)** and **C2C (Customer to Customer)**. "**Shokher Mart**" is an interactive e-commerce solution for users where they can easily buy and sell their product. This website has divided into two modules. First module, includes user module. And the second module, includes admin module. The user module is for consumer and seller. The seller has to register to open an account for the shop where he or she can advertise the product. The consumer can view details of the product and he/she can be able to buy products as his/her desire. Consumer has to pay for the product and provide the delivery charge as distance. On the other hand, the admin module is for developer. It has access to the admin panel where they have the ability to add, delete and update any information. So that, it has many shops to sell their product. For **B2B** and **C2C** platform, it has the opportunity for both small and big businessman to grow their business.

TABLE OF CONTENTS

CONTENTS	PAGE
Board of examiners	ii
Declaration	iii
Acknowledgements	iv
Abstract	v
CHAPTER	
CHAPTER 1: INTRODUCTION	**1-2**
1.1 Introduction	1
1.2 Objectives	1
1.3 Motivation	2
1.4 Expected Outcome	2
1.5 Project Management and Finance	2
CHAPTER 2: MARKET ANALYSIS AND BUSINESS PLAN	**3-4**
2.1 Preliminaries	3
2.2 Market Analysis	3
2.3 Related Works	3
2.4 Competitor Analysis	4
CHAPTER 3: WEB DEVELOPMENT	**5-7**

3.1 Web Development 5

3.2 Website 6

3.3 Webpage 7

CHAPTER 4: STEPS FOR BUILDING WEBSITE **8-18**

4.1 User Interface (UI) **8**

4.1.1 HTML 8

4.1.2 CSS 9

4.1.3 JavaScript 10

4.1.4 PHP 12

4.2 Scripting 13

4.2.1 Server-side-scripting 13

4.2.2 Client-side-scripting 14

4.3 Database 17

CHAPTER 5: DATA FLOW DIAGRAM **19-21**

CHAPTER 6: IMPLEMENTATION AND TESTING **22-26**

6.1 Website Implementation 22

6.2 Testing 22

CHAPTER 7: CONCLUSION **27**

7.1 Future scope 27

7.2 Conclusion 27

REFERENCES **28-29**

LIST OF FIGURES

FIGURES	PAGE NO
Figure 2.1: Market share	3
Figure 2.2: E-commerce website market share	4
Figure 4.1: A simple HTML code	8
Figure 4.2: A simple CSS code	9
Figure 4.3: A simple JavaScript code	10
Figure 4.4: Language uses for Server-side Scripting	13
Figure 4.5: A comparative image for Scripting	14
Figure 4.6: Database Management System	15
Figure 5.1: 0-level DFD	16
Figure 5.2: Level-1 DFD	18
Figure 5.3: Level-2 DFD	19
Figure 6.1: Website home page	22
Figure 6.2: Login panel	24
Figure 6.3: Order Placement	25
Figure 6.4: Order Details	26

LIST OF TABLES

TABLES	PAGE NO
Table 6.1: Test case	23

CHAPTER 1
INTRODUCTION

1.1 Introduction

The e-commerce sector has experienced rapid expansion and has integrated itself into the global commercial environment. Businesses are realizing the enormous potential of developing an online presence to reach a bigger client base and streamline their operations as online shopping grows in popularity[1]. Over this year e-commerce sector did not as famous in Bangladesh as now. But suddenly this sector becomes sky rocket due Covid lockdown. Back then people used to go outside to buy their necessary product. People like to bargain with the sells man to man oeuvre them for lowering the price. Due to Covid lockdown people did not go outside for marketing. Some people ware so afraid that they did not want any kind of physical contact. For this reason, to solve this problem people dependent on online platform.

"Shokher Mart" is one of the online trustworthy and secure online platforms that we build to provide better service to the consumer. This website is basically for both **B2B(Business to Business) and C2C(Customer to Customer)** service.

1.2 Objectives

Establishing a strong online marketplace that supports both Business to Business (B2B) and Customer to Customer (C2C) transactions is the main goal of ShokherMart. It is building a safe and expandable online store. Creating an intuitive user interface to facilitate easy browsing, product search, and purchase procedures. using a range of payment alternatives to give customers choice and convenience.

According to the 2021 report the e-commerce market size was about Tk 56,870 crore. In 2022, it becomes Tk 65,966 crore market size. Now-a-days B2B (Business to Business) market share is 17.61%. On the other hand, C2C (Customer to Customer) market share is 3.7% and others has rest of them.

1.3 Motivation

Most of us belong from middle class family. We try to earn some money to bear our educational and other expenses. So that, we can help our family and try not be burden of them for finical crises. Moreover, we want to be independent. The best option is business. That is the reason, we seek for opportunity. We invest on small business. On the other hand, we need some trustworthy website which sell product with low price and the product quality have to be good. So, to solve this problem I came out with an idea that a website can provide low price product and the quality of the product is good. An e-commerce website which can provide authentic product. Besides, it can help the young entrepreneur to create their own shop to show their talent and earn some good money.

1.4 Expected Outcome

The expected outcome is very simple to make profit with our vender. **"Shokher Mart"** is one of the online trustworthy and secure online platforms that we build to provide better service to the consumer. This website is basically for both **B2B(Business to Business) and C2C(Customer to Customer)** service. We want to expend our website name. So that, every small businessman or new entrepreneur can start their business.

1.5 Project Management and Finance

Website will be fast and smooth if it maintains properly. That's why we need to give time and labor to develop the website. Our main targets are the small businessman. They do not want to invest large amount money they would not want to sell their product on this website. But, to build and run this website we need to buy domain and hosting. For overcome this costing and farther maintain the website, we decided to charge 2% from per product sell. As a result, it would not be a hassled for seller to provide such small amount of money. By this way we can maintain our cost and generate profit.

CHAPTER 2
MARKET ANALYSIS AND BUSINESS PLAN

2.1 Preliminaries

Day by day e-commerce platform increasing. It also increases the fraud. People get cheated from many websites. To solve this problem, we came out with an idea to build a secure website. We have to follow some steps to full-fill the project. Initially, we have to make planning for overall project. After, working with the plan for executing the project. Then comes testing. So, build this project we first bought domain and hosting. Without domain and hosting we cannot release the website globally. It will make authenticate.

2.2 Market Analysis

According to the 2021 report the e-commerce market size was about Tk 56,870 crore. In 2022, it becomes Tk 65,966 crore market size. Now-a-days B2B (Business to Business) market share is 17.61%. On the other hand, C2C (Customer to Customer) market share is 3.7% and others has rest of them[2][3].

