



*Mini project report on*  
**E Commerce Website**

*Submitted in partial fulfilment of the requirements for the award of degree of*

**Bachelor of Technology**  
**in**  
**Computer Science & Engineering**

**UE21CS351 – DBMS Project**

*Submitted by:*

**Maryam Khan**

**PES2UG21CS283**

**Manasvi Varma**

**PES2UG21CS305**

Under the guidance of

**Dr. Mannar Mannan**

Assistant Professor

Designation

PES University

**AUG - DEC 2023**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**FACULTY OF ENGINEERING**

**PES UNIVERSITY**

(Established under Karnataka Act No. 16 of 2013)

Electronic City, Hosur Road, Bengaluru – 560 100, Karnataka, India

---

## **DECLARATION**

We hereby declare that the DBMS Project entitled **E-Commerce Website** has been carried out by us under the guidance of **Dr. Mannar Mannan, Assistant Professor** and submitted in partial fulfilment of the course requirements for the award of degree of **Bachelor of Technology in Computer Science and Engineering** of **PES University, Bengaluru** during the academic semester AUG – DEC 2023.

**Maryam Khan**

**PES2UG21CS283**

**Manasvi Varma**

**PES2UG21CS305**

## **ACKNOWLEDGEMENT**

I would like to express my gratitude to Dr. Mannar Mannan, Department of Computer Science and Engineering, PES University, for her continuous guidance, assistance, and encouragement throughout the development of this UE21CS351 - DBMS Project.

I take this opportunity to thank Dr. Sandesh B J, C, Professor, Chair Person, Department of Computer Science and Engineering, PES University, for all the knowledge and support I have received from the department.

I am deeply grateful to Dr. M. R. Doreswamy, Chancellor, PES University, Prof. Jawahar Doreswamy, Pro Chancellor – PES University, Dr. Suryaprasad J, Vice-Chancellor, PES University for providing to me various opportunities and enlightenment every step of the way. Finally, this DBMS Project could not have been completed without the continual support and encouragement I have received from my family and friends.

## **ABSTRACT**

Our Project, “E-Commerce Website” involves the development of an E-commerce website that enables users to search for, and purchase products online. It provides a platform for buyers to shop conveniently from a wide range of categories.

The primary purpose of this project is to create an online marketplace that facilitates seamless transactions. It aims to provide a user-friendly and secure platform for e-commerce activities, including product listing, shopping cart management, order processing, and payment handling.

The system will be implemented using PHP for the backend and MySQL as the database management system. The aim of this project is to develop a fully functional E-Commerce website while emphasizing the learning of PHP programming and MySQL database management.

# **TABLE OF CONTENTS**

<b>Chapter No.</b>	<b>Title</b>	<b>Page No.</b>
<b>1.</b>	<b>INTRODUCTION</b>	<b>11</b>
<b>2.</b>	<b>PROBLEM DEFINITION</b>	<b>12</b>
<b>3.</b>	<b>ER MODEL</b>	<b>13</b>
<b>4.</b>	<b>ER TO RELATIONAL MAPPING</b>	<b>14</b>
<b>5.</b>	<b>DDL STATEMENTS</b>	<b>15</b>
<b>6.</b>	<b>DML STATEMENTS</b>	<b>20</b>
<b>7.</b>	<b>QUERIES (SIMPLE QUERY AND UPDATE AND DELETE OPERATION, CORRELATED QUERY AND NESTED QUERY)</b>	<b>23</b>
<b>8.</b>	<b>STORED PROCEDURE, FUNCTIONS AND TRIGGERS</b>	<b>30</b>
<b>9.</b>	<b>FRONT END DEVELOPMENT</b>	<b>40</b>
	<b>REFERENCES/BIBLIOGRAPHY</b>	<b>41</b>
	<b>APPENDIX A DEFINITIONS, ACRONYMS AND ABBREVIATIONS</b>	<b>42</b>

## LIST OF TABLES

<u>Table No.</u>	<u>Title</u>
1	user_table
2	user_order
3	orders_pending
4	user_payments
5	cart_details
6	admin_table
7	products
8	brands
9	category

## **LIST OF FIGURES**

<b>Figure No.</b>	<b>Title</b>
<b>10.1</b>	<b>Home and Products page</b>
<b>10.2</b>	<b>User Registration</b>
<b>10.3</b>	<b>User Login</b>
<b>10.4</b>	<b>Sort on brands or categories</b>
<b>10.5</b>	<b>Sort on brands or categories</b>
<b>10.6</b>	<b>Admin Registration</b>
<b>10.7</b>	<b>Admin Page buttons to for various functions</b>
<b>10.8</b>	<b>Admin may insert products</b>
<b>10.9</b>	<b>The admin may view, edit, delete products</b>
<b>10.10</b>	<b>The admin may insert categories</b>
<b>10.11</b>	<b>The admin may view, edit, delete categories</b>
<b>10.12</b>	<b>The admin may insert brands</b>
<b>10.13</b>	<b>The admin may view, edit, delete brands</b>
<b>10.14</b>	<b>The admin may view all orders</b>
<b>10.15</b>	<b>The admin may view all payments</b>
<b>10.16</b>	<b>The admin may view all users</b>
<b>10.17</b>	<b>Items in cart and subtotal and checkout option</b>
<b>10.18</b>	<b>Payment page</b>
<b>10.19</b>	<b>User profile page showing pending orders</b>
<b>10.20</b>	<b>User profile page with edit option</b>
<b>10.21</b>	<b>User may delete their account</b>



# **1. INTRODUCTION**

Our E-Commerce project is all about making online shopping straightforward and enjoyable. We want to create a strong marketplace where users can easily find and buy products. Using PHP and MySQL, we're following industry standards while also giving developers a chance to learn these important web development tools. Our focus goes beyond just functionality. We're dedicated to creating a website that's easy to use, responsive, and ensures secure transactions by integrating payment methods.

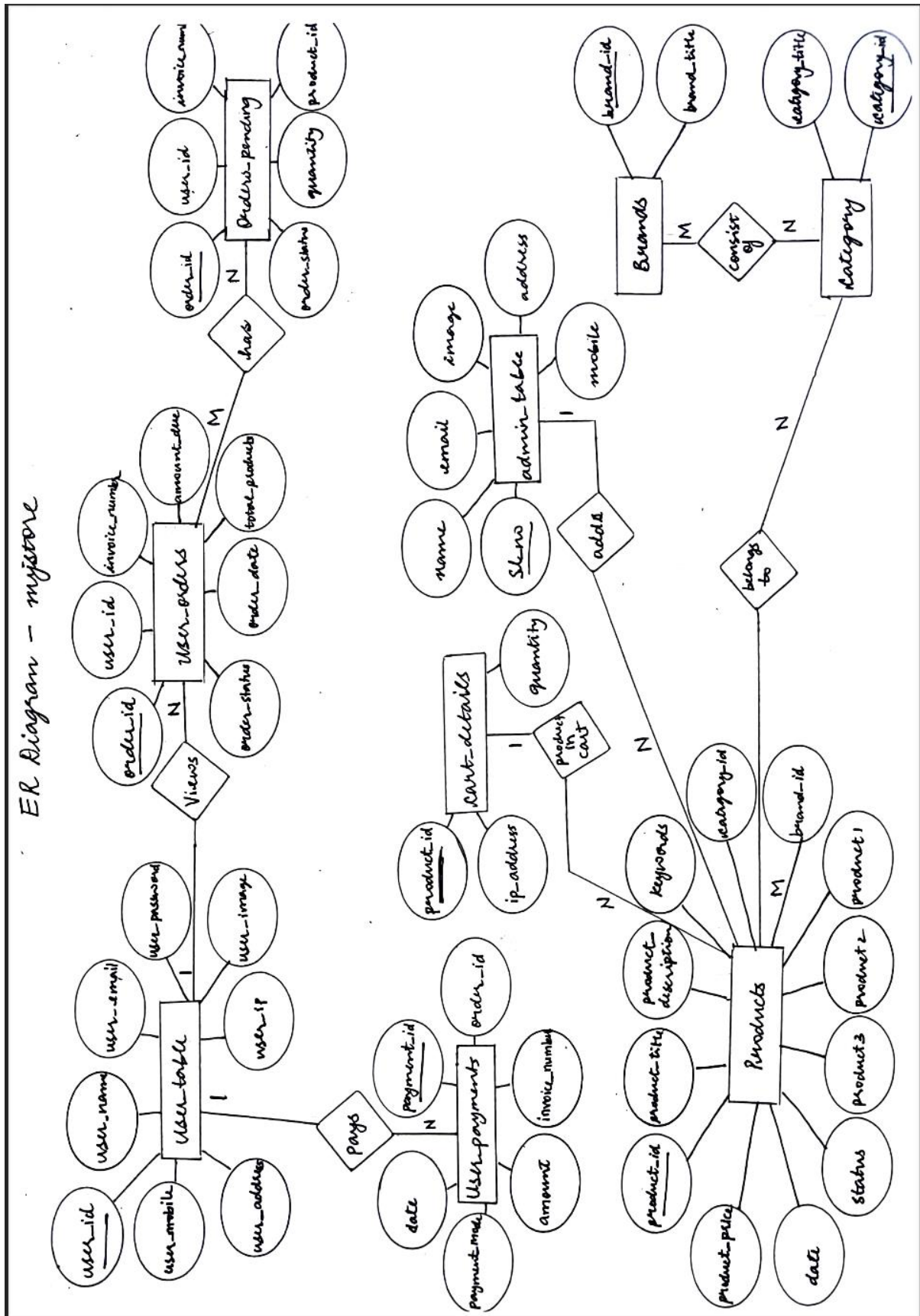
We aim to deliver a comprehensive E-Commerce platform covering user registration, product management, shopping cart and checkout processes, order tracking, payment processing, and an admin panel for site management. We've also included features like search and filters to enhance the user experience, making product discovery precise and effortless. The website is designed to be interactive and engaging, providing users with a seamless online shopping journey. Our use of technologies like XAMPP, Apache, PHP, MySQL, HTML, and CSS showcases the project's technical depth, offering a complete solution for a modern and efficient E-Commerce experience.

