**Project report on the E-Commerce Website**

Submitted By

Md. Abuessa (19202103265)

Mir Billal Hossen (19202103262)

Md Morshadur Rahman (19202103151)

Md Mehedi Hasan (19202103264)

Md Jubair Hossain (19202103254)

Submitted To

Sadah Anjum Shanto

Assistant Professor

Department of Computer Science & Engineering

(Web Database Programming course in Computer Science Engineering)

Department of Computer Science & Engineering

Bangladesh University of Business & Technology (BUBT)

Dhaka 1216

November 28, 2023

# Acknowledgment

We would like to pay our gratitude to the Almighty Allah who created us with all the abilities to understand analysis and develop the process with patience. We are thankful to our project supervisor Sadah Anjum Shanto, Assistant Professor Computer Science and Engineering Department, Bangladesh University of Business and Technology for his professional guidance and motivation during the work of this thesis which is a major part of it. Without his valuable support and guidance, this thesis could not reach this level of development from our point of view.

We would like to thank all the Faculty members, Department of CSE, Bangladesh University of Business and Technology for their valuable time spend in requirements analysis and evaluation of the thesis work. We would like to express our sincere and warm gratitude to all those who have encouraged us directly, provided mental encouragement and criticized our work in several phases during the development of this thesis and for preparing this thesis indirectly.

# Abstract

E-Commerce Website is basically an e-commerce platform. In today's fast-changing business environment, it's extremely important to be able to respond to client needs in the most effective and timely manner. If your customers wish to see your business online and have instant access to your products or services. This project allows viewing of various products available and enables registered users to purchase desired products by using the Cash on Delivery (Pay Later) option. This project provides easy access to Administrators and Managers to view orders placed using Pay Later and Instant Pay options. n order to develop an e-commerce website, a number of Technologies must be studied and understood. These include multi-tiered architecture, server and client-side scripting techniques, and implementation technologies such as PHP, HTML, CSS, JavaScript, and relational databases. This is a project with the objective to develop a basic website where a consumer is provided with a shopping cart application and also to know about the technologies used to develop such an application. It basically helps Customers who want to buy their products in a user-friendly manner. The customers can simply visit the system, choose products from any category, register for orders, log in to their accounts and finally can make payment of their purchased amount. The customers can edit their order list before order confirmation. It provides 24x7 supports. This document will discuss each of the underlying technologies to create and implement an e-commerce website.

# Declaration

We hereby declare that the Project on E-Commerce Website submitted in partial fulfillment of the Web Database Programming course in Computer Science Engineering of Bangladesh University of Business and Technology (BUBT) is our own work and that it contains no material which has been accepted for the award to the candidate(s) of any other degree or diploma, except where due reference is made in the text of the project. To the best of our knowledge, it contains no materials previously published or written by any other person except where due reference is made in the project.


Md.Abuessa
ID: 19202103265

Mir Billal Hossen
ID:19202103262

Md Morshadur Rahman
ID: 19202103151

Md Mehedi Hasan
ID: 19202103264

Md Jubair Hossain
ID: 19202103254

# Copyright

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# Dedication

*Dedicated to our parents, teachers, friends, Sauda(Sweet mummy) and who loved us for all their love and inspiration.*

# Certificate

This is to certify that Md.Abuessa (19202103265), Mir Billal Hossen (19202103262), Md Morshadur Rahman (19202103151), Md Mehedi Hasan (09202103264) Md Jubair Hossain (19202103254). belonged to the department of Computer Science and Engineering, have completed their Project on Comparison Based studies to Ecommerch Web base using php satisfactorily in partial fulfillment for the Web Database Programming course in Computer Science Engineering Science and Engineering of Bangladesh University of Business and Technology in the year 2023.

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Supervisor
Sadah Anjum Shanto
Assistant Professor
Department of Computer Science and Engineering
Bangladesh University of Business and Technology

# Approval

Md.Abuessa (19202103265), Mir Billal Hossen (19202103262), Md Morshadur Rahman (19202103151), Md Mehedi Hasan (09202103264) and Md Jubair Hossain (19202103254) under the department of Computer Science and Engineering of Bangladesh University of Business and Technology is accepted in partial fulfillment of the Software Development-III course in Computer Science and Engineering.

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Chairman
Md. Saifur Rahman
Assistant Professor and Chairman
Department of Computer Science and Engineering
Bangladesh University of Business and Technology

---

Supervisor
Sadah Anjum Shanto
Assistant Professor
Department of Computer Science and Engineering
Bangladesh University of Business and Technology

# Acronyms List

HTML = HyperText Markup Language

PHP = Hypertext Preprocessor

CSS = Cascading Style Sheets

MYSQL = My Structured Query Language

DBMS = Database Management System

API = Application Programming Interface

UI = User Interface

ERD = Entity Relationship Diagram

SQL = Structure Query Language

GUI = Graphical User Interface

SDLC = Software Development Life Cycle

UML = Unified Modeling Language

DFD = Data Flow Diagram

# Contents

***Acknowledgment*** **i**

***Abstract*** **ii**

***Declaration*** **iii**

***Copyright*** **iv**

***Dedication*** **v**

***Certificate*** **vi**

***Acronyms List*** **viii**

***List of Figures*** **viii**

***List of Tables*** **viii**

**1 Introduction** **1**

1.1 Project aims and objective . . . . . 1

1.2 Features of project . . . . . 2

**2 System Analysis** **3**

2.1 System Specifications . . . . . 3

2.1.1 Hardware Requirements . . . . . 3

2.1.2 Software Requirements . . . . . 3

2.2 Technology, Framework and Tools . . . . . 4

2.3 Modules of E-commerce Store application . . . . . 5
2.4 Use Case Diagram . . . . . 6
2.5 ER Diagram . . . . . 7

**3 System Design Analysis** **8**
3.1 Front-End Design . . . . . 8
3.1.1 HTML . . . . . 8
3.1.2 CSS . . . . . 8
3.1.3 BOOTSTRAP . . . . . 9
3.1.4 JAVASCRIPT . . . . . 9
3.2 Back-End Design . . . . . 10
3.2.1 PHP . . . . . 10
3.2.2 MYSQL . . . . . 10