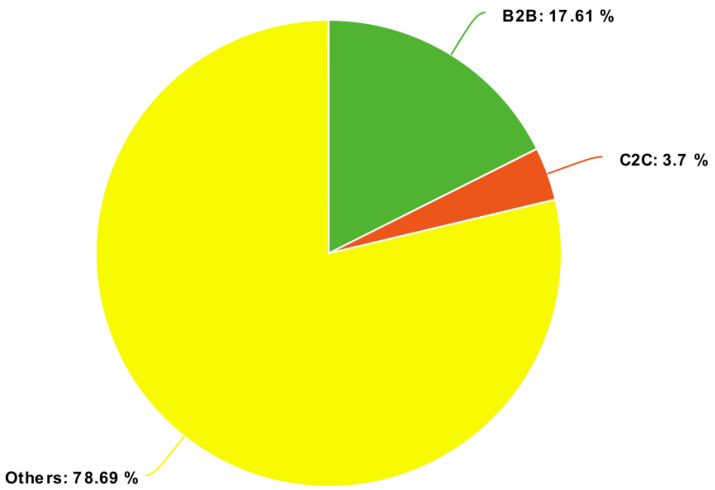


Figure 2.1: Market share

2.3 Related Works

When we analysis the market, we find out that there are many e-commerce websites are available. Some focus on electronics, some on groceries, some on accessories. But among them only **Daraz** has all of these qualities. It provides all kind of services. If you need electronics, you can find it on Daraz. If it is groceries or accessories or whatever you need, we can find it on Daraz.

2.4 Competitor Analysis

Although there are many e-commerce websites are available in Bangladesh. Among all of them the most famous e-commerce website is **"Daraz"**. **"Daraz"** is an international e-commerce website. It is most popular in Asia. In Bangladesh, it has 40% market share in Bangladesh. Its delivery quantity at the retail level every day is assessed at 15,000 to 20,000. We can say it is the shark of e-commerce website. On the other hand, **"Pandamart"** has 15%, **"Chaldal"** has 9% and the rest of 36% has others e-commerce website such as Grammen Mart, Paran Bazar, Gorila, Priyo Shop, Lazz Pherma etc. they are also quite famous website among of them. Though their market share is small, but they are still growing and give them tough competition[4].

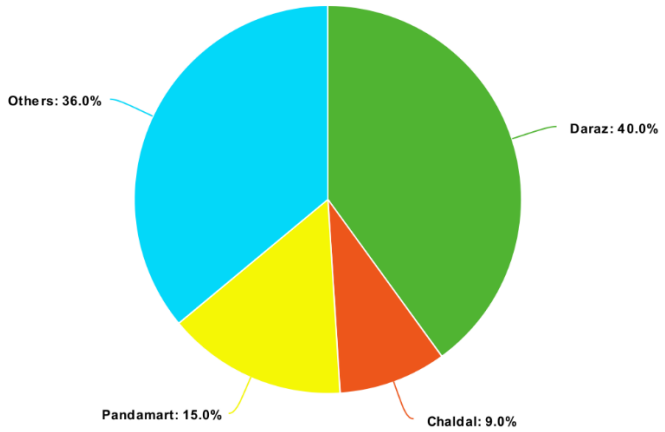


Figure 2.2: E-commerce website market share

CHAPTER 3
DEVELOPMENT

3.1 Web Development

Web development is a dynamic and flexible process that includes the creation, maintenance and development of websites and web applications. It includes a combination of programming languages, frameworks and tools to bring digital ideas to life on the Internet. Skilled web designers use HTML, CSS, and JavaScript to create the structure, style, and interactivity of their websites[5]. They leverage frameworks like React, Angular, or Vue.js to simplify development and create rich, responsive user experiences.

Back-end web development involves using server-side languages such as Python, PHP, or Node.js to manage data storage, transactions, and server interactions. Additionally, web developers often use databases, APIs, and content management systems (CMS) to manage content, improve performance, and integrate external service[6]. As web technology continues to evolve, it is essential to update and use best practices for web developers to create secure, scalable and web solutions[7].

3.2 Web Site

A website is a digital platform that allows a person, business or organization to establish an online presence and communicate with a global audience. It works as a virtual representative of their identity, product or service on the Internet. Websites are designed and built using various technologies such as HTML, CSS and JavaScript to create design, layout and interactive content.

They provide information, attract visitors with multimedia content, and provide functions such as e-commerce, information and user registration. Websites can range from simple one-page websites to complex websites with multiple pages and complex functions. They can be accessed through a web browser, allowing access across different devices and platforms. A well-designed website combines beauty, usability

and functionality to create a seamless and seamless user experience. Additionally, websites play an important role in digital marketing strategies, search engine visibility, and building trust online.

A website can serve many purposes, depending on the owner's needs and goals. They can be informative by providing content such as articles, blogs, news updates, and educational resources. Businesses, news organizations, schools, and personal bloggers often use these sites to share information and interact with their audience.

E-commerce site is specially designed for online shopping and commerce. There are product listings, shopping carts, payment gateways, and management systems that allow businesses to sell products or services directly to consumers over the Internet. E-commerce sites have changed the way people shop by providing ease and accessibility to purchase a variety of products from all over the world[8].

Social networking sites focus on collaboration and collaboration between users. They often include forums, community discussions, user-generated content, and messaging to facilitate communication and build online communities around interests. These sites range from hobby forums to professional forums and online support communities.

Additionally, websites may contain multimedia content such as images, videos, audio files, and interactive features to enhance the user experience. They can be optimized for mobile devices to enable smooth browsing on smartphones and tablets. In addition, the website is designed to expand its functionality and add maps, social networking, payment gateway, etc. It can integrate with third-party services, APIs (application programming interfaces), and plugins to provide additional features such as maps, mobile communications, payment gateways, and more.

Design and user experience play an important role in web development[9]. A website should have good visual appeal, easy to understand and fast load times to attract and retain visitors. Responsive design allows a website to adapt to different screen sizes and devices and is essential for a consistent experience across platforms.

Security is another important aspect of web development. Websites should use measures such as SSL certificates, secure access and data encryption to protect user data and prevent unauthorized access. Regular updates and maintenance are required to keep the website secure and meet the latest technologies and web standards.

Overall, the web is a powerful tool for communication, information sharing, online marketing, and community building. They have become an integral part of our daily lives, allowing us to access information, connect with others, and explore many online services and resources.

3.3 Web Page

A website is a document or file on the web that displays certain content and acts as the building block for the entire website structure. It is a standalone unit that can be accessed directly from a URL or linked to another web page. Most web pages are created using HTML (Hypertext Markup Language), CSS (Cascading Style Sheets), and JavaScript to define the structure, layout, and interaction of the content. They can contain various elements such as text, images, videos, text, buttons, and hyperlinks that allow users to navigate and interact with the information presented[10]. Web pages can be static, where content remains constant over time, or dynamic, where content can be created or modified based on user input or external data.

Each web page has its own unique URL that provides direct access to certain content on the site. A well-designed website combines beauty, usability and functionality to provide visitors with an engaging and effective experience.