## **2. PROBLEM DEFINITION**

In the ever-expanding digital marketplace, there exists a need for a user-centric and secure E-Commerce platform that caters to the growing demands of online shoppers. Many existing solutions lack a comprehensive set of features, leading to fragmented and less-than-ideal user experiences. Current platforms may also face challenges related to security, making users hesitant about engaging in online transactions. Additionally, the absence of standardized technologies for web development in some solutions poses obstacles for developers to create robust and scalable E-Commerce websites.

The lack of a seamlessly integrated and user-friendly online marketplace is a critical issue that our project aims to address. Users often encounter difficulties in navigating through product listings, managing their shopping carts efficiently, and experiencing a secure and enjoyable transaction process. Moreover, existing platforms may lack modern features such as responsive web design and integration with popular payment gateways, hindering their ability to meet the diverse needs of today's online shoppers. In light of these challenges, our E-Commerce Website project seeks to provide a comprehensive solution that not only streamlines the user experience but also offers a learning platform for developers to master essential web development technologies, ensuring a more accessible and secure online shopping environment for all.

### 3. ER MODEL



## **4. ER TO RELATIONAL MAPPING**

### **4.1 STEPS OF ALGORITHM FOR CHOSEN PROBLEM**

User Registration and Authentication:

- Prompt the user to register by providing necessary details.
- Verify user inputs for validity (e.g., proper email format, strong password).
- Store user information securely in the database.
- Implement authentication to validate user credentials during login.

Product Listing and Management:

- Retrieve product data from the database.
- Display products with details such as name, image, price, and description.
- Allow users to filter products based on categories and brands.
- Allows search for products based on keywords stored in the database
- Enable Admin to add, edit, or remove products from the database.

Shopping Cart and Checkout:

- Implement a shopping cart to store selected products for a user.
- Allow users to add, remove, or adjust quantities of items in the cart.
- Calculate the total cost of items in the cart.
- Facilitate a secure checkout process for users to complete their purchases.

Order Management:

- Store order details, including products, quantities, and total cost.
- Provide users with access to their order history and current order status.
- Allow admin to track and manage all orders.

### Payment Processing:

- Integrate with a secure payment gateway (e.g., PayPal, Stripe). In our project we have only implemented cash on delivery.
- Users must to enter payment method details securely.
- Verify and process payments securely.

### Admin Panel for Site Management:

- Create an admin interface for managing users, products, and orders.
- Implement authentication for admin access.
- Allow admins to add, edit, or remove products and user accounts.

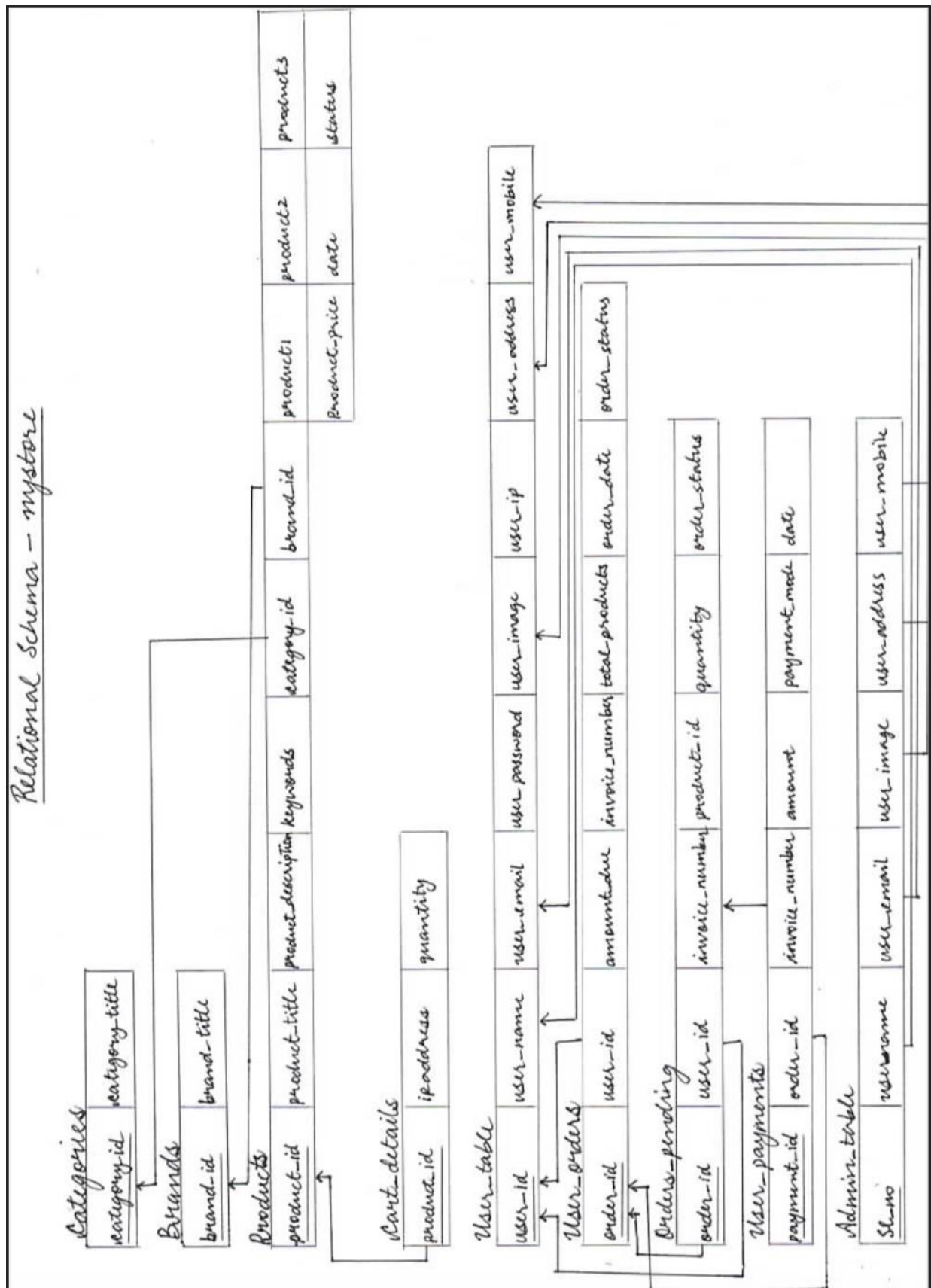
### Search and Filter Functionality:

- Implement a search feature for users to find products quickly.
- Allow users to filter search results based on various criteria.

### Interactive Design:

- Design a user-friendly interface for seamless navigation.