**4 Proposed Model** **12**

**5 Experimental Results and Evaluation** **13**
5.1 Introduction . . . . . 13
5.2 Result Analysis . . . . . 14

**6 Conclusion and Future Work** **21**
6.1 Conclusions . . . . . 21
6.2 Future Scope of Our Thesis . . . . . 22

# List of Figures


2.1 Use Case Diagram . . . . . 6
2.2 ER Diagram . . . . . 7

5.1 Landing page . . . . . 14
5.2 Product page . . . . . 15
5.3 User Profile . . . . . 16
5.4 After add to card . . . . . 16
5.5 Dicsount . . . . . 17
5.6 Pament Option . . . . . 17
5.7 User panding order . . . . . 18
5.8 Admin profile . . . . . 18
5.9 All admin profile . . . . . 19
5.10 View All product . . . . . 19
5.11 Admin pending order . . . . . 20
5.12 View database . . . . . 20

# List of Tables

# Chapter 1

# Introduction

An E-commerce website requires appropriate strategy of successful design and implementation. Everything is required to plan from scratch to end of website. The e-commerce sector is seen the exponential growth thus a new option will easily part of this regatta of commercial website. The e-commerce website will feature the online shopping facility of various fashion products under a single web space. The proposed web application will allow business personnel to make their total business using it and increase their reach ability thousands of times more than today they have, over the internet. It will allow multiple shopping vendors to sale their products online. The product management in the system will be done in the form of categories. The safety of information is the main requirement of the system and will be handling according to that. To formulate this project first task is to do is cost estimation. For probabilistic assessment of the project cost estimation is required. Cost estimation covers the accurate; estimations of cost and effort required for the project.

## 1.1 Project aims and objective

The project aims and objectives that will be achieved after completion of this project are discussed in this sub chapter. The aims and objectives are as follows:

• To design an online e-commerce system.

• Develop and testing a dynamic e-commerce web application with more user friendly functionality.

- To provides a solution to reduce and optimize the expenses of customer order management
- To create an avenue where people can shop for fashion products online.
- To develop a database to store information on fashion products and services.
- Effective categorical organization of products.
- Simple navigation from home page to information and order links for specific products.
- Obvious shopping links or buttons.
- Minimal and effective security notifications or messages.

## 1.2 Features of project

- User Friendly Homepage.
- Login/Register Area
- User Panel
- Admin Panel
- Easy navigation.
- Search for product.
- Online order processing.
- Add to shopping cart.
- Discount.
- Payment Option.
- Responsive web design
- Safe and Secure data management

# Chapter 2

# System Analysis

## 2.1 System Specifications

### 2.1.1 Hardware Requirements

- Processor - 2.4 GHz Processor speed
- Memory - 2 GB RAM
- Disk Space - 1 GB Storage

### 2.1.2 Software Requirements

- Operating System - Windows 8, 10, 11 or MAC OS 10.8, 10.9, 10.11 or LINUX
- Browser: Chrome, Microsoft Edge, Firefox.
- Database Management System - MySQL, Xampp or MongoDB
- Text Editor - Visual Studio Code or Sublime Text

## 2.2 Technology, Framework and Tools

For this particular project I have selected specific technologies and framework for better workflow. Some technologies included in this project are:

### Front End:

- HTML
- CSS
- BOOTSTRAP
- JAVASCRIPT

### Back End:

- PHP
- MYSQL

For database design I have used relational database management system (RDBMS) as MySQL. Used XAMPP for local host development. For framework I have used the latest advanced PHP framework Laravel (Version 8.1.13)

Tools used in this project:

- VS Code as a code editor
- Xampp for local host development environment
- Github for version control system

## 2.3 Modules of E-commerce Store application

- Login Module
- Registration Module
- Products Browse Module
- Products Search Module
- Shopping cart Module
- Shipping Billing Module
- Payment Module
- Admin User Management Module
- Admin Order Management Module
- Admin Products add edit Module