CHAPTER 4
STEPS FOR BUILDING WEBSITE

4.1 User Interface (UI):

The user interface consists of the visual design, layout, and interactive elements of the website that users see and interact with. It includes:

HTML (Hypertext Markup Language): HTML is a standard markup language used to create web content. It defines the layout and organization of text, images, links, and other media on a web page.

CSS (Cascading Style Sheets): CSS is used to control the rendering and styling of web pages. It makes your website more interactive and beautiful by allowing you to define colors, fonts, spacing and other aspects of your website.

JavaScript: JavaScript is a scripting language that enables the interaction and behavior of web pages. It can be used to create interactive information, manage user input, use data, create animations and improve user experience.

4.1.1 HTML

Hypertext Markup Language (HTML) is a markup language widely used in web development. It serves as the backbone of a web page, providing the necessary structure and formatting instructions for the presentation content. HTML works with Cascading Style Sheets (CSS) and scripting languages to create visually appealing, interactive websites. It allows developers to define the structure, hierarchy and meaning of various elements of a web page. Using tags, attributes, and hierarchies, HTML allows developers to organize and present information in a consistent and efficient way. Using HTML, developers can create responsive web pages between different devices and browsers, allowing users to use the Internet seamlessly[11].

HTML markup consists of a set of elements, tags, and attributes that define the structure, content, and presentation of a web page. Some important aspects of HTML markup include: elements, tags, and attributes together define the structure, content, and presentation of web pages, enabling developers to create rich, interactive web experiences.

```html
<!DOCTYPE html>
<html>
<head>
  <title>My Web Page</title>
</head>
<body>
  <h1>Welcome to My Web Page</h1>
  <p>This is a sample paragraph on my web page.</p>
  <img src="image.jpg" alt="Example Image">
</body>
</html>
```

Figure 4.1: A simple HTML code

4.1.2 CSS

Cascading Style Sheets (CSS) are a format used to describe the appearance of documents written in HTML or XML. It provides rules and tools that define what the content on a web page should do. CSS allows web designers and developers to control layouts, colors, fonts and other aspects of visual design, making it essential for creating beautiful and consistent web pages[12].

CSS lets you apply styles to various HTML elements such as paragraphs, paragraphs, images, and links. Font family, font size, color, background, margin, padding, etc. You can set things like CSS also provides flexibility by allowing you to define global styles or target specific elements using classes or IDs.

CSS supports the replace and reuse design style, separating the presentation style (CSS) from the style (HTML). It provides consistency across multiple pages and provides the ability to easily customize the look of your website.

CSS can be written in a separate external document or embedded in an HTML document using the <style> tag. Additionally, CSS supports various selectors and cascading rules that allow you to target and style elements based on their relationships within the document.

In summary, Cascading Style Sheets (CSS) is a powerful language that can improve the visual design and presentation of web pages. It enables web designers to create beautiful and user-friendly websites by defining patterns and designs, separating design from content, and maintaining consistency across different pages.

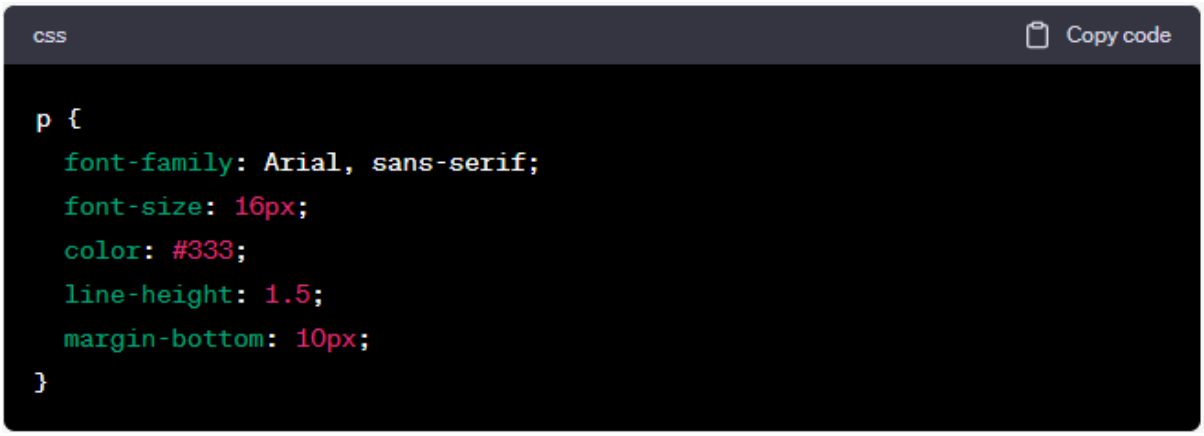


Figure 4.2: A simple CSS code

This short CSS snippet shows you how to style a message group by specifying multiple properties. Note that CSS can be used to create different elements and customize their appearance according to your design preferences.

By integrating CSS into your HTML page, you can control images and create a more visual and customized look for your content.

4.1.3 JavaScript

JavaScript is an advanced programming language used to add interactivity, functionality, and behavior to web pages. It runs primarily in web browsers and allows developers to manipulate HTML content, manage user interactions, perform calculations, perform network requests, and more.

Using JavaScript, you can create dialogs that take advantage of user inputs, create dynamic content that is updated over time, use web design by customizing the content according to size, and improve the user experience with animations and visual effects[13].

JavaScript provides rich features and functions that allow you to do many things. It also supports the use of external libraries and frameworks to simplify and expand its work. One of the main features of JavaScript is that it can interact with HTML and CSS. You can use JavaScript to access and modify HTML elements, change their structure, add or remove classes, and even dynamically create new elements. 98.7% of websites use JavaScript for client-side webpage behavior. JavaScript also supports event-driven programming, which allows you to listen for and respond to various events triggered by user actions or process events. This allows you to build interactive and responsive web applications.

In a nutshell JavaScript is a versatile programming language that allows web developers to create dynamic and interactive web pages. It improves user experience, supports real-time updates, and provides various features to make web applications more powerful and attractive.

javascript Copy code

```javascript
function greet(name) {
  console.log("Hello, " + name + "!");
}

greet("John");
```

Figure 4.3: A simple JavaScript code

This short JavaScript snippet shows the basics of the function, how to define and call it, and how to use the 'console.log' statement to display the output. JavaScript allows you to perform many tasks, manage data, control execution flow, and interact with HTML elements to create dynamic and interactive web pages.

4.1.4 PHP

PHP (Hypertext Preprocessor) is a popular server-side scripting language designed for web development. It is widely used to create dynamic web pages and build powerful web applications. PHP is embedded in HTML code and is executed on the server, producing HTML output that is sent to the user's browser. Here are some key features of PHP:

Syntax and features: PHP uses C-like syntax and is easy to learn for developers familiar with C, Java, or other C-style languages. It provides a variety of functions including variables, arrays, functions, loops, events, data manipulation, regular expressions, and more. PHP also supports project orientation, allowing reusable and flexible code generation.

