RAYAT SHIKSHAN SANSTHAN'S

S.M. JOSHI COLLEGE HADAPSAR, PUNE 28

A Project Report On

"Bicycle Ecommerce Website"

Submitted To,

University of Pune

In Partial Fulfilment of the Requirement Of

TY BCA,

(Bachelor of Computer Application, Science)

Submitted By

Mr. Arbaj Shafik Shaikh

Under Guidance Of

(Prof. Shivarkar S.Y. and Prof. Vrunda P. Chouthkanthiwar)

During Academic Year: ***2023-24***

RAYAT SHIKSHAN SANSTHAN 'S

S. M. JOSHI COLLEGE HADAPSAR, PUNE 28

CERTIFICATE

This is to certify that,

Mr. Arbaj Shafik Shaikh

has successfully completed her work on project report entitled ***"Bicycle Ecommerce Website for the academic year of 2023-2024". for S.M. Joshi College, Hadapsar, Pune 28*** in Visual Basic 6.0 in the partial fulfilment of the award of the degree "Bachelor of Computer Applications" (BCA, Science: Semester-VI) through Savitribai Phule Pune University, Pune.

This work has been carried out under my guidance to the best of my knowledge and belief the matter presented in this project report has not been submitted earlier and it is his original work.

Head Of Department **External Examiner**

Project Guide **Principal**

ACKNOWLEDGEMENT

We want to say a big thank you to everyone who helped us with the **"Bicycle Ecommerce Website"** project. Our ***Prof. Vrunda P. Chouthkanthiwar Co-ordinator and Lecturer Department of BCA*** guided us well. We throughout this project get many bugs, but us motivated by Prof. Shivarkar S.Y. about project management and debugging of the bugs, we tried to overcome them all. The teachers and staff at S.M. Joshi College, Hadapsar, Pune 28 supported us throughout. Our friends and classmates were there for us too. We're grateful to our families for their love and encouragement. And a special thanks to the users and others who gave us feedback. Your ideas made our project better. We couldn't have done it without all of you. Thank you for being a part of this .

DECLARATION

We, **Mr. Saurabh Kope** and **Mr. Arbaj Shafik Shaikh** student of TY BCA, S.M. JOSHI COLLEGE HADAPSAR, PUNE declare that the project entitled **"Bicycle Ecommerce Website"** have been completed successfully & This project is submitted towards the partial fulfilment of the requirement of the degree of TY BCA. This project is not submitted for any other degree, Diploma or other similar title or prize in any other university.

Place : Hadapsar, Pune

Date: / / 2024

Name of Student **: Arbaj Shaikh**

Signature

Rayat Shikshan Sanstha's
S. M. Joshi College Hadapsar, Pune – 28
Academic Year 2023-24
Department of Computer Science and Application
T.Y.B.C.A (Science)

Project Milestones

Name of Students : _____

_____

Project Work	Date	Remarks from Guide	Sign Guide
Project Topic			
Seminar on project Synopsis			
Submission of ER Diagram			
Submission of DFD Diagram			
Submission of Data Dictionary			
Form Designing			
Project Review Meeting			
Database connectivity with validation			
1st Presentation			
2 nd Presentation			
Final Presentation			
Final Documentation			
Project review Meeting			

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INTRODUCTION

Welcome to the revolutionary world of our bicycle ecommerce website project. In today's fast-paced society, where convenience is key, we present a cutting-edge platform tailored to cyclists of all levels. Our project aims to bridge the gap between traditional bike shops and the digital realm, offering an immersive online shopping experience like never before.

With an emphasis on user-friendly navigation and seamless functionality, our website provides a virtual showroom where cyclists can explore a diverse range of bicycles and accessories from the comfort of their homes. Whether you're a casual rider or a passionate enthusiast, our platform caters to your every need, ensuring a personalized shopping journey.

Our project endeavors to redefine the way cyclists interact with and purchase their gear, prioritizing ease of use and accessibility for all. Through innovative features such as detailed product descriptions, intuitive search filters, and secure payment integration, we strive to elevate the online shopping experience for our users.

Backed by meticulous research and robust technological foundations, our project represents a milestone in the evolution of bicycle ecommerce. Join us on this exciting journey as we pedal towards a future where cycling enthusiasts worldwide can connect, explore, and indulge their passion with unparalleled convenience and efficiency. Welcome aboard!

SCOPE

The scope of the "Bicycle Ecommerce Website" project encompasses the following key aspects :

Product Catalog :

The website will feature a comprehensive catalog of bicycles, accessories, `and related products, sourced from various brands and suppliers.

User Registration and Authentication :

Users will have the ability to create accounts, log in securely, and manage their profiles, enabling personalized experiences and order tracking.

Product Browsing and Searching :

The website will facilitate easy browsing and searching of products through intuitive navigation menus, search filters, and categories.

Product Details and Descriptions :

Detailed product pages will provide essential information, including specifications, images, prices, and customer reviews, aiding users in making informed purchasing decisions.

Shopping Cart and Checkout :

Users can add items to their shopping carts, review their selections, and proceed to secure checkout, where they can enter payment and shipping details.