## 4.2 COMPLETE DIAGRAM OF RELATIONAL MAPPING



## 5. DDL STATEMENTS

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> admin	★ Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_general_ci	16.0 KiB	–
<input type="checkbox"/> brands	★ Browse Structure Search Insert Empty Drop	8	InnoDB	utf8mb4_general_ci	16.0 KiB	–
<input type="checkbox"/> cart_details	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 KiB	–
<input type="checkbox"/> categories	★ Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_general_ci	16.0 KiB	–
<input type="checkbox"/> orders_pending	★ Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_general_ci	16.0 KiB	–
<input type="checkbox"/> products	★ Browse Structure Search Insert Empty Drop	10	InnoDB	utf8mb4_general_ci	16.0 KiB	–
<input type="checkbox"/> user_orders	★ Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_general_ci	16.0 KiB	–
<input type="checkbox"/> user_payments	★ Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_general_ci	16.0 KiB	–
<input type="checkbox"/> user_table	★ Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_general_ci	16.0 KiB	–
<b>9 tables</b>	<b>Sum</b>	<b>29</b>	<b>InnoDB</b>	<b>utf8mb4_general_ci</b>	<b>144.0 KiB</b>	<b>0 B</b>

```
CREATE TABLE `admin` (
  `admin_id` int(11) NOT NULL,
  `admin_name` varchar(255) NOT NULL,
  `admin_email` varchar(255) NOT NULL,
  `admin_password` varchar(255) NOT NULL
);
```

```
CREATE TABLE `brands` (
  `brand_id` int(11) NOT NULL,
  `brand_title` varchar(100) NOT NULL
);
```

```
CREATE TABLE `cart_details` (
  `product_id` int(11) NOT NULL,
  `ip_address` varchar(255) NOT NULL,
  `quantity` int(100) NOT NULL
);
```

```
CREATE TABLE `categories` (  
  `category_id` int(11) NOT NULL,  
  `category_title` varchar(100) NOT NULL  
);
```

```
CREATE TABLE `orders_pending` (  
  `order_id` int(11) NOT NULL,  
  `user_id` int(11) NOT NULL,  
  `invoice_number` int(255) NOT NULL,  
  `product_id` int(11) NOT NULL,  
  `quantity` int(255) NOT NULL,  
  `order_status` varchar(225) NOT NULL  
);
```

```
CREATE TABLE `products` (  
  `product_id` int(11) NOT NULL,  
  `product_title` varchar(100) NOT NULL,  
  `product_description` varchar(255) NOT NULL,  
  `product_keywords` varchar(255) NOT NULL,  
  `category_id` int(11) NOT NULL,  
  `brand_id` int(11) NOT NULL,  
  `product_image1` varchar(255) NOT NULL,  
  `product_image2` varchar(255) NOT NULL,  
  `product_image3` varchar(255) NOT NULL,  
  `product_price` varchar(100) NOT NULL,  
  `date` timestamp NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp(),  
  `status` varchar(100) NOT NULL  
);
```



```
CREATE TABLE `user_orders` (  
  `order_id` int(11) NOT NULL,  
  `user_id` int(11) NOT NULL,  
  `amount_due` int(255) NOT NULL,  
  `invoice_number` int(255) NOT NULL,  
  `total_products` int(255) NOT NULL,  
  `order_date` timestamp NOT NULL DEFAULT current_timestamp() ON UPDATE  
current_timestamp(),  
  `order_status` varchar(255) NOT NULL  
);
```

```
CREATE TABLE `user_payments` (  
  `payment_id` int(11) NOT NULL,  
  `order_id` int(11) NOT NULL,  
  `invoice_number` int(11) NOT NULL,  
  `amount` int(11) NOT NULL,  
  `payment_mode` varchar(255) NOT NULL,  
  `date` timestamp NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()  
);
```

```
CREATE TABLE `user_table` (  
  `user_id` int(11) NOT NULL,  
  `username` varchar(100) NOT NULL,  
  `user_email` varchar(100) NOT NULL,  
  `user_password` varchar(255) NOT NULL,  
  `user_image` varchar(225) NOT NULL,  
  `user_ip` varchar(100) NOT NULL,  
  `user_address` varchar(255) NOT NULL,  
  `user_mobile` varchar(20) NOT NULL  
)
```

## 6. DML STATEMENTS

### admin

```
INSERT INTO `admin` (`admin_id`, `admin_name`, `admin_email`, `admin_password`) VALUES  
(1, 'Maryam', 'maryam@gmail.com',  
'$2y$10$ol4DskDH9F4/wLiakRjR9Okhm4uQ2XS4ACvRHYEJbq1MJDS7//BDi');
```

Showing rows 0 - 0 (1 total, Query took 0.0001 seconds.)

`SELECT * FROM `admin``

☐ Profiling [ [Edit inline](#) ] [ [Edit](#) ] [ [Explain SQL](#) ] [ [Create PHP code](#) ] [ [Refresh](#) ]

☐ Show all | Number of rows:  Filter rows:

Extra options

	admin_id	admin_name	admin_email	admin_password
<input type="checkbox"/> Edit Copy Delete	1	Maryam	maryam@gmail.com	\$2y\$10\$ol4DskDH9F4/wLiakRjR9Okhm4uQ2XS4ACvRHYEJbq1...

↑ ☐ Check all With selected: Edit Copy Delete Export

### brands

```
INSERT INTO `brands` (`brand_id`, `brand_title`) VALUES  
(1, 'Nike'),  
(2, 'Puma'),  
(3, 'Sketchers'),  
(4, 'Fossil'),  
(5, 'G-Shock'),  
(6, 'Allen Solly'),  
(7, 'Van Heusen'),  
(8, 'Leafyaffair');
```

✓ Showing rows 0 - 7 (8 total, Query took 0.0001 seconds.)

```
SELECT * FROM `brands`
```

☐ Profiling [ [Edit inline](#) ] [ [Edit](#) ] [ [Explain SQL](#) ] [ [Create PHP code](#) ] [ [Refresh](#) ]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

	brand_id	brand_title
<input type="checkbox"/> Edit Copy Delete	1	Nike
<input type="checkbox"/> Edit Copy Delete	2	Puma
<input type="checkbox"/> Edit Copy Delete	3	Sketchers
<input type="checkbox"/> Edit Copy Delete	4	Fossil
<input type="checkbox"/> Edit Copy Delete	5	G-Shock
<input type="checkbox"/> Edit Copy Delete	6	Allen Solly
<input type="checkbox"/> Edit Copy Delete	7	Van Heusen
<input type="checkbox"/> Edit Copy Delete	8	Leafyaffair

↑ ☐ Check all With selected: Edit Copy Delete Export

## cart\_details

```
INSERT INTO `cart_details` (`product_id`, `ip_address`, `quantity`) VALUES
(6, '::1', 1),
(9, '::1', 1),
(10, '::1', 1);
```

✓ Showing rows 0 - 2 (3 total, Query took 0.0002 seconds.)

```
SELECT * FROM `cart_details`
```

☐ Profiling [ [Edit inline](#) ] [ [Edit](#) ] [ [Explain SQL](#) ] [ [Create PHP code](#) ] [ [Refresh](#) ]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

	product_id	ip_address	quantity
<input type="checkbox"/> Edit Copy Delete	6	::1	1
<input type="checkbox"/> Edit Copy Delete	9	::1	1
<input type="checkbox"/> Edit Copy Delete	10	::1	1

↑ ☐ Check all With selected: Edit Copy Delete Export

## catrgories

```
INSERT INTO `categories` (`category_id`, `category_title`) VALUES
(1, 'Watches'),
(2, 'Shirts'),
(3, 'Shoes'),
(4, 'Jewellery');
```

✓ Showing rows 0 - 3 (4 total, Query took 0.0001 seconds.)

```
SELECT * FROM `categories`
```

☐ Profiling [ [Edit inline](#) ] [ [Edit](#) ] [ [Explain SQL](#) ] [ [Create PHP code](#) ] [ [Refresh](#) ]

☐ Show all | Number of rows:  Filter rows:  Sort by key:

Extra options

	category_id	category_title
<input type="checkbox"/> Edit  Copy  Delete	1	Watches
<input type="checkbox"/> Edit  Copy  Delete	2	Shirts
<input type="checkbox"/> Edit  Copy  Delete	3	Shoes
<input type="checkbox"/> Edit  Copy  Delete	4	Jewellery

↑ ☐ Check all With selected: Edit Copy Delete Export

## orders\_pending

```
INSERT INTO `orders_pending` (`order_id`, `user_id`, `invoice_number`, `product_id`, `quantity`,
`order_status`) VALUES
(1, 2, 39311596, 6, 1, 'pending'),
(2, 2, 1609328475, 10, 1, 'pending'),
(3, 2, 269562185, 7, 1, 'pending');
```

✓ Showing rows 0 - 2 (3 total, Query took 0.0001 seconds.)

```
SELECT * FROM `orders_pending`
```