Dynamic Web Pages: PHP creates dynamic web pages by embedding PHP code in HTML. This includes server-side calculations of HTML content, database queries, user input, etc. allows it to be created dynamically based on Using PHP, you can easily integrate data from databases, manage form submissions, and create personalized web experiences.

Database interaction: PHP has extensive support for interacting with databases. MySQL, PostgreSQL, Oracle, etc. It provides functionality and connectivity to popular databases such as Using PHP, you can perform database queries, store data, insert or update data, and manage transactions, making it a powerful tool for building databases.

Integration and Extensibility: PHP can be integrated with other technologies and services. It supports multiple communication methods, including HTTP, FTP, and SMTP, allowing you to interact with remotes and APIs. PHP is extended with libraries

and frameworks such as Laravel, Symfony, and CodeIgniter, which provide additional functionality, tools, and abstractions to develop and improve good math.

PHP is widely used in the web development industry and supports many websites and web applications. Its versatility, ease of use and wide ecosystem make it a popular choice for creating dynamic and interactive web experiences.

4.2 Scripting

Script refers to programming languages and scripts used to add functionality and interactivity to websites. Some of the most commonly used scripting languages are:

JavaScript: As mentioned earlier, JavaScript is a versatile scripting language used to create interactive content and add functionality to websites.

PHP: PHP (Hypertext Preprocessor) is a server-side scripting language widely used in Web development. It allows you to create dynamic content, manipulate data, interact with databases and perform other external tasks.

Python, Ruby or other scripting languages: Depending on your preferences and needs, you can also use other scripting languages to create custom functionality for your website.

4.2.1 Server-side scripting

Server-side scripting means processing scripts on the server, generating dynamic content or server-side functions, and then posting the results to the user's website. Unlike client-side scripting that runs in the user's browser, server-side scripting happens on the server hosting the website. It involves using a scripting language such as PHP, Python, Ruby or Node.js to manage external processes.

Dynamic content generation: Server-side scripting allows the server to generate dynamic content based on user requests and other factors. It allows the server to retrieve

data from the database, process the data, and generate HTML or other output to send back to the client's browser.

Database Interaction: Server-side scripts frequently interact with databases to store and retrieve information. The external script can do things like store user data, store product details, or manage user time by connecting to the database.

Form Processing: Server-side scripts process form submissions from users, validate input data, complete as appropriate or calculated, and store or make available the information on the server.
User authentication and session management: Server-side scripts are often used to implement user authentication. Allows authentication of user credentials and management of user sessions to secure access to restricted areas of the website.

It provides the ability to create server-side scripting, manipulate data, generate dynamic content, and perform various server-side operations, enabling the creation of powerful and efficient web applications. It completes client-side typing by performing server-side tasks and providing secure data processing and storage.

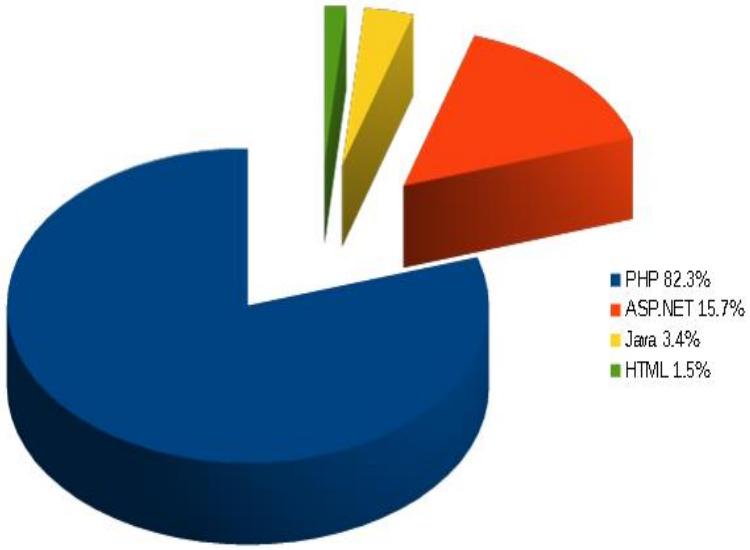


Figure 4.4: Language uses for Server-side Scripting

4.2.2 Client-side scripting

Client-side scripting refers to executing scripts on the client side of the web rather than on the server. It includes the use of scripting languages, usually JavaScript, to improve the functionality and interaction of web pages. Client-side scripts are downloaded and executed by the browser, providing updates and interactions without server communication.

JavaScript is the most widely used language for external scripting. It provides various functions and APIs that allow developers to manipulate HTML content, manage user events, make HTTP requests, perform calculations, and manipulate the content of web pages.

Improve User Experience: User-side scripts enhance user experience by enabling dynamic and interactive features. It lets you create form validations, make in-form updates, create dynamic content loading, use image sliders, create animations and transitions, and enable responsive behavior, among many other things.

Client-side scripting can respond to various user events such as mouse click, keyboard input, form submission, and page load. Event handlers are attached to HTML elements and allow you to define actions or tasks that must be performed when certain events occur.

Browser Compatibility: Client-side scripting is dependent on the web browser's ability to handle scripts. All major web browsers support JavaScript, which makes user-side scripting widely available across platforms and devices.

Client-side scripting allows web developers to create interactive, responsive and dynamic web pages directly for the user's browser. It can provide a better user experience and enable faster, more interactive web applications by reducing reliance on server-side interactions.

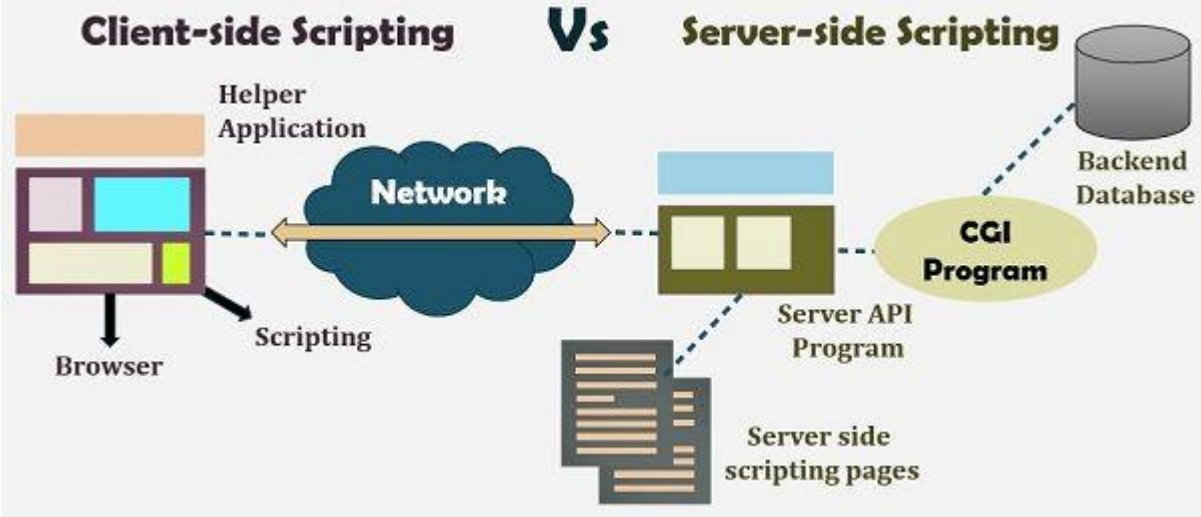


Figure 4.5: A comparative image for Scripting[14]

4.3 Database

Databases are used to store and store information for your website. It allows you to manage and edit information such as user accounts, product details, blog posts and more. Some of the most commonly used databases in web development are:

MySQL: MySQL is an open-source relational database management system (RDBMS) widely used in web development. It provides a reliable and scalable solution for storing and storing necessary information.