Payment Integration :

The website will integrate with secure payment gateways to facilitate smooth and secure transactions, supporting various payment methods such as credit/debit cards, digital wallets, and online banking.

Order Management :

The platform will provide functionalities for users to track the status of their orders, receive notifications on order updates, and access order history for reference.

User Reviews and Ratings :

Customers can leave reviews and ratings for products they have purchased, contributing to the community and informing future buyers.

Admin Dashboard :

An administrative dashboard will be available for site administrators to manage products, inventory, orders, user accounts, and other backend operations.

Customer Support :

The website will offer channels for customer support, including FAQs, contact forms, and possibly live chat, to address user inquiries, concerns, and feedback.

Responsive Design :

The website will be designed to be responsive, ensuring compatibility and optimal viewing experience across various devices, including desktops, laptops, tablets, and smartphones.

Security and Compliance :

Robust security measures will be implemented to protect user data, prevent fraud, and comply with relevant regulations such as GDPR and PCI DSS.

Need of Ecommerce Website

- **Growing Demand for Online Shopping :** With the increasing trend of online shopping, cyclists seek a convenient platform where they can browse, compare, and purchase bicycles and related accessories from the comfort of their homes.

- **Access to a Wide Range of Products :** Cyclists often look for a diverse selection of bicycles, gear, and accessories to meet their specific needs and preferences. An ecommerce website provides access to a broader range of products compared to traditional brick-and-mortar stores.

- **Convenience and Accessibility :** Many cyclists lead busy lives and may not have the time to visit physical stores. An online platform allows them to shop at any time, from anywhere, using their computers or mobile devices.

- **Information and Reviews :** Cyclists value detailed product information and user reviews when making purchasing decisions. An ecommerce website offers the opportunity to provide comprehensive product descriptions, specifications, and customer reviews.

- **Ease of Transaction :** Online payment options and secure checkout processes streamline the purchasing process for customers, making it easier to complete transactions online.

- **Community and Engagement :** An ecommerce website can serve as a hub for the cycling community, offering forums, blogs, and social features where cyclists can connect, share experiences, and seek advice.

Technology Used

Front-End (Client-Side):

- **HTML (Hyper Text Markup Language) :** This is the core building block of your website's content and structure.
- **CSS (Cascading Style Sheets) :** CSS controls the visual style of your website. It determines fonts, colors, layout, and overall appearance.
- **JavaScript (JS) :** JavaScript adds interactivity to your website. It allows for features like animations, form validation, and dynamic content updates.
- **Bootstrap Framework :** Bootstrap is a popular front-end framework that provides pre-built components and styles for faster development. It simplifies creating responsive layouts, buttons, navigation menus, and more.

Back-End (Server-Side) :

- **XAMPP (or similar software) :** XAMPP is a local development environment that bundles essential server-side components like Apache web server, MySQL database, and PHP interpreter.
- **PHP :** PHP is a server-side scripting language. It's used to generate dynamic website content, interact with databases, and handle user requests.
- **MySQLite (or similar database) :** While you mentioned SQLite, your website might be using a full-fledged MySQL database instead. MySQL is a relational database management system that stores website data like user information, content, and settings. SQL (Structured Query Language) is used to interact with the database to retrieve, insert, update, and delete data

Development Tools :

- **Visual Studio Code (VS Code) :** This is a popular, free code editor with features like syntax highlighting, code completion, and debugging tools. It's a versatile tool for writing and editing website code.

Hardware Requirement :

- **Processor (CPU) :** A mid-range Intel Core i5
- **RAM (Memory) :** 8GB of RAM is the minimum
- **Storage :** A Solid State Drive (SSD) is essential for fast loading times.
- **Operating System :** Windows, mac OS, or Linux, some developers have preferences.

Proposed Systems

- **Product Catalog :**
  - Allows showcasing products with descriptions, images, and variations (size, color).
- **Shopping Cart :**
  - Enables users to add and remove items before checkout.
- **Secure Checkout :**
  - Provides a secure payment gateway for customers to complete purchases.
- **Order Management :**
  - Allows you to track orders, manage inventory, and fulfill deliveries.
- **Customer / Subscriber :**
  - Subscriber can subscribe the website with the email.
- **Product Search and Filtering :**
  - Allows users to easily find products based on various criteria (category, price, brand).
- **Customer Reviews and Ratings :**
  - Enables customers to leave feedback on products, building trust and credibility.
- **Inventory Management (decentralized) :**
  - Inventory is managed by each vendor, requiring clear communication and integration with the platform.
- **Payment Processing :**
  - The platform facilitates secure transactions between customers and vendors.

OBJECTIVE

- **Create a User-Friendly Platform :** Develop an intuitive and easy-to-navigate website interface that ensures a seamless shopping experience for users of all skill levels and preferences.

- **Offer Diverse Product Selection :** Curate a comprehensive collection of bicycles, accessories, and related gear from various brands, catering to the diverse needs and preferences of cyclists.

- **Enhance Product Information :** Provide detailed product descriptions, specifications, and images to empower users with the information needed to make informed purchasing decisions.

- **Implement Secure Transactions :** Integrate robust security measures to safeguard user data and ensure secure online transactions during the checkout process.