## 2.4 Use Case Diagram

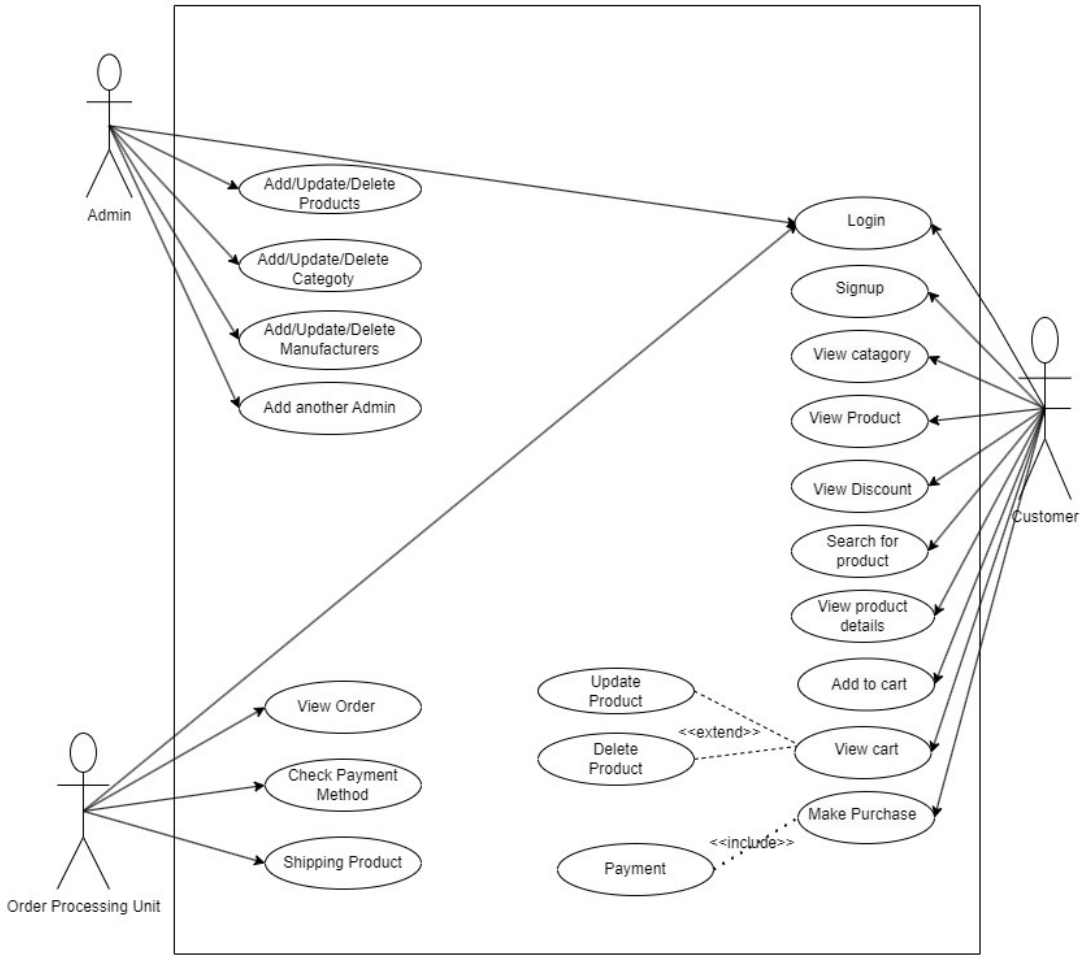


Figure 2.1: Use Case Diagram

## 2.5 ER Diagram

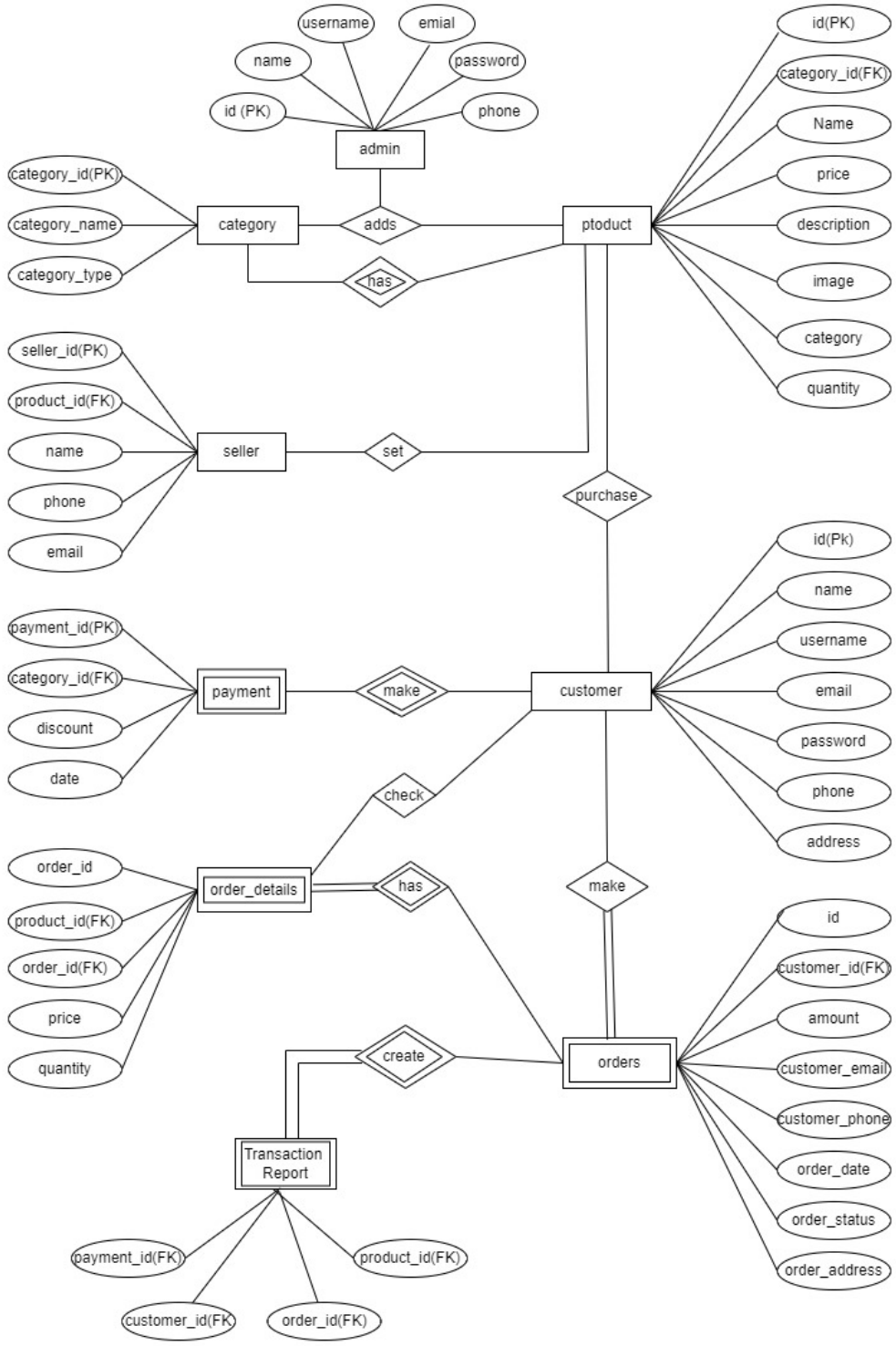


Figure 2.2: ER Diagram

# Chapter 3

# System Design Analysis

## 3.1 Front-End Design

- HTML
- CSS
- BOOTSTRAP
- JAVASCRIPT

### 3.1.1 HTML

Html is an acronym which stands for Hyper Text Markup Language which is used for creating web pages and web applications. It can be assisted by technologies such as cascading style sheets (css) and scripting languages such as javascript. Html is a markup language which is used for creating attractive web pages with the help of styling, and which looks in a nice format on a web browser. An html document is made of many html tags and each html tag contains different content.

### 3.1.2 CSS

Cascading style sheets (css) is a style sheet language used for describing the presentation of a document written in a markup language like html, css is a cornerstone technology of the

world wide web, alongside html and javascript css is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant css in a separate css file and reduce complexity and repetition in the structural content.The name cascading comes from the specified priority scheme to determine which style rule applies if more than one rule matches a particular element. This cascading priority scheme is predictable.

### 3.1.3 BOOTSTRAP

Bootstrap is a powerful toolkit a collection of html, css, and javascript tools for creating and building web pages and web applications. It is a free and open source project, hosted on github, and originally created by twitter. Bootstrap is available in two forms, as a precompiled version, and as a source code version. The source code version uses the less css preprocessor, but if you are more into sass, there is an official sass port of bootstrap also available. To make it easier to make use of css vendor prefixes, bootstrap uses autoprefixer. The source code version comes styles source code written in less (or sass), all the javascript, and accompanying documentation. This allows more ambitious designers and developers to change and customize, at their will, all the provided styles, and to build their own version of bootstrap.