PostgreSQL: PostgreSQL is another popular open-source RDBMS known for its advanced features and powerful database.

MongoDB: MongoDB is a NoSQL database that offers flexibility and scalability and is particularly suitable for handling large or semi-structured data.

SQL Server, Oracle or other database systems: Depending on your needs and the technology you use, you can choose another database system that suits your needs.

These components work together to create an efficient and powerful website. The user interface determines the look and feel of the site, the scripting language adds interactivity and functionality, and provides database and data management. By

combining these elements well, you can create a website that works well and is attractive to your users.

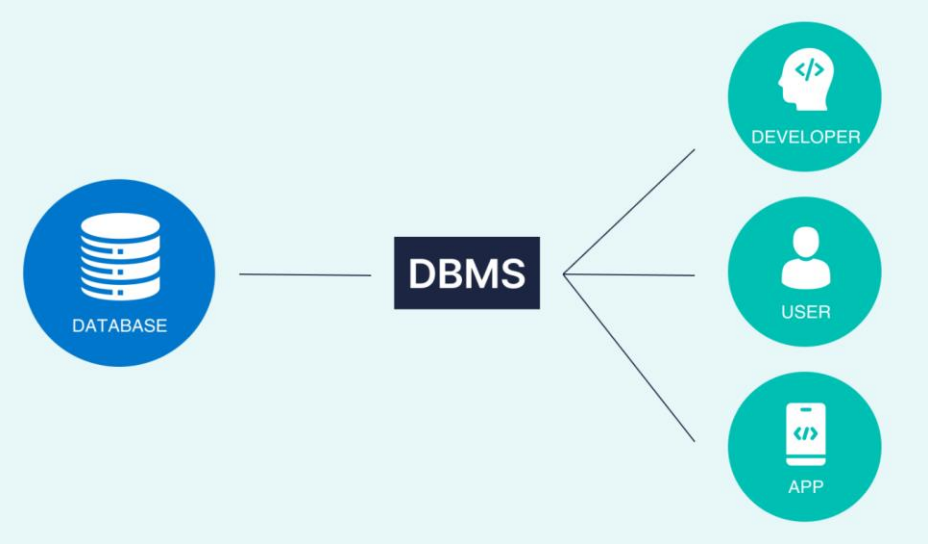


Figure 4.6: Database Management System[15]

A database management system (DBMS) is software that provides systematic management, organization, storage and retrieval of data. It provides an interface to interact with data and provides tools and functionality to help you manage data effectively. The following are some of the important features of a database management system (DBMS):

Data organization: A DBMS helps organize data into organized structures. Allows creation of tables with rows (data) and columns (fields). A DBMS provides control over data integrity, consistency, and rules defined in the database system.

Data storage and retrieval: DBMS works well for storing and retrieving data. It manages the physical storage of data files on disk or other storage and provides a mechanism to store certain data based on queries or transactions.

Data Query and Manipulation: DBMSs provide queries such as SQL (Structured Query Language) for interacting with databases. Developers and users can write queries to retrieve, update, insert or delete data in the database. The DBMS optimizes and executes these queries to provide efficient and accurate results.

DBMS examples include MySQL, Oracle Database, Microsoft SQL Server, PostgreSQL, and MongoDB, each with their own features and benefits for different applications. DBMSs play an important role in today's applications by supporting data-driven transactions, decision making and efficient data management. It provides data integrity, security and ease of access while providing powerful tools and capabilities to manage and manage large amounts of data.

CHAPTER 5
DATA FLOW DIAGRAM

DFD (Data flow diagram) is a diagram that describes the flow of data in a system or process. It explains how information moves from an input to various processes and finally to an output. DFD is often used in analysis and design to understand, document and communicate the flow of data and the interactions between different components of a system.

A typical data diagram contains the following objects: External Entities, Processes, Data Flows, Data Stores and Relationships. DFD helps to visualize the entire data flow and understand the relationship between different components in the system. They help identify data dependencies, potential bottlenecks, and areas for optimization or improvement.

DFDs can be created at different levels of abstraction, including summary-level DFDs that provide a high-level overview of the process, and detailed DFDs that provide a view of the process standard specification and data flow. Using DFDs, analysts and designers gain an understanding of how information is processed and transformed in the system, enabling communication quality and control throughout the development lifecycle.

A context/ 0-level DFDs provides a high-level overview of the system or process, showing the interactions between the system and external resources. It represents the system as a process and shows the flow of data entering and leaving the system.

Content-level DFDs provide a simple view of the data flow and its interactions with external resources. It helps stakeholders understand system boundaries, key concepts and outputs without going into internal processes or data changes.

Content-level DFDs are the basis for creating detailed DFDs that break down processes into smaller operations and provide a deeper understanding of the operation of systems and materials. Here is an example of a content-level DFD:

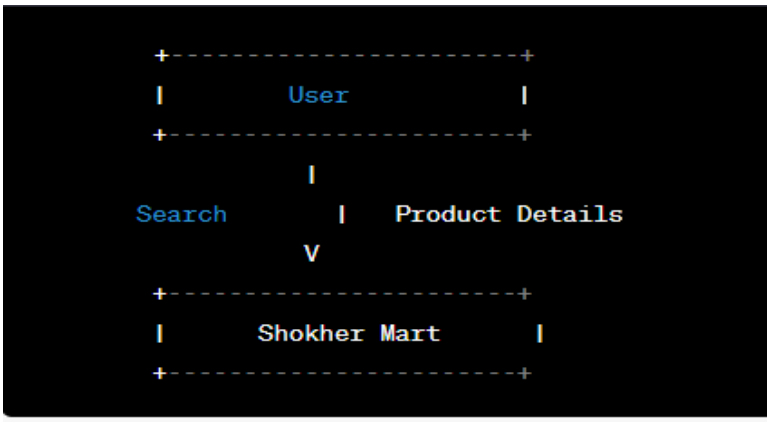


Figure 5.1: 0-level DFD

Level 1 DFD provides a high-level overview of the information flow and interactions between the various components in the system. It captures key ideas, actions, and outputs, but does not provide details about internal processes or data changes.