- **Enable Efficient Order Management :** Implement features for users to add items to their shopping carts, proceed to checkout, and track the status of their orders in real-time, enhancing transparency and convenience.

- **Facilitate Customer Engagement :** Enable user reviews, ratings, and feedback mechanisms to foster community engagement and provide valuable insights for both customers and the business.

User Requirements

- **Easy Navigation :** Users should be able to find what they're looking for quickly and intuitively. This includes a clear and well-organized website layout, with easily accessible menus, search bars, and category filters.

- **Detailed Product Information :** Each product should have comprehensive descriptions, high-quality images from multiple angles (especially important for physical products), and clear specifications.

- **Search Functionality :** A robust search function allows users to find products by keyword, category, brand, price range, or other relevant criteria. Facet filtering further refines search results based on specific attributes.

- **Product Reviews and Ratings :** Customer reviews and ratings can build trust and influence purchasing decisions. Allow users to easily submit reviews and showcase them prominently on product pages.

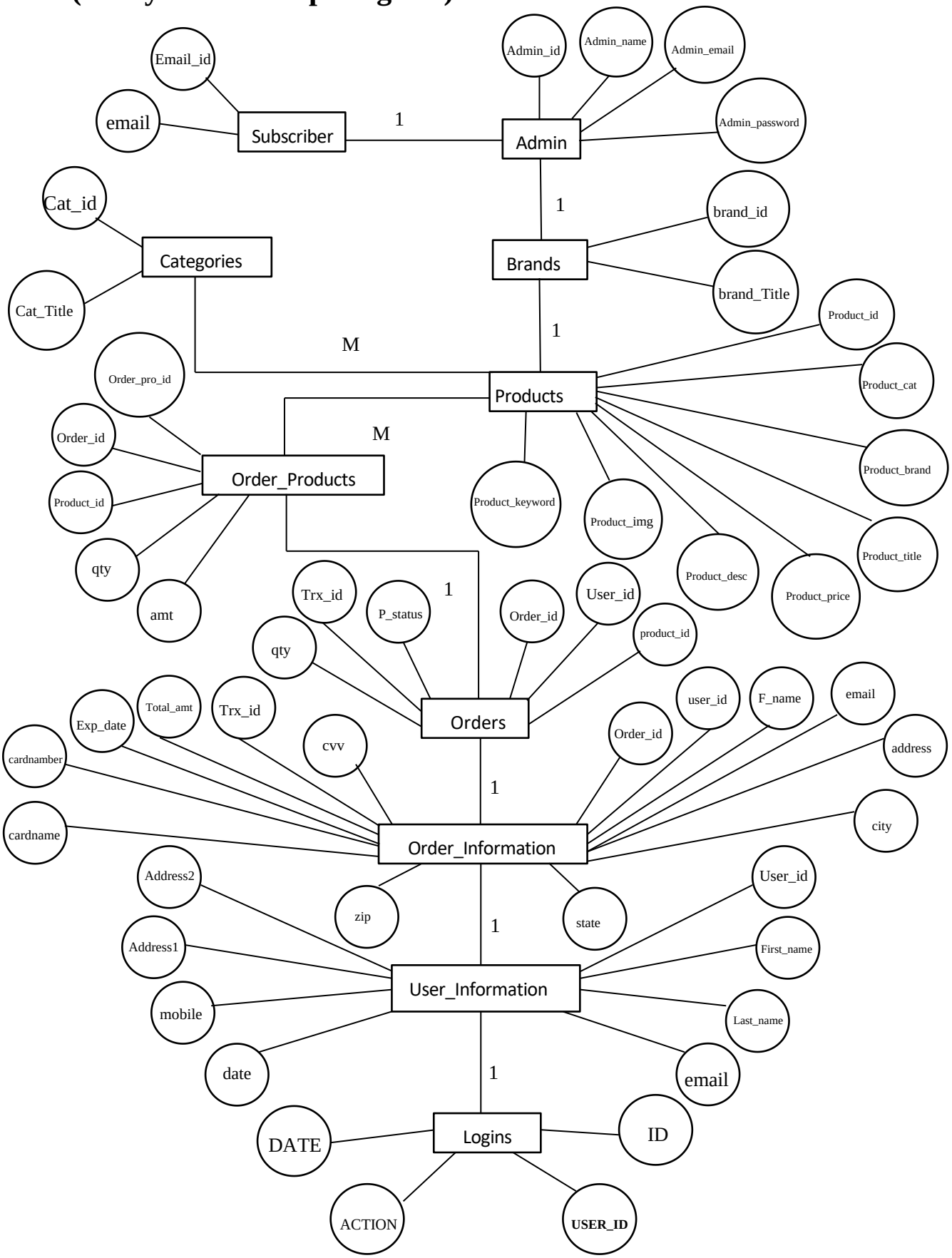
- **Mobile-Friendly Design :** A significant portion of online shopping happens on mobile devices. Ensure your website is responsive and offers a seamless user experience on all screen sizes.