☐ Profiling [ [Edit inline](#) ] [ [Edit](#) ] [ [Explain SQL](#) ] [ [Create PHP code](#) ] [ [Refresh](#) ]

☐ Show all | Number of rows:  Filter rows:  Sort by key:

Extra options

	order_id	user_id	invoice_number	product_id	quantity	order_status
<input type="checkbox"/> Edit  Copy  Delete	1	2	39311596	6	1	pending
<input type="checkbox"/> Edit  Copy  Delete	2	2	1609328475	10	1	pending
<input type="checkbox"/> Edit  Copy  Delete	3	2	269562185	7	1	pending

↑ ☐ Check all With selected: Edit Copy Delete Export

## products

```

INSERT INTO `products` (`product_id`, `product_title`, `product_description`, `product_keywords`,
`category_id`, `brand_id`, `product_image1`, `product_image2`, `product_image3`, `product_price`,
`date`, `status`) VALUES
(1, 'Casio G-Shock Men Black Dial Analog-Digital', 'Black and blue, stainless steel, water resistant',
'analog, digital, black, blue, water resistant, stainless steel, men', 1, 5, 'w1a.png', 'w1b.png', 'w1c.png',
'4000', '2023-10-16 16:23:24', 'true'),
(2, 'Men Black regular Fit Full sleeves Formal Shirt', 'Black Solid shirt, Regular Fit from Van Heusen',
'Black, shirt, men, regular fit, Van Heusen', 2, 7, 's1a.png', 's1b.png', 's1c.png', '1500', '2023-10-17
16:21:17', 'true'),
(4, 'Allen Solly Women\'s Poly Viscose Solid Regular Fit Shirt', 'Regular Fit, Lavender formal
women\'s shirt', 'Lavender, women, shirt, regular fit', 2, 6, 's2a.png', 's2b.png', 's2c.png', '1000', '2023-
10-16 17:40:50', 'true'),
(5, 'Nike Womens Zoom Court Lite 3 Running Shoe', 'White/Amethyst Nike running shoes',
'White/Amethyst Nike running shoes White, purple, lilac, amethyst, nike, shoes, women', 3, 1,
'sh2a.png', 'sh2b.png', 'sh2c.png', '2000', '2023-11-02 17:33:56', 'true'),
(6, 'Fossil Jacqueline Analog Rose Gold Dial Women\'s Watch', 'Rose gold, stainless steel Fossil
Analog watch', 'Rose gold, stainless steel, Fossil, Analog, watch, women', 1, 4, 'w2a.png', 'w2b.png',
'w2c.png', '3000', '2023-10-16 17:59:59', 'true'),
(7, 'Skechers-Womens-UNO 2 - Pastel PLAYE-Sneakers', 'Pastel blue Sketchers Sneakers, rubber sole',
'Pastel blue, blue, rubber sole, regular fit, women', 3, 3, 'sh3a.png', 'sh3b.png', 'sh3c.png', '3500', '2023-
10-17 16:20:43', 'true'),
(8, 'Fossil Analog White Dial Watch-FS4795', 'Silver, Stainless steel, Analog Fossil watch', 'Sliver,
analog, stainless steel', 1, 4, 'w3a.png', 'w3b.png', 'w3c.png', '6000', '2023-10-16 18:07:12', 'true'),
(9, 'Men Blue Slim Fit Full Sleeves Formal Shirt', 'Sky/Light blue formal shirt', 'Sky blue, blue, light
blue, formal, men, full sleeve', 2, 7, 's3a.png', 's3b.png', 's3c.png', '2500', '2023-10-16 18:14:00', 'true'),
(10, 'Tinsel Flower Earrings', 'Pressed blue lobelia flowers and Queen Anne\'s lace earrings', 'Blue,
white, flowers, earrings', 4, 8, 'j1a.png', 'j2a.png', 'j3a.png', '500', '2023-10-16 18:22:10', 'true'),
(11, 'Puma Unisex-Adult BMW MMS Drift Cat 8 Low ', 'BootRubber sole, lace, Regular fit BMW
Shoes ', 'Rubber, lace, bmw, shoe, men', 3, 2, 'sh1a.png', 'sh1b.png', 'sh1c.png', '3500', '2023-11-02
19:22:01', 'true');

```

Server: localhost - Database: Mystore - Table: products

Showing rows 0 - 9 (10 total, Query took 0.0001 seconds.)

SELECT \* FROM `products`

Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

	product_id	product_title	product_description	product_keywords	category_id	brand_id	product_image1	product_image2	product_image3	product_price	date	status
<input type="checkbox"/> Edit Copy Delete	1	Casio G-Shock Men Black Dial Analog-Digital	Black and blue, stainless steel, water resistant	analog, digital, black, blue, water resistant, sta...	1	5	w1a.png	w1b.png	w1c.png	4000	2023-10-16 21:53:24	true
<input type="checkbox"/> Edit Copy Delete	2	Men Black regular Fit Full sleeves Formal Shirt	Black Solid shirt, Regular Fit from Van Heusen	Black, shirt, men, regular fit, Van Heusen	2	7	s1a.png	s1b.png	s1c.png	1500	2023-10-17 21:51:17	true
<input type="checkbox"/> Edit Copy Delete	4	Allen Solly Women's Poly Viscose Solid Regular Fit...	Regular Fit, Lavender formal women's shirt	Lavender, women, shirt, regular fit	2	6	s2a.png	s2b.png	s2c.png	1000	2023-10-16 23:10:50	true
<input type="checkbox"/> Edit Copy Delete	5	Nike Womens Zoom Court Lite 3 Running Shoe	White/Amethyst Nike running shoes	White/Amethyst Nike running shoes White, purple, l...	3	1	sh2a.png	sh2b.png	sh2c.png	2000	2023-11-02 23:03:56	true
<input type="checkbox"/> Edit Copy Delete	6	Fossil Jacqueline Analog Rose Gold Dial Women's Wa...	Rose gold, stainless steel Fossil Analog watch	Rose gold, stainless steel, Fossil, Analog, watch...	1	4	w2a.png	w2b.png	w2c.png	3000	2023-10-16 23:29:59	true
<input type="checkbox"/> Edit Copy Delete	7	Sketchers-Womens-UNO 2 - Pastel PLAYE-Sneakers	Pastel blue Sketchers Sneakers, rubber sole	Pastel blue, blue, rubber sole, regular fit, women	3	3	sh3a.png	sh3b.png	sh3c.png	3500	2023-10-17 21:50:43	true
<input type="checkbox"/> Edit Copy Delete	8	Fossil Analog White Dial Watch-FS4795	Silver, Stainless steel, Analog Fossil watch	Silver, analog, stainless steel	1	4	w3a.png	w3b.png	w3c.png	6000	2023-10-16 23:37:12	true
<input type="checkbox"/> Edit Copy Delete	9	Men Blue Slim Fit Full Sleeves Formal Shirt	Sky/Light blue formal shirt	Sky blue, blue, light blue, formal, men, full slee...	2	7	s3a.png	s3b.png	s3c.png	2500	2023-10-16 23:44:00	true
<input type="checkbox"/> Edit Copy Delete	10	Tinsel Flower Earrings	Pressed blue lobelia flowers and Queen Anne's lace...	Blue, white, flowers, earrings	4	8	j1a.png	j2a.png	j3a.png	500	2023-10-16 23:52:10	true
<input type="checkbox"/> Edit Copy Delete	11	Puma Unisex-Adult BMW MMS Drift Cat & Low	BootRubber sole, lace, Regular fit BMW Shoes	Rubber, lace, bmw, shoe, men	3	2	sh1a.png	sh1b.png	sh1c.png	3500	2023-11-03 00:52:01	true

## user\_orders

```
INSERT INTO `user_orders` (`order_id`, `user_id`, `amount_due`, `invoice_number`, `total_products`, `order_date`, `order_status`) VALUES (1, 2, 3500, 269562185, 1, '2023-11-04 14:02:13', 'Complete');
```

Showing rows 0 - 0 (1 total, Query took 0.0001 seconds.)

SELECT \* FROM `user\_orders`

Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

Show all | Number of rows: 25 | Filter rows: Search this table

Extra options

	order_id	user_id	amount_due	invoice_number	total_products	order_date	order_status
<input type="checkbox"/> Edit Copy Delete	1	2	3500	269562185	1	2023-11-04 19:32:13	Complete

Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table

## user\_payments

```
INSERT INTO `user_payments` (`payment_id`, `order_id`, `invoice_number`, `amount`,
`payment_mode`, `date`) VALUES
(1, 1, 269562185, 3500, 'Net Banking', '2023-11-04 14:02:13');
```

✓ Showing rows 0 - 0 (1 total, Query took 0.0001 seconds.)