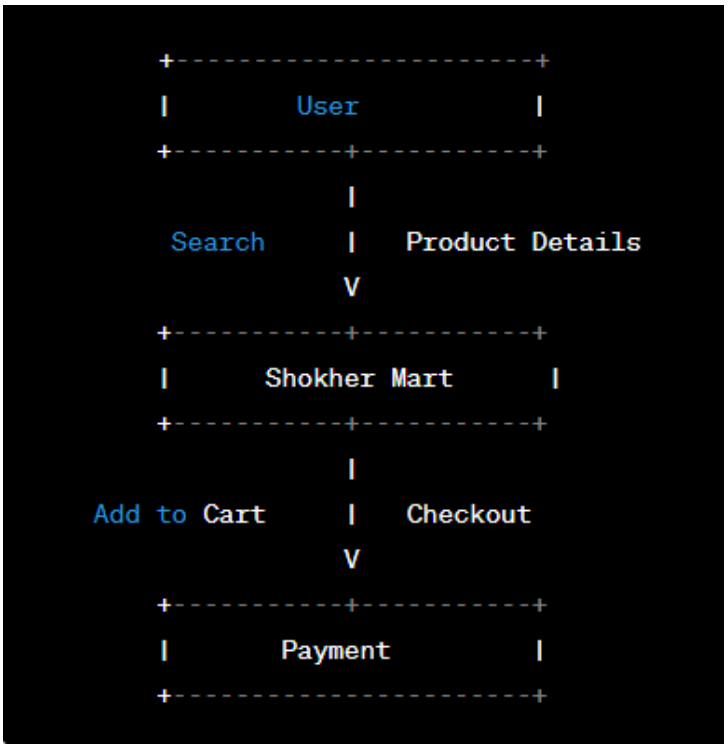


Figure 5.2: Level-1 DFD

Level-2 DFD provides a more detailed description of the information flow and interactions in the system by dividing the process into functional processes or tasks. It helps identify relationships and dependencies between different components and provides a better understanding of how the body works.

Figure 5.3: Level-2 DFD

The third level DFD provides a more detailed view of the system by breaking down business processes or business tasks in more detail. It helps to capture specific functions in a system and their relationships, thus providing a better understanding of the functioning of the body.

CHAPTER 6
IMPLEMENTATION AND TESTING

6.1 Website implementation

To secure this website we use login option. Customize the theme. We take this theme from “Theme Hunk” from wordpress[16-17]. We change is theme code, add plugin and connect it with our domain hosting.

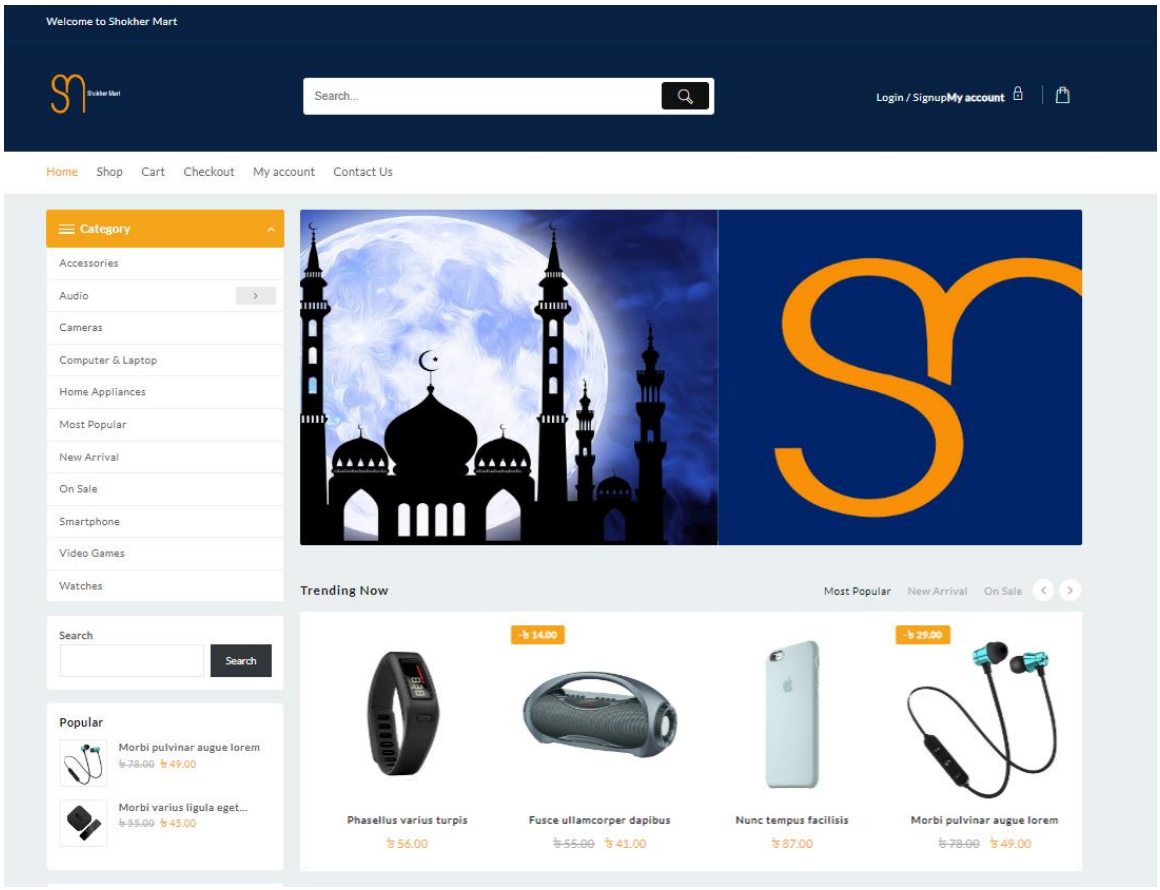


Figure 6.1: Website home page

6.2 Testing

Testing is the process where we can find out the website is proper working or not. Several types of test process are given below.

Test Case	Test Input	Expected Outcome	Obtained Outcome	Result
1. Admin Login	Correct user id and password	Login successful	Login successful	Pass
2. Admin Login	Incorrect user id and password	Login fail	Login fail	pass
3. Add to cart	Select product and add to cart	Add to cart successful	Add to cart successful	pass
4. Checkout	Add to cart product and select checkout	Checkout successful	Checkout successful	Pass
5. Order	Fill up billing details and select place order	Order successful	Order successful	Pass
6. Confirmation mail	Valid mail address and select place order	Get confirmation mail	Get confirmation mail	pass

Table 6.1: Test case

Following the test case for admin panel

Test case 1.1:

Precondition: Device must be connected to the internet.

Assumption: User has opened the website and is on login page.

Input: User pressed “Login” button.

Result: User is logged in to the system.

Test case 1.2:

Precondition: Device must be connected to the internet.