- **Fast Loading Times :** Nobody likes waiting for pages to load. Optimize your website for speed to avoid losing customers due to impatience

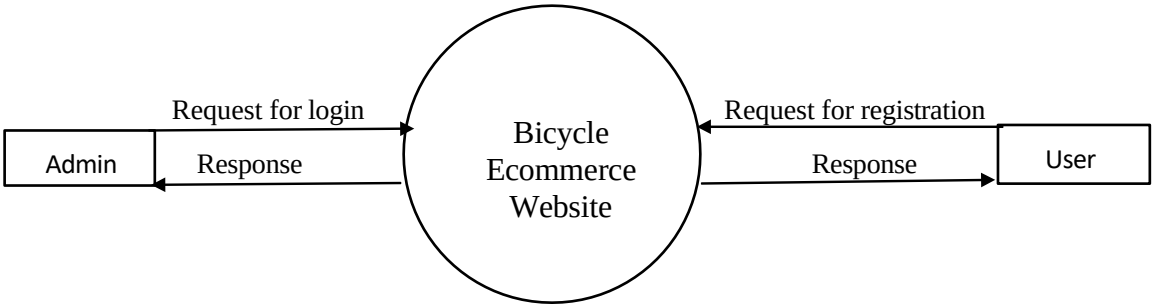
- **Customer Support :** Provide multiple channels for customer support, such as FAQs, live chat, email ticketing, or phone support, to answer questions and address any issues promptly.

Analysis & Design

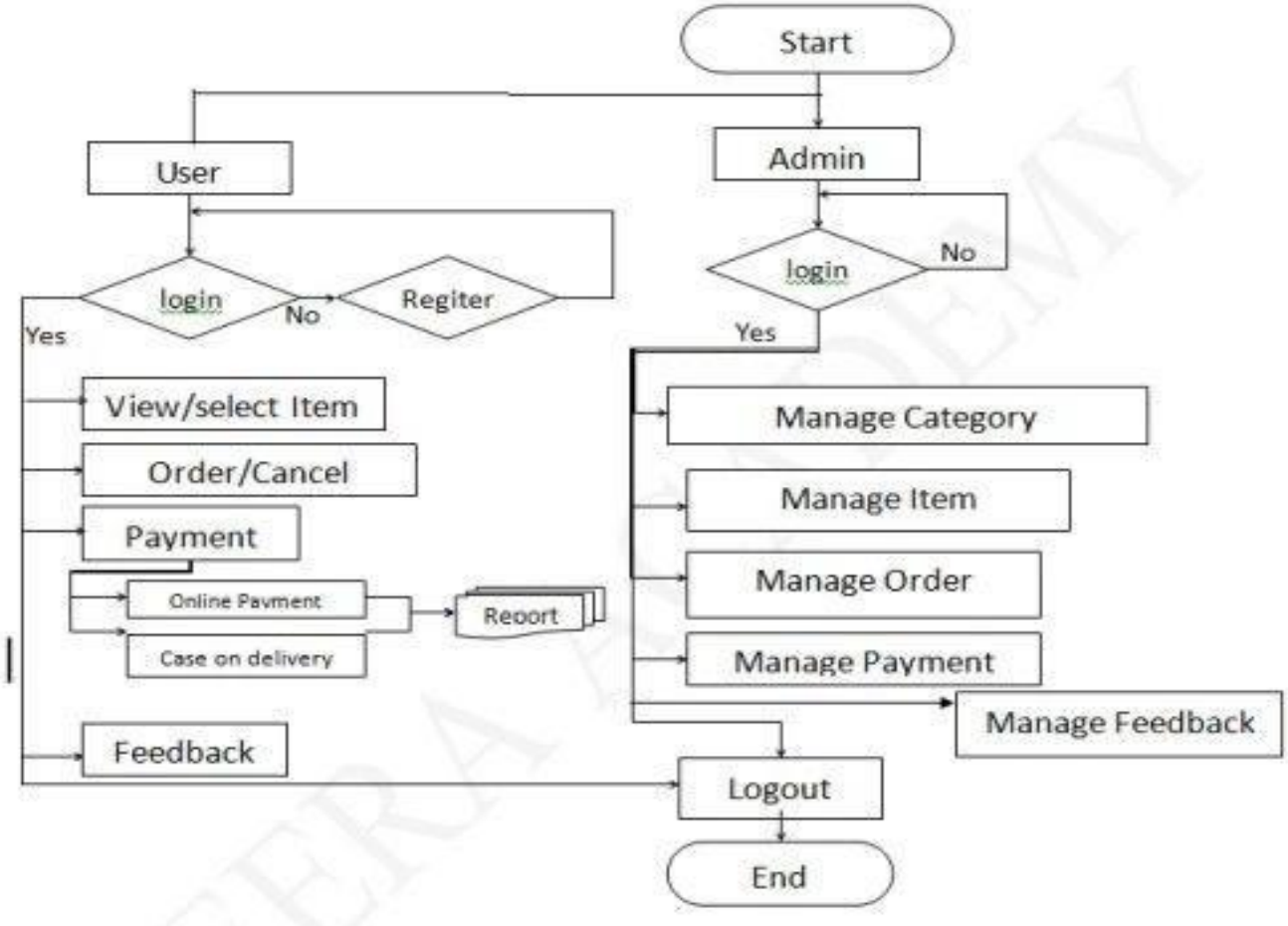
ERD (Entity Relationship Diagram) :