`SELECT * FROM `user_payments``

☐ Profiling [ [Edit inline](#) ] [ [Edit](#) ] [ [Explain SQL](#) ] [ [Create PHP code](#) ] [ [Refresh](#) ]

☐ Show all | Number of rows: 25 | Filter rows:

Extra options

	payment_id	order_id	invoice_number	amount	payment_mode	date
<input type="checkbox"/> <a href="#">Edit</a> <a href="#">Copy</a> <a href="#">Delete</a>	1	1	269562185	3500	Net Banking	2023-11-04 19:32:13

☐ Check all
 With selected: [Edit](#) [Copy](#) [Delete](#) [Export](#)

## user\_table

```
INSERT INTO `user_table` (`user_id`, `username`, `user_email`, `user_password`, `user_image`,
`user_ip`, `user_address`, `user_mobile`) VALUES
(2, 'Manasvi', 'manasvi@gmail.com', '$2y$10$smxfjmkam4snSlbaJ.rWNO.ejnb6fu3d2pfpTSSzo1hZDqFYfhZEC', 'u1.png', '::1',
'Koramangala', '1234567890');
```

✓ Showing rows 0 - 0 (1 total, Query took 0.0001 seconds.)

`SELECT * FROM `user_table``

☐ Profiling [ [Edit inline](#) ] [ [Edit](#) ] [ [Explain SQL](#) ] [ [Create PHP code](#) ] [ [Refresh](#) ]

☐ Show all | Number of rows: 25 | Filter rows:

Extra options

	user_id	username	user_email	user_password	user_image	user_ip	user_address	user_mobile
<input type="checkbox"/> <a href="#">Edit</a> <a href="#">Copy</a> <a href="#">Delete</a>	2	Manasvi	manasvi@gmail.com	\$2y\$10\$smxfjmkam4snSlbaJ.rWNO.ejnb6fu3d2pfpTSSzo1h...	u1.png	::1	Koramangala	1234567890

☐ Check all
 With selected: [Edit](#) [Copy](#) [Delete](#) [Export](#)

☐ Show all | Number of rows: 25 | Filter rows:

## 7. QUERIES

### 7.1 SIMPLE QUERY WITH GROUP BY OR AGGREGATE

Fetch scheme prices and sum them up: We use this query in our trigger to find the sum which is required while finding order total.

```
SELECT SUM(scheme_price) INTO total FROM schemes WHERE scheme_id =  
schemePrice;
```

### 7.2 UPDATE OPERATION

In cart.php to update the cart\_details table values of ip\_address and product\_id

```
$update_cart = "UPDATE cart_details SET quantity = $quantity WHERE ip_address = '$ip' AND product_id  
= $product_id";
```

In edit\_brand.php to update the brands table values of brand\_title

```
$update_query = "UPDATE brands SET brand_title = '$brand_title' WHERE brand_id = '$edit_brand'";
```

In edit\_brand.php to update the categories table values of category\_title

```
$update_query="update categories set category_title='$cat_title' where category_id='$edit_category'";
```

In edit\_products.php to update the products table values of product\_title and  
product\_image

```
$update_product = "UPDATE products SET product_title='$product_title',  
$update_product .= ", product_image1='$product_image1'";
```

In confirm\_payment.php update the user\_orders table values of user\_id

```
$update_orders = "UPDATE user_orders SET order_status='Complete' WHERE order_id='$order_id'";
```



In edit\_account.php update the user details when image if image is updated

```
$update_data = "UPDATE user_table SET username = '$new_username', user_email = '$user_email',  
user_image = '$user_image', user_address = '$user_address', user_mobile = '$user_mobile' WHERE  
user_id = '$update_id'";
```

In edit\_account.php update the user details when image if image is not updated

```
$update_data = "UPDATE user_table SET username = '$new_username', user_email = '$user_email',  
user_address = '$user_address', user_mobile = '$user_mobile' WHERE user_id = '$update_id'";
```

### 7.3 DELETE OPERATION

We call the procedure DeleteBrand(\$delete\_brand) which uses the delete query

**DELETE FROM brands WHERE brand\_id = brand\_id\_param;**

In cart.php delete cart\_details where product\_id is specified

```
$delete_query="delete from cart_details where product_id=$remove_id";
```

In delete\_caetgory.php delete the category having a specific category\_id

```
$delete_query = "DELETE FROM categories WHERE category_id = '$delete_category'";
```

In delete\_product.php delete the products having a specific product\_id

```
$delete_product="Delete from products where product_id='$delete_id'";
```

In delete\_account.php we delete form the user\_table where username is specified

```
$delete_query="delete from user_table where username='$username_session'";
```

### 7.4 CORRELATED QUERY

A correlated subquery is a subquery that contains a reference to a table that also appears in the outer query.

In user\_login.php we check whether the username and password match to allow login

```
select_query="select * from user_table where username='$user_username';
```

In user\_login.php we check whether the ip\_address is same as user\_ip

```
$select_query_cart="select * from cart_details where ip_address='$user_ip';
```

To select a product form products table we check the product\_id

```
$select_product = "SELECT * FROM products WHERE product_id = $product_id";
```

## 7.5 NESTED QUERY

In this nested query we use a correlated query where the 'WHERE' condition checks the ip address, it also has an inner join on the cart details and products tables and we do a select operation.

```
$cart_query = "SELECT cart_details.product_id, products.product_title, products.product_image1,  
                    products.product_price, cart_details.quantity  
                FROM cart_details  
                INNER JOIN products ON cart_details.product_id = products.product_id  
                WHERE cart_details.ip_address = '$ip';
```

## 8. STORED PROCEDURES, FUNCTIONS AND TRIGGERS

### 8.1 STORED PROCEDURES OR FUNCTIONS

Function to calculate the subtotal of the order or items in the cart

```
1 DELIMITER //
2
3 CREATE FUNCTION total_cart_price(ipAddress VARCHAR(255)) RETURNS DECIMAL(10, 2)
4 BEGIN
5     DECLARE total DECIMAL(10, 2);
6     DECLARE schemePrice DECIMAL(10, 2);
7
8     SET total = 0;
9
10    -- Calculate the total cart price based on the payment table
11    SELECT scheme_id INTO schemePrice FROM payment WHERE ip_address = ipAddress;
12
13    -- Fetch scheme prices and sum them up
14    SELECT SUM(scheme_price) INTO total FROM schemes WHERE scheme_id = schemePrice;
15
16    RETURN total;
17 END //
18
19 DELIMITER ;
```

Procedure to delete items of a specified brand

```
1 DELIMITER $$
2 CREATE PROCEDURE DeleteBrand(IN brand_id_param INT)
3 BEGIN
4     DELETE FROM brands WHERE brand_id = brand_id_param;
5 END $$
6 DELIMITER ;
```

## 8.2 TRIGGERS

Trigger that deletes all products from the products table having that category that is deleted

```
1 CREATE TRIGGER DeleteProductsOnCategoryDelete
2 AFTER DELETE ON categories
3 FOR EACH ROW
4 BEGIN
5     DELETE FROM products
6     WHERE category_id = OLD.category_id;
7 END;
8 //
9 DELIMITER ;
```

## 10. FRONT END DEVELOPEMNT

In our E-commerce website's front-end development, we use HTML, PHP, Bootstrap, and Font Awesome to implement user-friendly interface.

The HTML structure provides the foundation for content organization, while PHP dynamically handles user sessions and includes essential files. Bootstrap, a trusted front-end framework, lends its responsive design and pre-styled components to ensure an adaptable and polished layout.

FontAwesome, Bootstrap, and CSS are the enhance both the look and functionality of the website. FontAwesome introduces a variety of scalable icons, adding visual appeal, notably in the animated shopping cart icon. Bootstrap streamlines the creation of a responsive layout, evident in the structured navigation bar and grid-based product cards, while CSS adds a personalized touch, adjusting elements like logo appearance and image sizes for a polished design.

Together, these tools create a visually engaging, responsive, and user-friendly web interface.