### 3.1.4 JAVASCRIPT

JavaScript is a dynamic computer programming language.It is lightweight and most commonly used as a part of web pages,whose implementations allow client side script to interact with the user and make dynamic pages.It is an interpreted programming language with object oriented capabilities. Client side javascript is the most common form of the language.The script should be included in or referenced by an html document for the code to be interpreted by the browser.It means that a web page need not be a static html, but can include programs that interact with the user, control the browser, and dynamically create html content.The javascript client side mechanism provides many advantages over traditional CGI server side scripts. Javascript can be used to trap user-initiated events such as button clicks, link navigation, and other actions that the user initiates explicitly or implicitly.

## 3.2 Back-End Design

In this project we use two types of language for back-end design. These are mentioned below:

- PHP
- MYSQL

### 3.2.1 PHP

In this project online examination system we use php for back-end design. PHP is a server side scripting language. That is used to develop static websites or dynamic websites or web applications. PHP stands for hypertext pre-processor, that earlier stood for personal home pages. PHP scripts can only be interpreted on a server that has php installed. PHP is especially suited for web development and can be embedded into html. The client computers accessing the php scripts require a web browser only. A php file contains php tags and ends with the extension ".php". A script is a set of programming instructions that is interpreted at runtime. PHP is a server side script that is interpreted on the server while javascript is an example of a client side script that is interpreted by the client browser. Both php and javascript can be embedded into html pages

### 3.2.2 MYSQL

MYSQL is one of the most recognizable technologies in the modern big data ecosystem. Often called the most popular database and currently enjoying widespread, effective use regardless of industry, it's clear that anyone involved with enterprise data or general. It should at least aim for a basic familiarity of mysql. With mysql, even those new to relational systems can immediately build fast, powerful, and secure data storage systems. MYSQL programmatic syntax and interfaces are also perfect gateways into the wide world of other popular query languages and structured data stores. Though mysql relational nature and the ensuing rigid storage structures might seem restrictive, the tabular paradigm is perhaps the most intuitive, and ultimately allows for greater usability. In fact, mysql makes many concessions to supporting the widest possible variety of data structures, from the standard but rich logical, numeric,alphanumeric, date, and time types, to more advanced joson or geospatial data. Beyond mere data types and

an expansive built in feature set, the mysql ecosystem also includes a variety of tools, easing everything from server management to reporting and data analysis

# Chapter 4

# Proposed Model

- After a customer first enters our website, he can view our various products. When a product is liked and added to the card, it needs to create an account. And through this account can make any kind of purchase later.
- Each product is accompanied by a description of the product, such as different colors, different sizes, prices are clearly mentioned, so that the customer does not have any questions.
- When the customer expresses interest in the product, he will be shown the related product that we have in stock.
- When a customer orders a product, the admin will immediately receive a notification to confirm the order. After admin approval, the product code number and other necessary
- If a user has purchased a previous product, he will get a discount according to his previous product.
- The user will have to pay 10 taka VAT for each product purchase.

# Chapter 5

# Experimental Results and Evaluation

## 5.1 Introduction

The result section of an e-commerce project is an important aspect that provides insights into the performance of the platform. In this section, we present the outcome of our e-commerce project, highlighting the key metrics and statistics that demonstrate the success of our efforts. Accompanied by relevant photos, the result section will showcase important information such as the landing page, product page, cart page, payment page, user profile, the number of orders processed, admin profile, pending orders on the admin page, and many other relevant performance indicators. Additionally, the section will discuss any notable trends or changes observed during the project's execution. By presenting the results of our e-commerce project with the aid of photos, readers will have a better understanding of the platform's performance and gain a more profound appreciation for the project's efforts. Ultimately, the result section will provide stakeholders with actionable insights to inform future decision-making and enhance the overall success of the e-commerce platform.