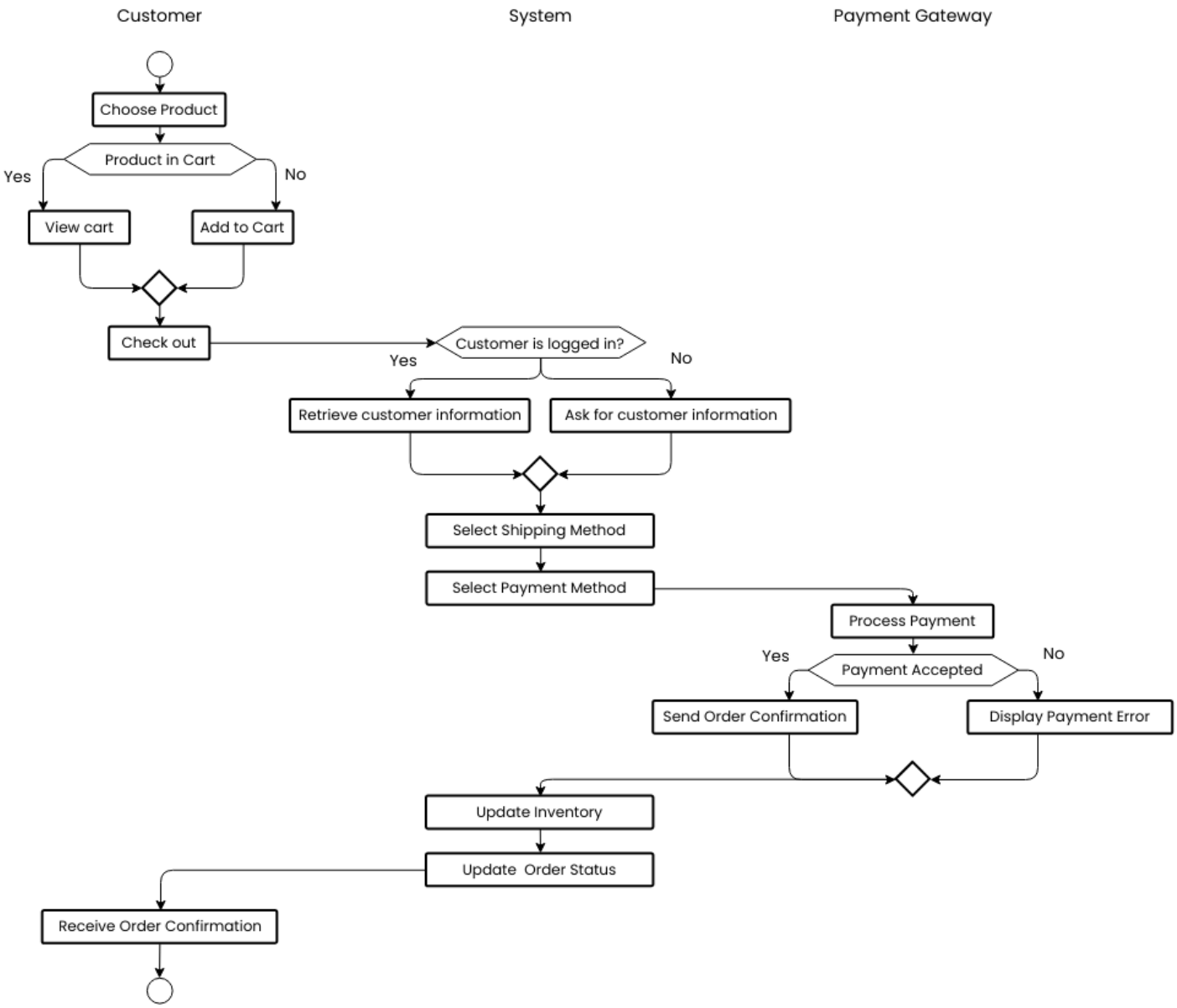
DFD 0 LEVEL



DFD Level 1



DFD Level 2


Customer
System
Payment Gateway
Choose Product
Product in Cart
Yes
No
View cart
Add to Cart
Check out
Customer is logged in?
Yes
No
Retrieve customer information
Ask for customer information
Select Shipping Method
Select Payment Method
Process Payment
Yes
Payment Accepted
No
Send Order Confirmation
Display Payment Error
Update Inventory
Update Order Status
Receive Order Confirmation

DATA DICTIONARY

1. Admin Information

Field Name	Data Type	Constrains	Description	Extra
admin_id	int(10)	Primary Key	Unique Identity of Admin	AUTO_INCREMENT
admin_name	varchar(300)		Name of the admin	
admin_email	varchar(300)		Email of the admin	
admin_password	varchar(300)		Password of the admin	

2. Brands

Field Name	Data Type	Constrains	Description	Extra
brand_id	int(100)	Primary Key	Unique ID of brands	AUTO_INCREMENT
brand_title	text		Brand/Company name	

3. Cart

Field Name	Data Type	Constrains	Description	Extra
id	int(10)	Primary Key	Unique ID of Product into cart	AUTO_INCREMENT
p_id	int (10)		Product uniqe id	
ip_add	varchar (250)		Internet Protocol Address	
user_id	int(10)[NULL]		User ID of user but not requirement for add to cart	
qty	int (10)		Quantity of Product	