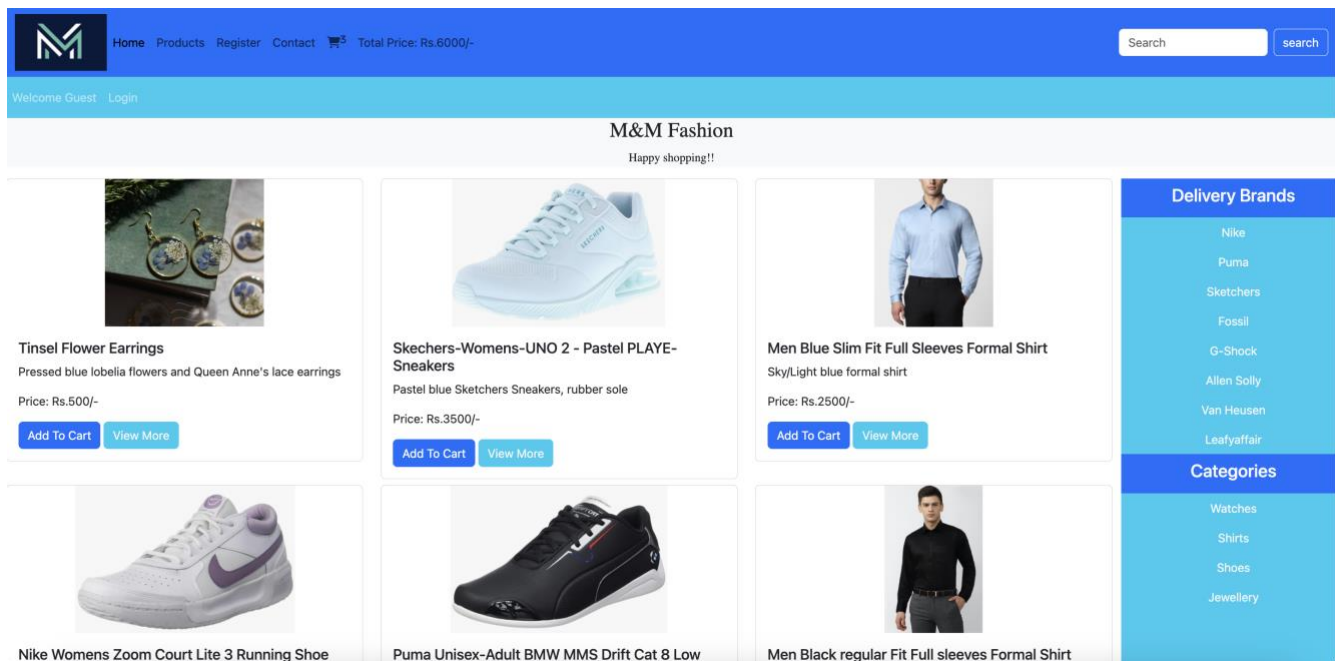



Fig 10.1 Home and Products page

[Home](#) [Products](#) [Contact](#)

M&M Fashion

Happy shopping!!

### New User Registration

Username

Email

User Image

Choose file

No file chosen

User Password

Confirm Password


Address

Contact

Register

Already have an account? [Login](#)

Fig 10.2 User Registration

[Home](#) [Products](#) [Register](#) [Contact](#)

Welcome Guest [Login](#)

M&M Fashion

Happy shopping!!

### User Login

Username

User Password

Login

Don't have an account? [Register](#)

All rights reserved © - Designed by Maryam and Manasvi

Fig 10.3 User Login

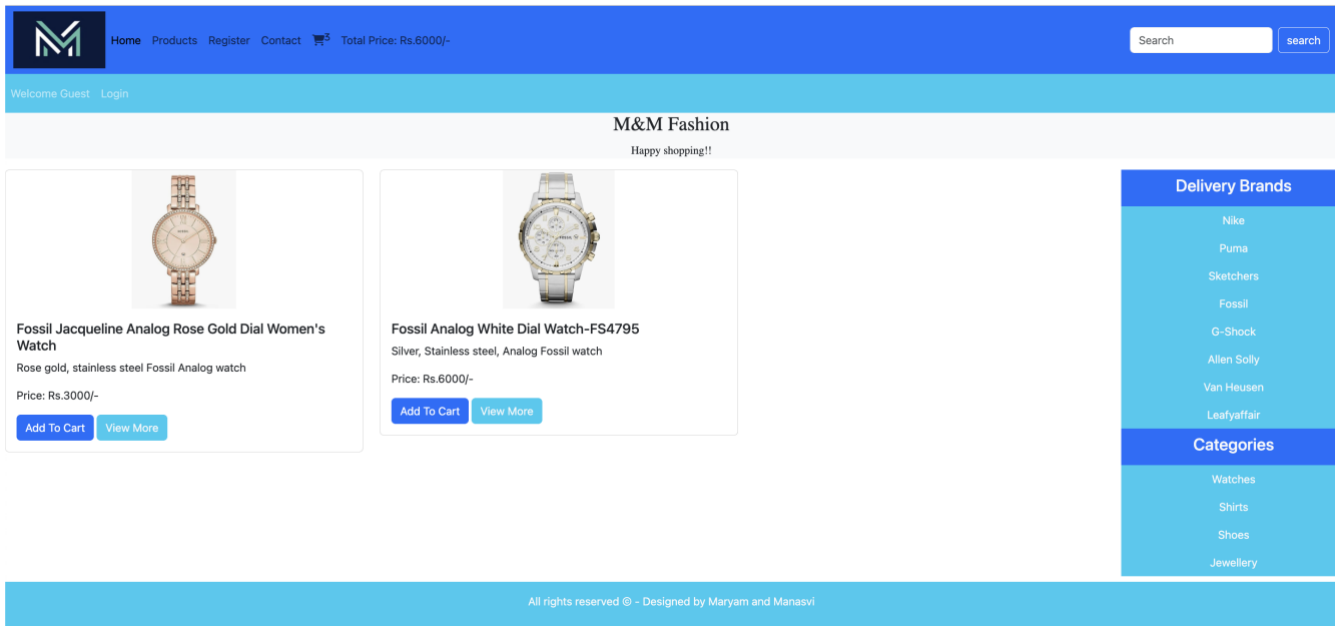


Fig 10.4 Sort on brands or categories

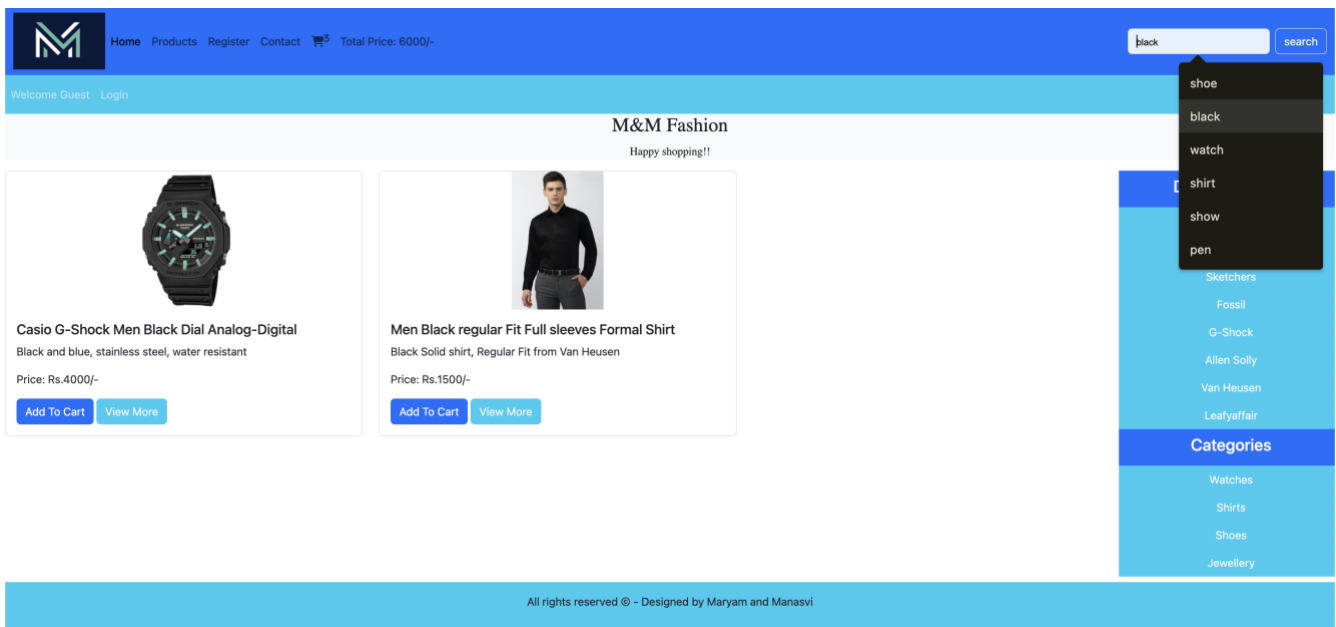


Fig 10.5 Search operation

## Admin Registration

Username

Email

Password

Confirm Password

Register

Already have an account? [Login](#)