Assumption: User has opened the website and select the product.

Input: User pressed “Add to cart” button.

Result: User is successfully adding the product in “Add to cart”.

Test case 1.3:

Precondition: Device must be connected to the internet.

Assumption: User has opened the website and the product is in “Add to cart”.

Input: User pressed “Checkout” button.

Result: User is successfully checkout the product.

Test case 1.4:

Precondition: Device must be connected to the internet.

Assumption: User has opened the website, fill up the details and give valid mail address.

Input: User pressed “Place Order” button.

Result: User and admin both get confirmation mail.

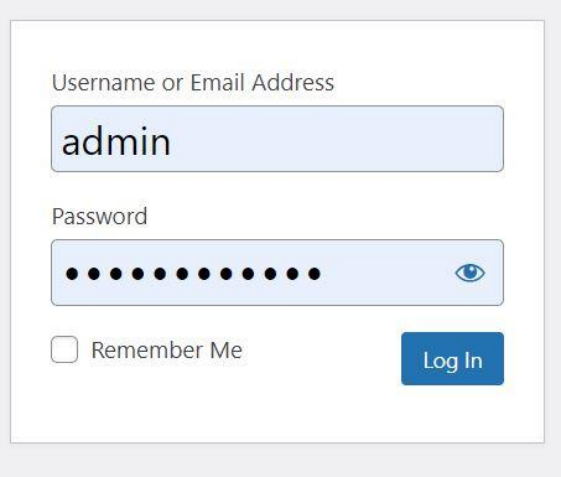


Figure 6.2: Login panel

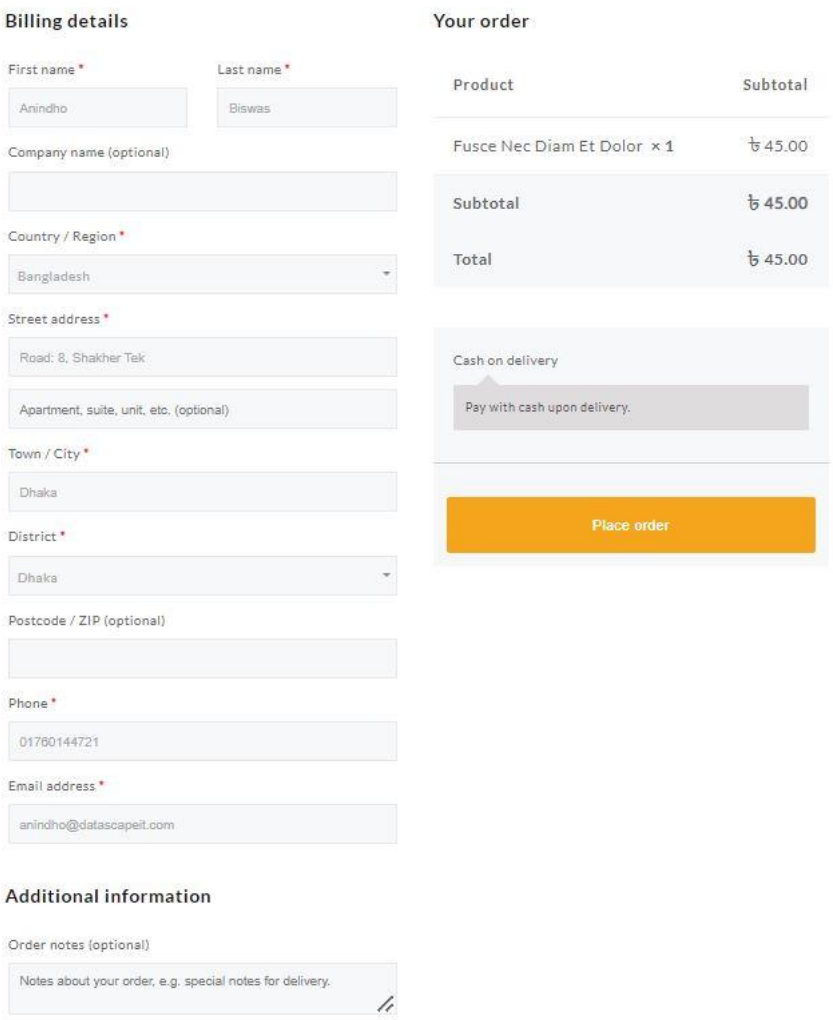


Figure 6.3: Order placement

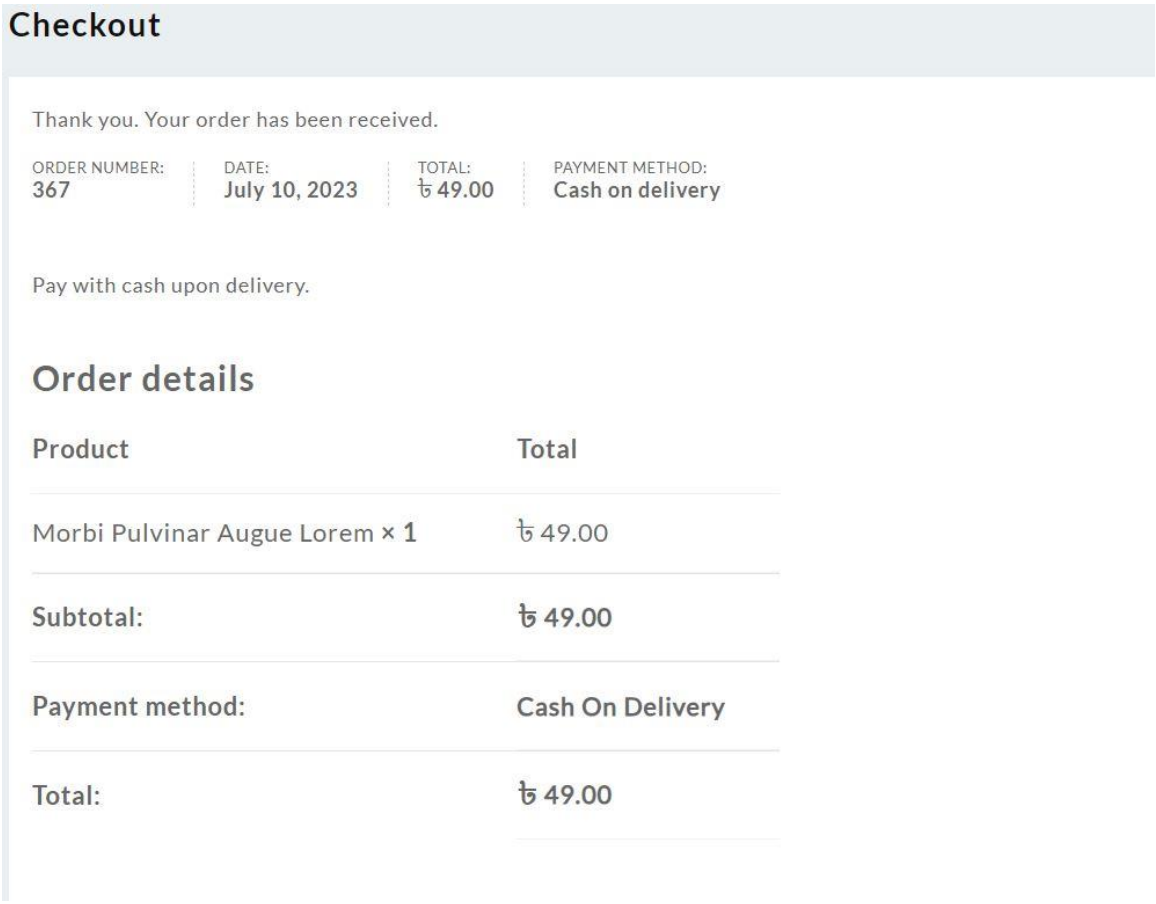


Figure 6.4: Order details

CHAPTER 7
CONCLUSION

7.1 Future scope

Our future goal for this website is to make it multi-vender system. Putting multi-vendor capabilities into place to let various merchants display and sell their goods. It will help to grow our business. Vendor from different places can connect with us. Because of the digitalization, it will help the buyer to grow their business.

7.2 Conclusion

Most of us belong from middle class family. We try to earn some money to bear our educational and other expenses. So that, we can help our family and try not be burden of them for finical crises. Moreover, we want to be independent. The best option is business. That is the reason, we seek for opportunity. We invest on small business. On the other hand, we need some trustworthy website which sell product with low price and the product quality have to be good. So “Shokher Mart” is the perfect opportunity to become trustworthy e-commerce website. It will be beneficial for both buyer and seller.

Reference:

[1] The Financial Express. 'E-commerce in Bangladesh: Where are we headed', 11 January 2022. Available at: https://thefinancialexpress.com.bd/views/views/e-commerce-in-bangladesh-where-are-we-headed-1578666791.

[2] The Business 'Standard. Bangladesh e-commerce sales to more than double by 2026: Research'. Available at: https://www.tbsnews.net/economy/bangladesh-e-commerce-sales-more-double-2026-research-497134.

[3] C2C e-commerce sectors and share (2022). Describes how widely e-Commerce is used, sectors that sell through e-commerce, and products/services in each sector sold versus brick-and-mortar retail. Available at: https://www.trade.gov/country-commercial-guides/bangladesh-ecommerce.

[4] Current E-commerce Industry Scenario in Bangladesh. Brainstation 23. Available at: https://brainstation-23.com/e-commerce-business-scenario-in-bangladesh-2006-to-2018/

[5] Bardia Doosti, David J. Crandall, Norman Makoto Su. "A Deep Study into the History of Web Design." WebSci '17: Proceedings of the 2017 ACM on Web Science ConferenceJune 2017, Pages 329–338

[6] Sašo Tomažič, Jaka Sodnik, M. Jekovec. 2010 "New technologies for web development." Researchgate /228742449

[7] David Botwe. 2015 "International Journal of Computer Science and Mobile Computing A Comparative Study of Web Development Technologies Using Open Source and Proprietary Software." researchgate//272745754