4. Categories

Field Name	Data Type	Constrains	Description	Extra
cat_id	int(100)	Primary Key	Unique ID of categories	AUTO_INCREMENT
cat_title	text		Categories name	

5. Email Information/Subscriber

Field Name	Data Type	Constrains	Description	Extra
email_id	int(100)	Primary Key	Unique Email ID	AUTO_INCREMENT
email	text		Email of subscriber	

6. Logins

Field Name	Data Type	Constrains	Description	Extra
id	int(11)	Primary Key	Unique login identifier.	AUTO_INCREMENT
user_id	varchar(50)		User identifier for login.	
action	varchar(50)		Type of login action.	
date	datetime		Date and time of login.	

7. Orders

Field Name	Data Type	Constrains	Description	Extra
order_id	int(11)	Primary Key	Unique order identifier.	AUTO_INCREMENT
user_id	int(11)		User identifier for order.	
product_id	int(11)		Product identifier in order.	
qty	int(11)		Quantity of product.	
trx_id	varchar(255)		Transaction identifier.	
p_status	varchar(20)		Order processing status.	

8. Orders Information

Field Name	Data Type	Constrains	Description	Extra
order_id	int(10)	Primary Key	Unique order identifier.	AUTO_INCREMENT
user_id	int(11)	Foreign key	Customer identifier.	
f_name	varchar(255)		Customer's first name.	
email	varchar(255)		Customer's email address.	
address	varchar(255)		Shipping address.	
city	varchar(255)		Shipping city.	
state	varchar(255)		Shipping state/province.	
zip	int(10)		Shipping ZIP/postal code.	
cardname	varchar(255)		Name on card.	
cardnumber	varchar(20)		Card number.	
expdate	varchar(255)		Card expiration date.	
prod_count	int(15)[NULL]		Total product count.	
total_amt	int(15)[NULL]		Total order amount.	
cvv	int(5)		Card security code	

9. Order Products

Field Name	Data Type	Constrains	Description	Extra
order_pro_id	int(10)	Primary Key	Unique Order Product ID	AUTO_INCREMENT
order_id	int(11)	Foreign Key	Order ID of user	
product_id	int(11)	Foreign key	Product ID of user	
qty	int(15)		Quantity of Product	
amt	int(15)		Amount of the Product	

10.Products

Field Name	Data Type	Constrains	Description	Extra
product_id	int(100)	Primary Key	Unique Product ID	AUTO_INCREMENT
product_cat	int(100)		Product category select	
product_brand	int(100)		Product brand select	
product_title	varchar(255)		Product title add	
product_price	int(100)		Product Price add	
product_desc	text		Product Description add	
product_image	text		Product Images add	
product_keywords	text		Product Keywords add	

11.User Information/ 12. User Information Backup

Field Name	Data Type	Constrains	Description	Extra
user_id	int(10)	Primary Key	Unique User ID	AUTO_INCREMENT
first_name	varchar(100)		First name of user	
last_name	varchar(100)		Last name of user	
email	varchar(300)		Email of user	
password	varchar(300)		Password of user	
mobile	varchar(10)		Mobile number of user	
address1	varchar(300)		User Address 1	
address2	varchar(11)		User Address 2	

Module Specification

1. **User Authentication Module**:
    - Features:
        - User registration
        - User login/logout
        - Password recovery/reset
        - User profile management (update profile, change password)
    - Components:
        - Registration form
        - Login form
        - Profile page

2. **Product Management Module:**
    - Features:
        - Display list of available bicycles
        - Detailed product descriptions
        - Filtering and sorting options
        - Product search functionality
    - Components:
        - Product catalog page
        - Product detail page
        - Filtering and sorting options

3. **Shopping Cart Module:**
    - Features:
        - Add/remove products to/from cart
        - Update quantity of products in cart
        - Calculate subtotal, taxes, and total
    - Components:
        - Shopping cart page
        - Mini-cart in the header