## 5.2 Result Analysis

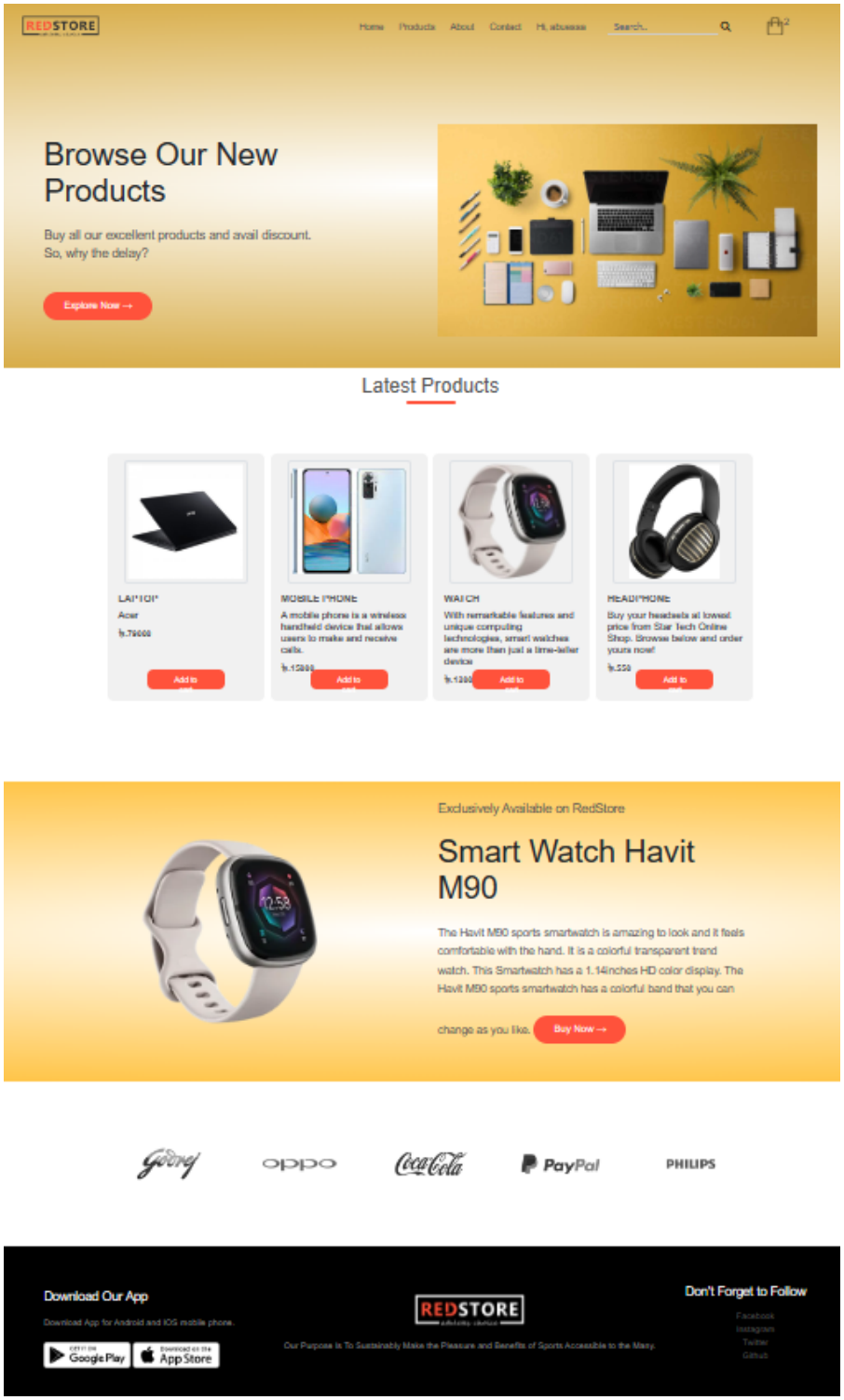


Figure 5.1: Landing page

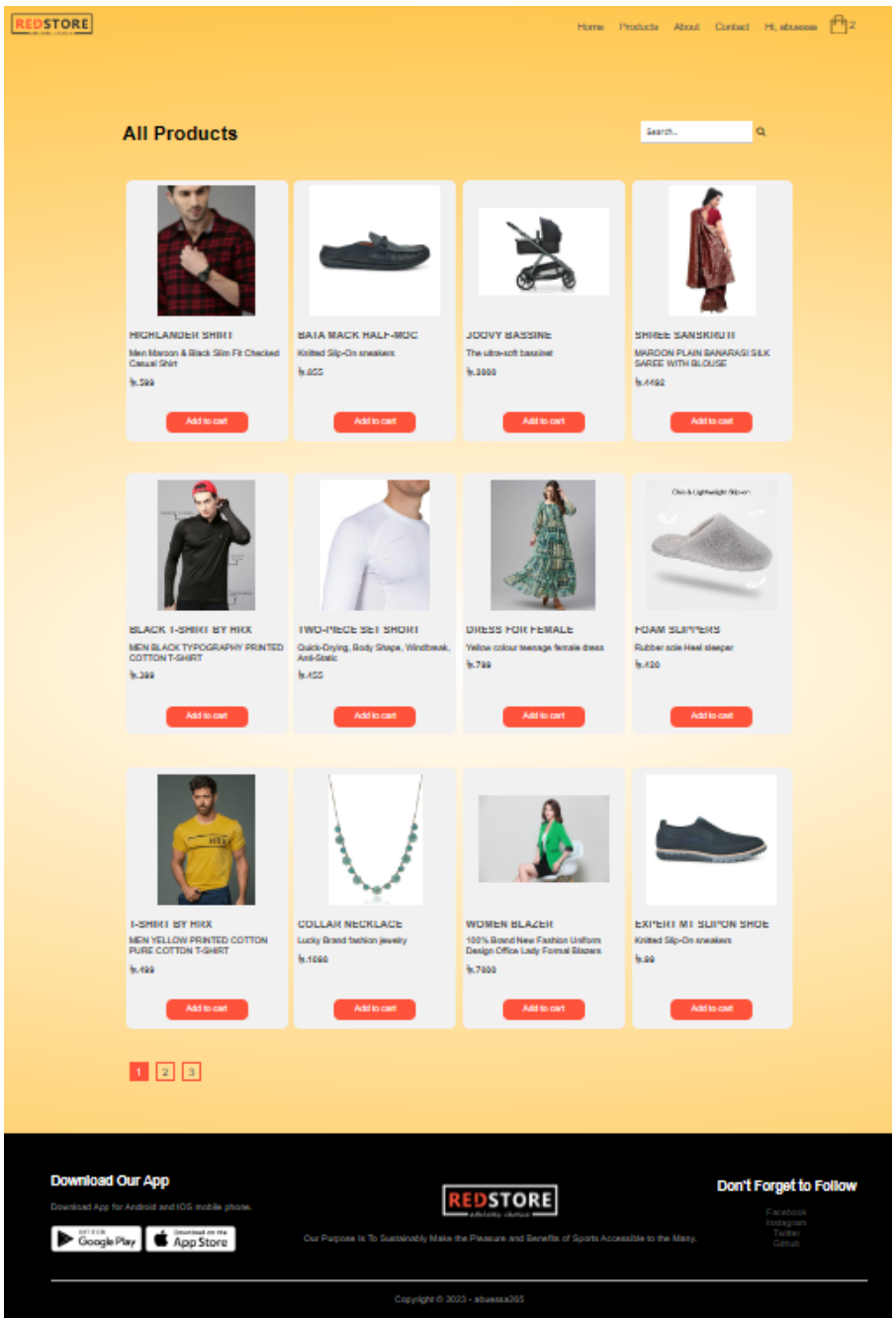


Figure 5.2: Product page

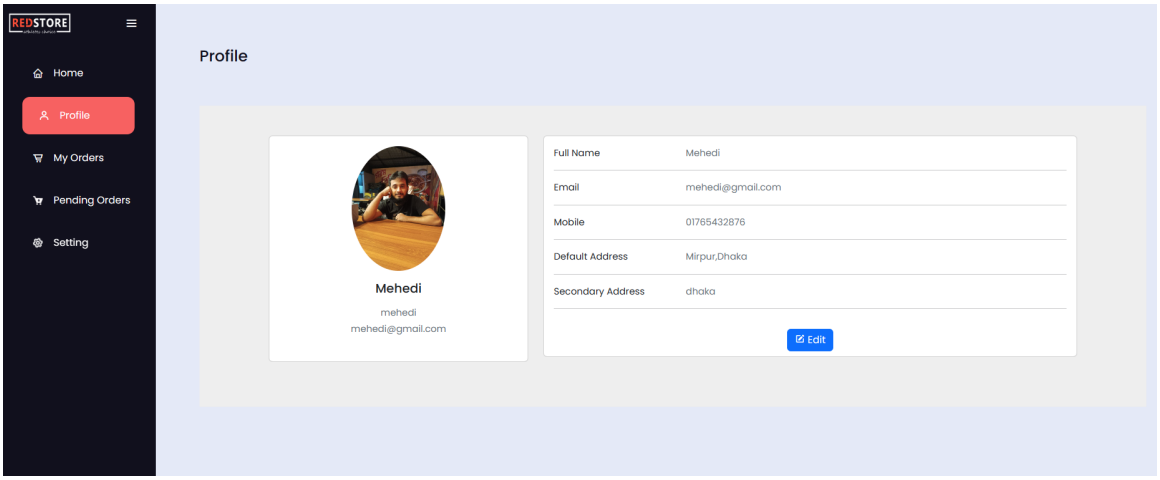


Figure 5.3: User Profile

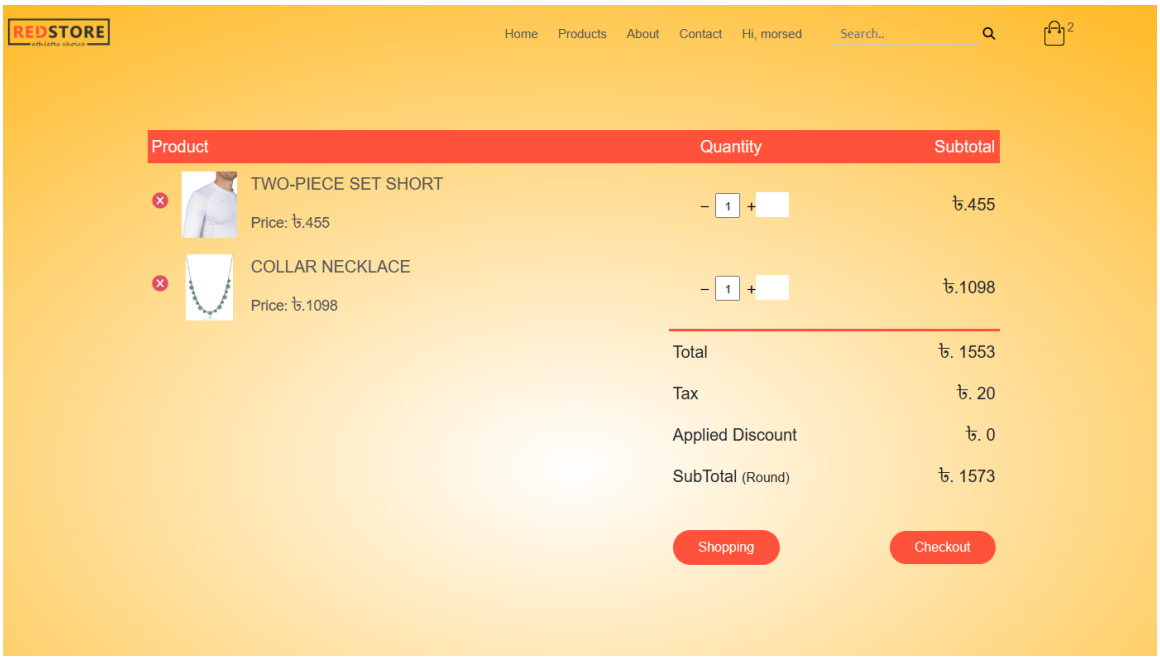


Figure 5.4: After add to card

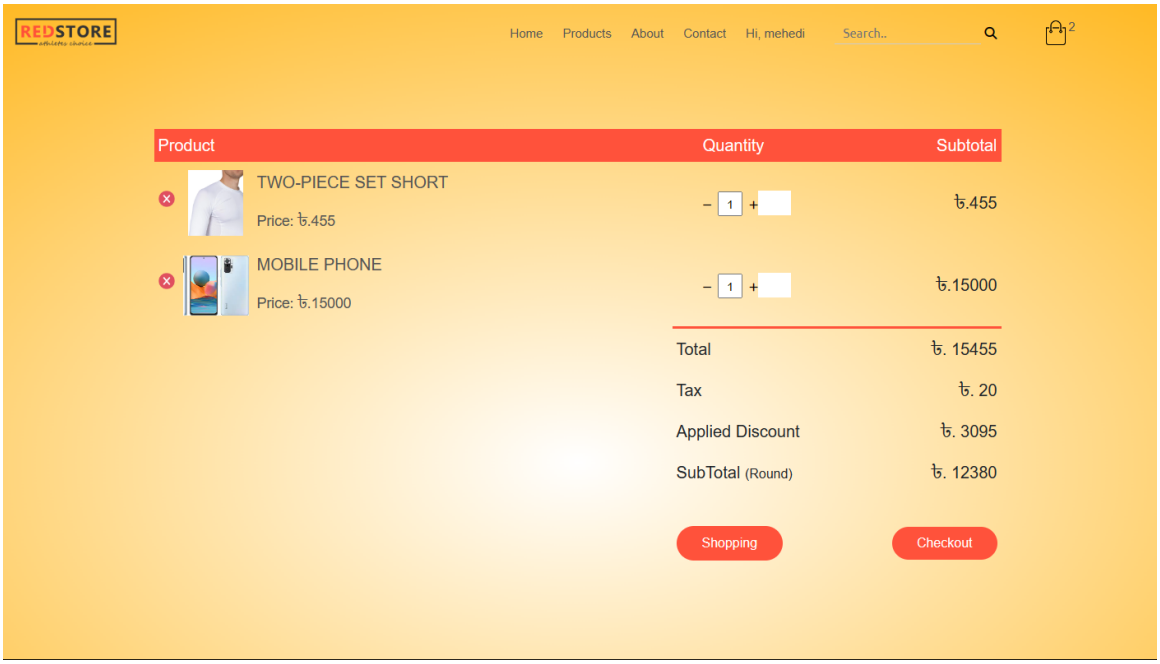


Figure 5.5: Dicsount

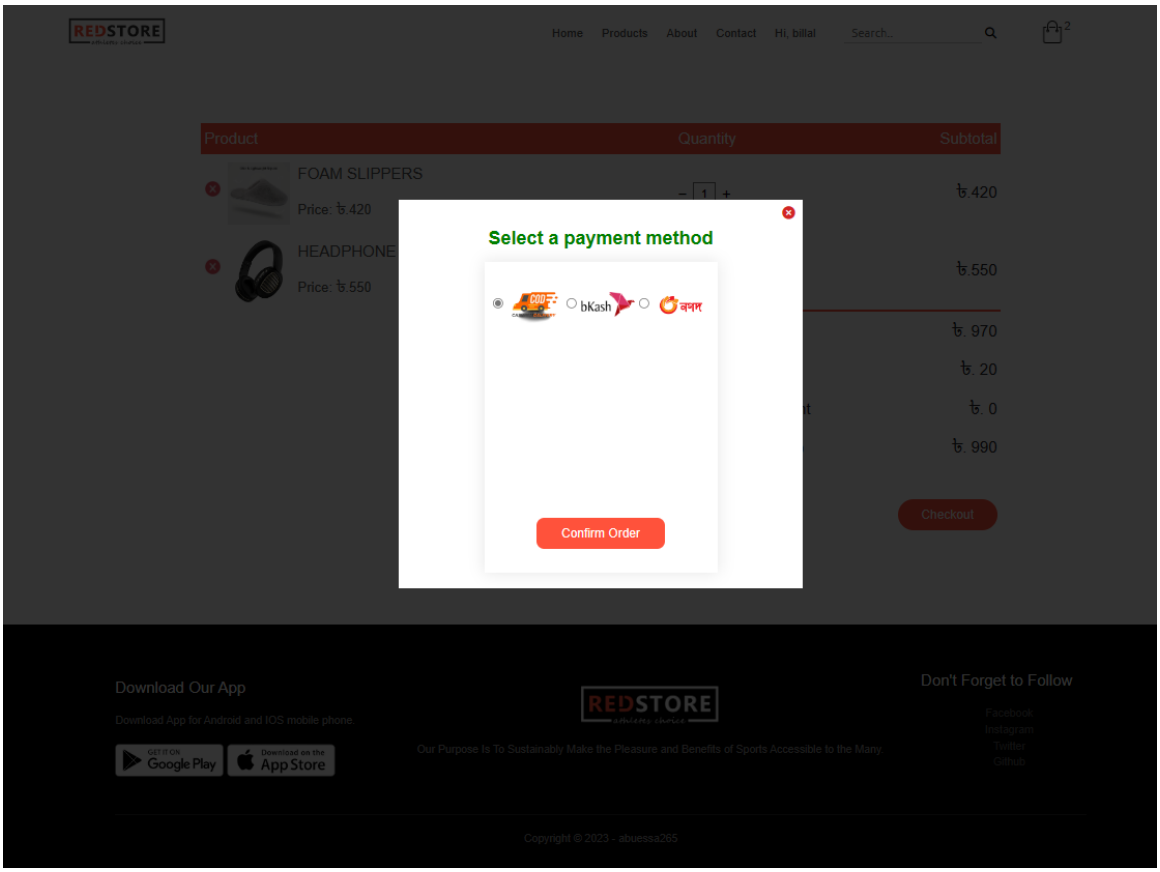


Figure 5.6: Pament Option

Figure 5.7: User panding order

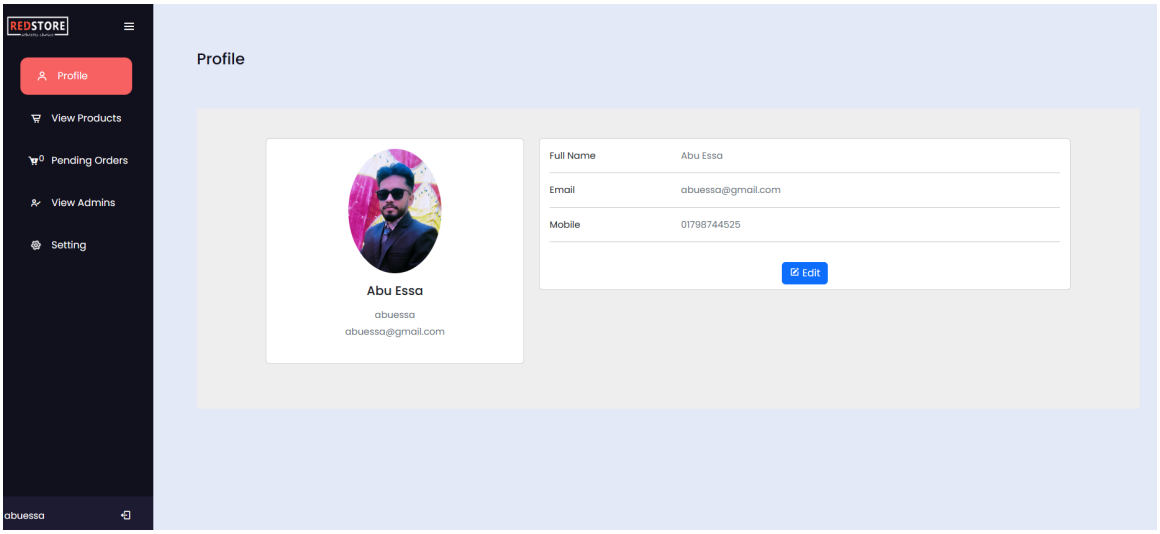


Figure 5.8: Admin profile

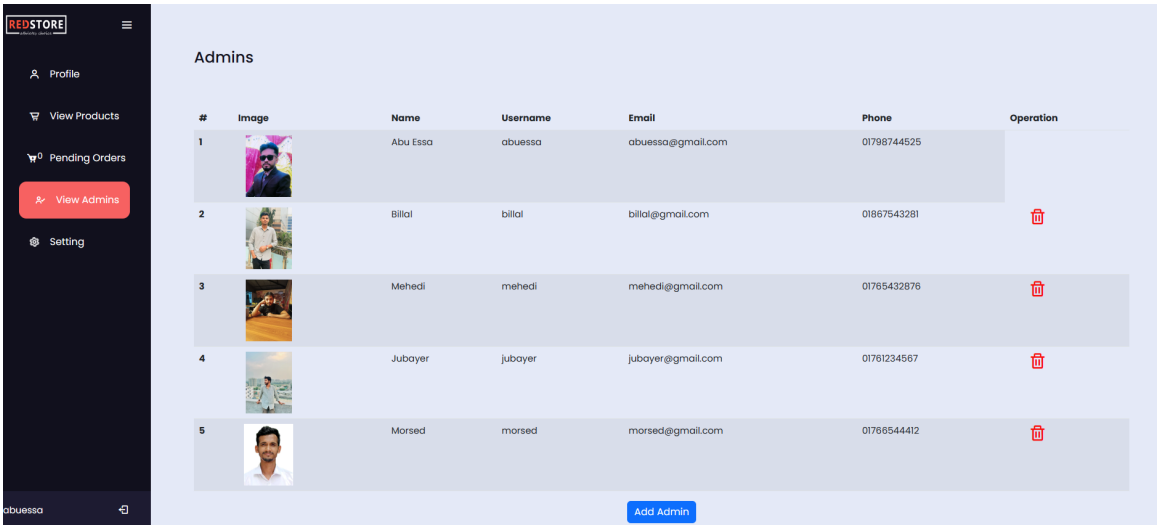


Figure 5.9: All admin profile

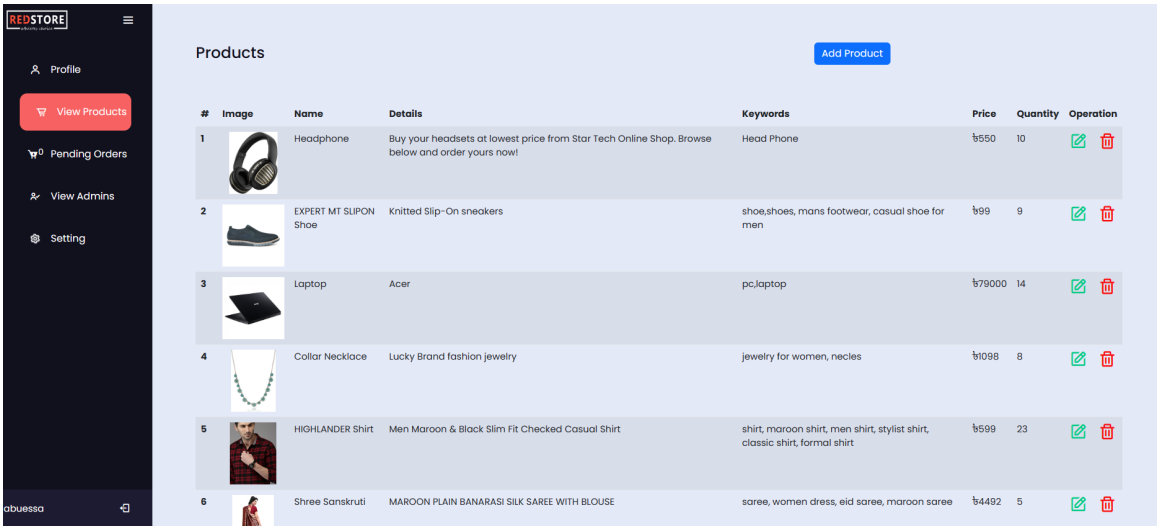