Fig 10.6 Admin Registration

## Admin Login

Username

Password

Login

Don't have an account? [Register](#)

Fig 10.7 Admin Login

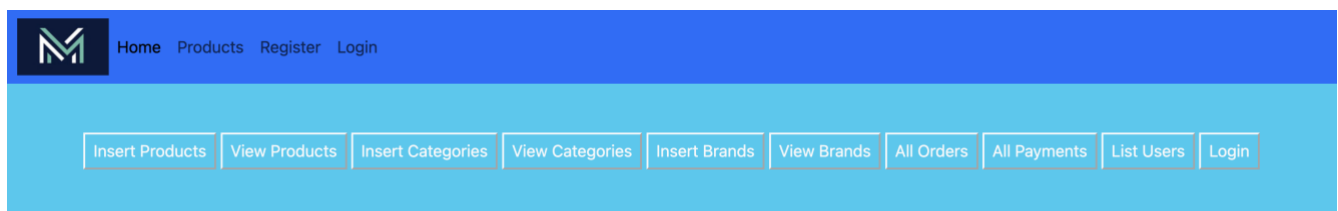



Fig 10.8 Admin Page with buttons to perform various functions




[Home](#) [Products](#) [Register](#) [Login](#)

[Insert Products](#) [View Products](#) [Insert Categories](#) [View Categories](#) [Insert Brands](#) [View Brands](#) [All Orders](#) [All Payments](#) [List Users](#) [Login](#)

### Insert Products

Product Title

Product Description

Keywords

Select a Category

Select a Brand

Product image 1

Choose file No file chosen

Product image 2

Choose file No file chosen

Product image 3


Choose file No file chosen

Product price

Insert Products































All rights reserved © - Designed by Maryam and Manavi

Fig 10.9 Admin may insert products


[Home](#) [Products](#) [Register](#) [Login](#)


[Insert Products](#) [View Products](#) [Insert Categories](#) [View Categories](#) [Insert Brands](#) [View Brands](#) [All Orders](#) [All Payments](#) [List Users](#) [Login](#)

### All Products

Product ID	Product Title	Product Image	Product Price	Total Sold	Status	Edit	Delete
1	Casio G-Shock Men Black Dial Analog-Digital		4000/-	0	true		
2	Men Black regular Fit Full sleeves Formal Shirt		1500/-	0	true		
3	Allen Solly Women's Poly Viscose Solid Regular Fit Shirt		1000/-	0	true		
4	Nike Womens Zoom Court Lite 3 Running Shoe		2000/-	0	true		
5	Fossil Jacqueline Analog Rose Gold Dial Women's Watch		3000/-	1	true		
6	Skechers-Womens-UNO 2 - Pastel PLAYE-Sneakers		3500/-	1	true		
7	Fossil Analog White Dial Watch-FS4795		6000/-	0	true		
8	Men Blue Slim Fit Full Sleeves Formal Shirt		2500/-	0	true		
9	Tinsel Flower Earrings		500/-	1	true		
10	Puma Unisex-Adult BMW MMS Drift Cat 8 Low		3500/-	0	true		

All rights reserved © - Designed by Maryam and Manavi


Fig 10.10 The admin can view, edit, delete products



[Home](#) [Products](#) [Register](#) [Login](#)

[Insert Products](#) [View Products](#) [Insert Categories](#) [View Categories](#) [Insert Brands](#) [View Brands](#) [All Orders](#) [All Payments](#) [List Users](#) [Login](#)

### Insert Categories




Insert Categories

[Insert Categories](#)

All rights reserved © - Designed by Maryam and Manasvi









Fig 10.11 The admin can insert categories



[Home](#) [Products](#) [Register](#) [Login](#)


[Insert Products](#) [View Products](#) [Insert Categories](#) [View Categories](#) [Insert Brands](#) [View Brands](#) [All Orders](#) [All Payments](#) [List Users](#) [Login](#)

### All Categories

Sno	Category title	Edit	Delete
1	Watches		
2	Shirts		
3	Shoes		
4	Jewellery		

All rights reserved © - Designed by Maryam and Manasvi


Fig 10.12 Admin may view, edit, delete categories



[Home](#) [Products](#) [Register](#) [Login](#)

[Insert Products](#) [View Products](#) [Insert Categories](#) [View Categories](#) [Insert Brands](#) [View Brands](#) [All Orders](#) [All Payments](#) [List Users](#) [Login](#)

### Insert Brands




Insert Brands

[Insert Brands](#)

















All rights reserved © - Designed by Maryam and Manasvi

Fig 10.13 Admin may insert brands


[Home](#)
[Products](#)
[Register](#)
[Login](#)


[Insert Products](#)
[View Products](#)
[Insert Categories](#)
[View Categories](#)
[Insert Brands](#)
[View Brands](#)
[All Orders](#)
[All Payments](#)
[List Users](#)
[Login](#)

### All Brands

Sino	Brand title	Edit	Delete
1	Nike		
2	Puma		
3	Sketchers		
4	Fossil		
5	G-Shock		
6	Allen Solly		
7	Van Heusen		
8	Leafyaffair		

All rights reserved © - Designed by Maryam and Manasvi

Fig 10.14 Admin may view, edit, delete brands


[Home](#)
[Products](#)
[Register](#)
[Login](#)


[Insert Products](#)
[View Products](#)
[Insert Categories](#)
[View Categories](#)
[Insert Brands](#)
[View Brands](#)
[All Orders](#)
[All Payments](#)
[List Users](#)
[Login](#)

### All Orders

Sl. No.	Due Amount	Invoice number	Total products	Order Date	Status
1	3500	269562185	1	2023-11-04 19:32:13	Complete

All rights reserved © - Designed by Maryam and Manasvi

Fig 10.15 Admin can view all orders


[Home](#)
[Products](#)
[Register](#)
[Login](#)

[Insert Products](#)
[View Products](#)
[Insert Categories](#)
[View Categories](#)
[Insert Brands](#)
[View Brands](#)
[All Orders](#)
[All Payments](#)
[List Users](#)
[Login](#)

### All Payments

Sl. No.	Invoice number	Amount	Payment Mode	Order Date
1	269562185	3500	Net Banking	2023-11-04 19:32:13