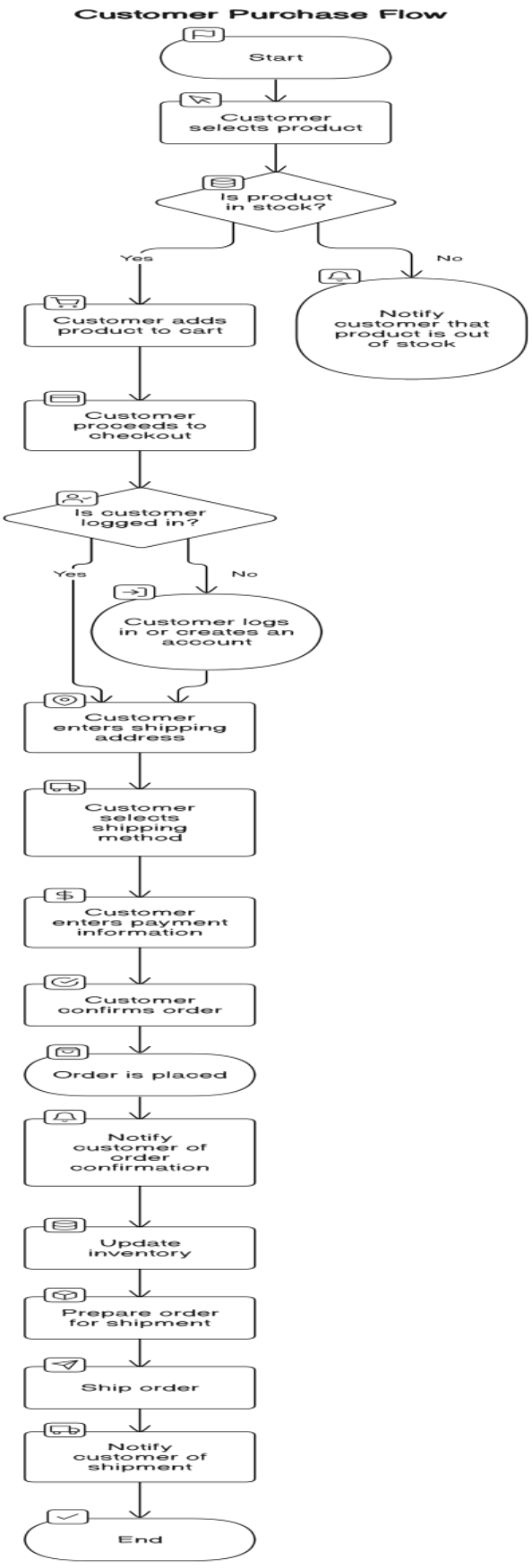
4. **Checkout Module:**
    - Features:
        - Input shipping and billing information
        - Select shipping method
        - Apply discount codes or coupons
        - Confirm order
    - Components:
        - Checkout page
        - Shipping and billing forms

5. **Order Management Module:**
    - Features:
        - View order history
        - Track order status
        - Cancel orders
    - Components:
        - Order history page
        - Order detail page

6. **Payment Integration Module:**
    - Features:
        - Integration with payment gateway
        - Secure payment processing
        - Handling payment failures and refunds
    - Components:
        - Payment form
        - Payment gateway integration

7. **Admin Dashboard Module:**
    - Features:
        - Manage product inventory
        - View and manage orders
        - Customer management
    - Components:
        - Product management interface
        - Order management interface
        - Customer management interface

Hierarchy Diagram



Website Testing

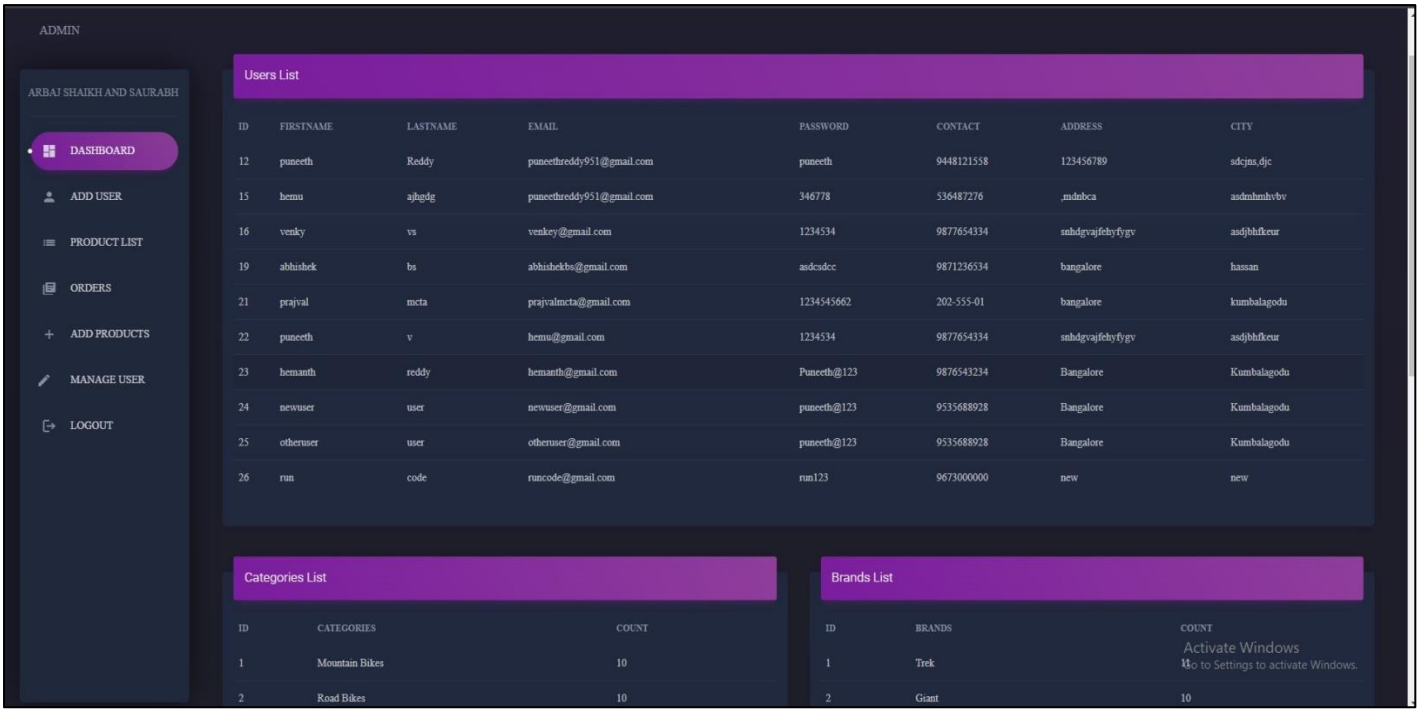
Testing Website step by step :