Figure 5.10: View All product

Figure 5.11: Admin pending order

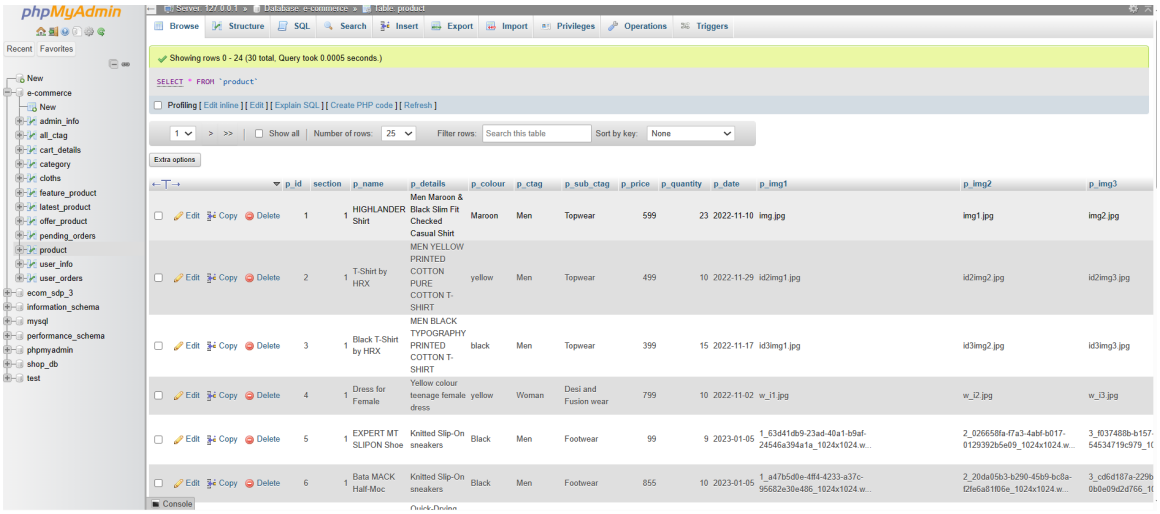


Figure 5.12: View database

# Chapter 6

# Conclusion and Future Work

## 6.1 Conclusions

The explanation for this is clear: we are living in a virtual era, where pretty much each and every single task is being performed on the web. Web based business has turned into a trendy expression in digital marketing. The brilliant side of the web based business industry is that a huge number of entrepreneurs are lifting it up as a profession. Then again, numerous entrepreneurs neglect the significance of web based business site planning and optimization. The optimization of a web based business site is not the same as that of a standard website. Web based business having turned into a tremendous and exceedingly aggressive industry, front line learning is required to remain focused. In this way, it is vital that online business site is appropriately upgraded. E-commerce can save our most valuable time and money. Also its opened a new door for cross border trading. This project helps me to do better understanding the development process of modern dynamic e-commerce web application and technologies used to implement it. The design of the project which includes data model and process with real life examples. The building of the project has given me a precise knowledge about the latest technology like "Laravel" to develop an e-commerce web application and better knowledge on e-commerce business industry

## 6.2 Future Scope of Our Thesis

We'll hopefully do some advanced new features in our systems:

- GUI Modification (More User Friendly)
- User can signup/Login using their other account like facebook, google etc.
- Add More feature in admin panel.
- Vendor can sell their products.
- payment Digital payments like Bkash, Nagad will be added.
- Add message,comment system user can use this if they have any quarry about products.

# Bibliography