[8] Alqahtani, A., & Goodwin, R. (2012). "E-commerce smartphone application. International Journal of Advanced Computer Science and Applications", 3(8), 54-59.

[9] F. Almeida, José A. Monteiro. December 2017 "The Role of Responsive Design in Web Development." Computer Science, Webology 14(2):48-65

[10] Geetha. S , Shasvat Shah , Harsh Shah. International Journal of Advanced Research in Science, Communication and Technology (IJARSCT) Volume 12, Issue 1, December 2021

[11] Ankush Sharma, Aakanksha, "Introduction to HTML (Hyper Text Markup Language) - A Review Paper. International Journal of Science and Research (IJSR)" ISSN (Online): 2319-7064

[12] Pierre Genevès, “On the Analysis of Cascading Style Sheets.” April 2012 DOI:10.1145/2187836.2187946 Conference: Proceedings of the 21st international conference on World Wide Web

[13] Sanja Delcev; Drazen Draskovic, “Modern JavaScript frameworks: A Survey Study.” Zooming Innovation in Consumer Electronics International Conference 2018.

[14] Difference Between Server-side Scripting and Client-side Scripting. Tech Differences. Available at: https://techdifferences.com/difference-between-server-side-scripting-and-client-side-scripting.html.

[15] Techopedia. Database Management System. Available at: https://www.techopedia.com/definition/24361/database-management-systems-dbms.

[16] Zujaj Misbah Khan, Kamran Rasheed, Muhammad Imran. “Wordpress : A versatile tool for managing contents.” International Journal of Scientific & Engineering Research, Volume 8, Issue 2, February-2017 786 ISSN 2229-5518

[17] Semila Fernandes. “Digital Marketing and Wordpress.” February 2015Indian Journal of Science and Technology 8(4):61-68

rep plag

ORIGINALITY REPORT

13%	11%	0%	7%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Daffodil International University Student Paper	2%
2	dspace.daffodilvarsity.edu.bd:8080 Internet Source	2%
3	Submitted to London Metropolitan University Student Paper	1%
4	www.slideshare.net Internet Source	1%
5	Submitted to University of Westminster Student Paper	1%
6	Submitted to Leeds Beckett University Student Paper	<1%
7	www.thefinancialexpress.com.bd Internet Source	<1%
8	Submitted to Goldsmiths' College Student Paper	<1%
9	jeecs.ubhara.ac.id Internet Source	<1%

10	Submitted to Staffordshire University Student Paper	<1 %
11	designoptimise.com Internet Source	<1 %
12	devanswers.co Internet Source	<1 %
13	www.geeksforgeeks.org Internet Source	<1 %
14	www.hindawi.com Internet Source	<1 %
15	Submitted to Bolton Institute of Higher Education Student Paper	<1 %
16	Submitted to Segi University College Student Paper	<1 %
17	Submitted to University of Western Ontario Student Paper	<1 %
18	www.filemakr.com Internet Source	<1 %
19	Submitted to West Herts College Student Paper	<1 %
20	www.scribd.com Internet Source	<1 %
21	seranking.com	

	Internet Source	<1 %
22	wikimili.com Internet Source	<1 %
23	Submitted to Online Business School - CN-536154 Student Paper	<1 %
24	core.ac.uk Internet Source	<1 %
25	dspace.dtu.ac.in:8080 Internet Source	<1 %
26	fireart.studio Internet Source	<1 %
27	likims.com Internet Source	<1 %
28	www.pubmedcentral.nih.gov Internet Source	<1 %
29	ijircce.com Internet Source	<1 %
30	lbhoover.schoolloop.com Internet Source	<1 %
31	www.irjmets.com Internet Source	<1 %

Exclude quotes	Off	Exclude matches	Off
Exclude bibliography	On		