All rights reserved © - Designed by Maryam and Manasvi

Fig 10.15 Admin may view all payments

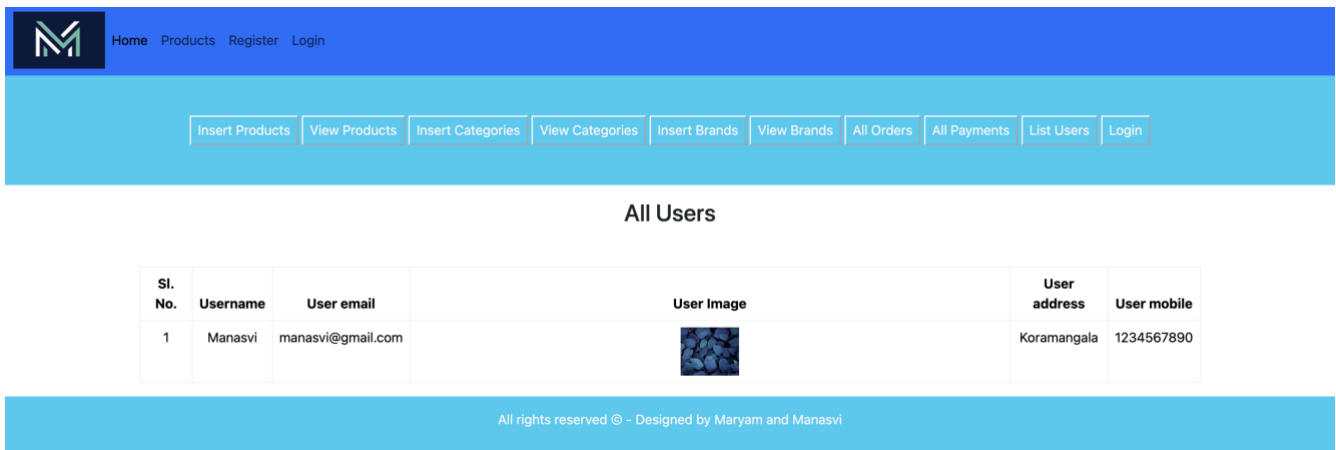


Fig 10.16 Admin may view all users

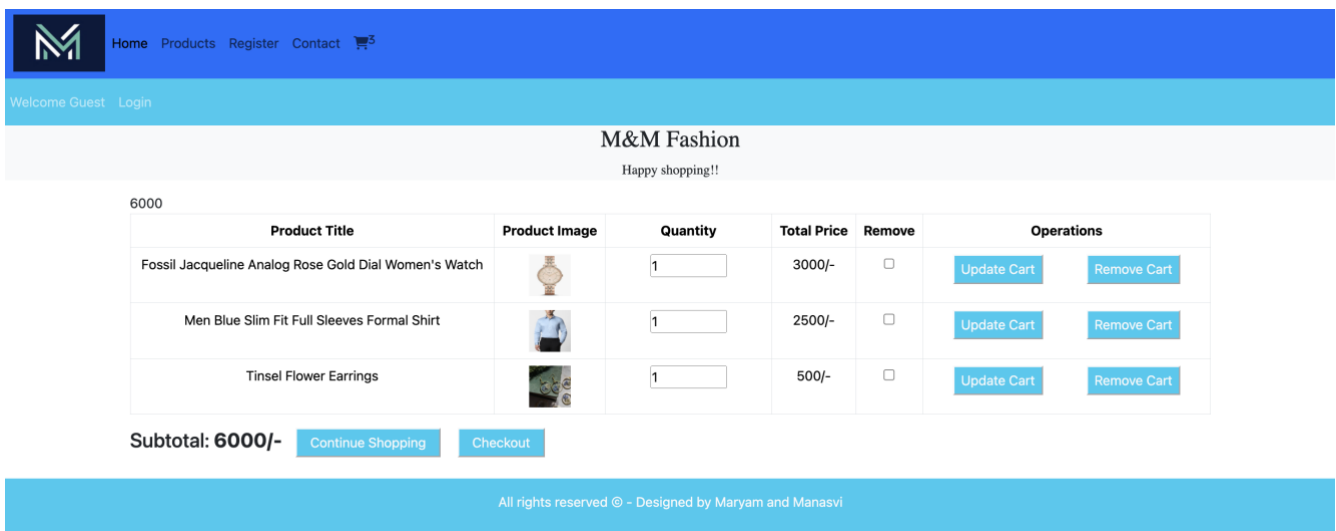


Fig 10.17 Items in cart and subtotal and checkout option

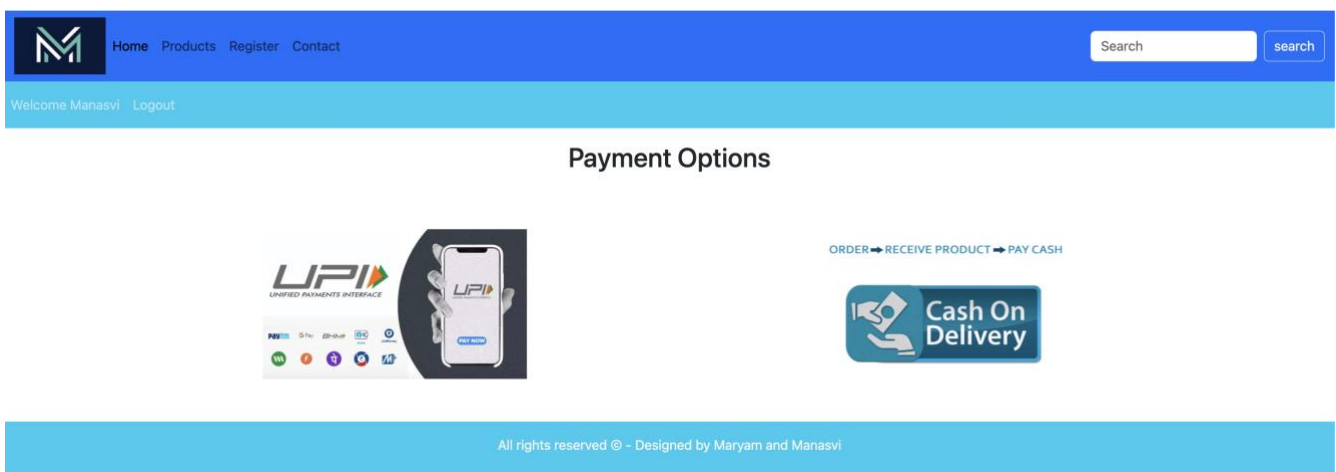




Fig 10.18 Payment page: We have implemented only COD in our code


[Home](#)
[Products](#)
[Register](#)
[Contact](#)



Total Price: Rs.0/-

Welcome Manasvi [Logout](#)

M&M Fashion

Happy shopping!!

Your Profile





[Pending Orders](#)
[Edit Account](#)
[My Orders](#)
[Delete Account](#)
[Logout](#)

My Orders

Sl. No.	Amount Due	Total Products	Invoice Number	Date	Complete/Incomplete	Status
1	3500	1	269562185	2023-11-04 19:32:13	Complete	Paid
2	6000	3	618029213	2023-11-16 12:55:02	Incomplete	<a href="#">Confirm</a>

Fig 10.19 User profile page showing pending orders


[Home](#)
[Products](#)
[Register](#)
[Contact](#)



Total Price: Rs.0/-

Welcome Manasvi [Logout](#)

M&M Fashion

Happy shopping!!

Your Profile



[Pending Orders](#)
[Edit Account](#)
[My Orders](#)
[Delete Account](#)
[Logout](#)

Edit Account




Fig 10.20 User profile page with edit option

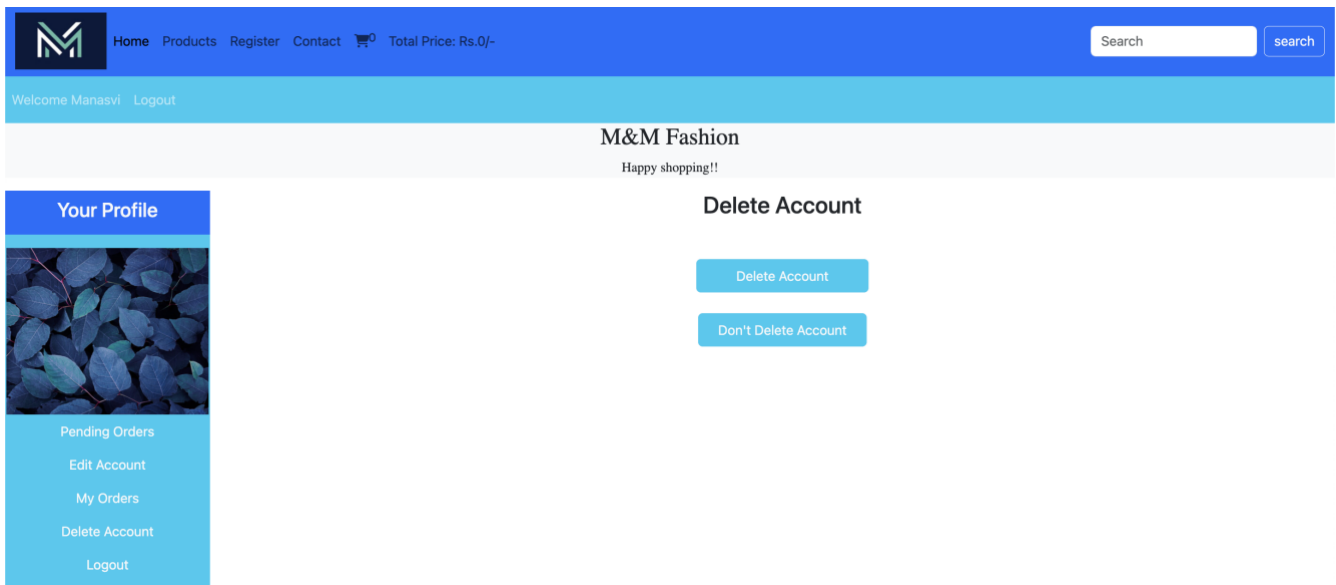


Fig 10.21 User may delete their account

## REFERENCES

1. <https://www.w3schools.com/php/>
2. <https://www.tutorialspoint.com/php/index.htm>
3. <https://www.geeksforgeeks.org/crud-operations-in-mysql/>
4. <https://www.geeksforgeeks.org/different-types-of-mysql-triggers-with-examples/>
5. <https://www.a2hosting.com/kb/developer-corner/mysql/mysql-stored-functions-and-procedures/>