1. **Functional Testing :**
    - **User Accounts :** Test login, signup, account information update, and password reset.
    - **Product Catalog :** Verify products are displayed correctly, search works with various filters, and sorting options function properly.
    - **Shopping Cart :** Test adding/removing items, updating quantities, and applying coupons.
    - **Checkout Process :** Simulate the entire checkout flow, including payment processing, shipping options, and order confirmation.
2. **Usability Testing :**
    - **Clear Navigation :** Ensure menus and categories are easy to understand and users can find what they're looking for quickly.
    - **Product Information :** Verify product descriptions, images, and specifications are clear and informative.
    - **Search Functionality :** Test if the search bar is prominent and delivers accurate results based on user queries.
    - **Checkout Simplicity:** The checkout process should be streamlined with minimal steps and clear instructions
3. **Performance Testing :**
    - **Page Load Speed :** Test loading times for different pages on your site, especially product pages and checkout.
    - **Mobile Responsiveness :** Ensure your website adapts seamlessly to different screen sizes and devices (phones, tablets, desktops).
    - **Website Uptime :** Monitor your site's uptime to minimize downtime and ensure smooth operation.

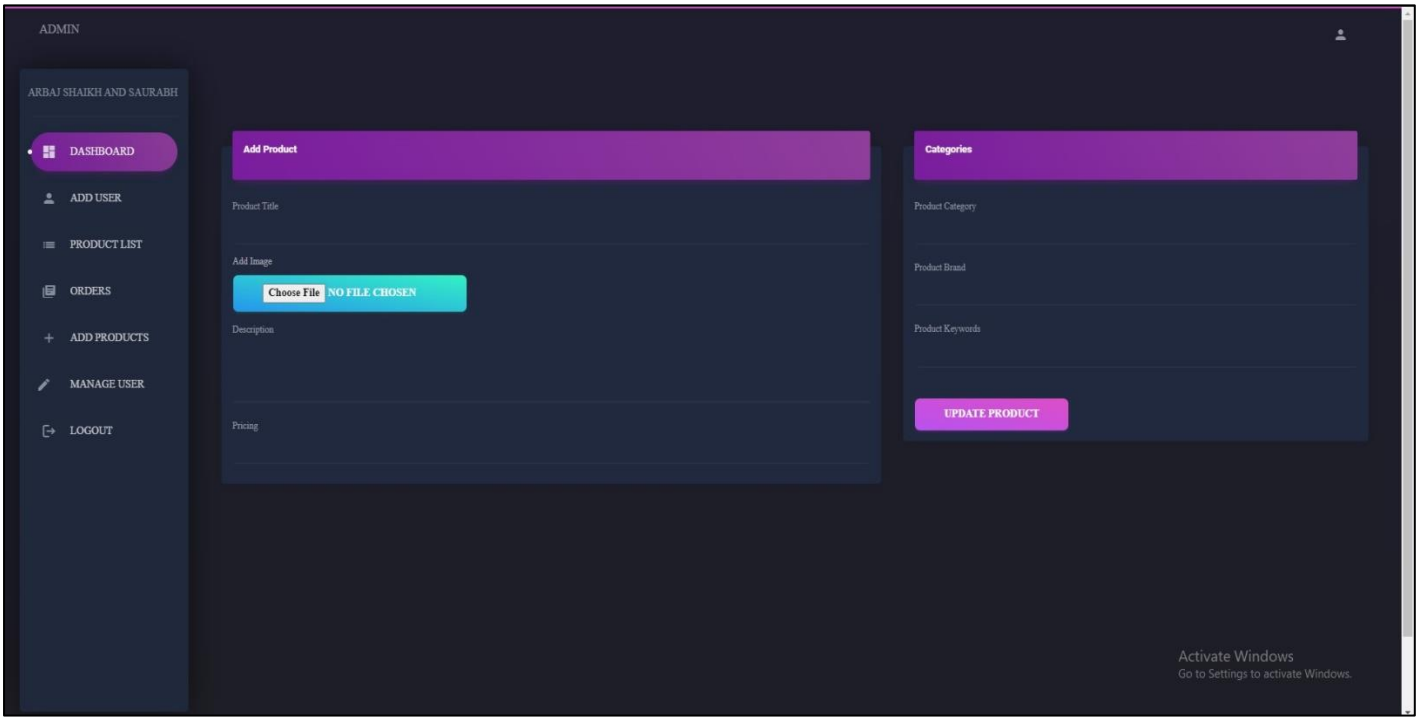
4. **Security Testing :**
    - ❖ **Payment Security :** Verify your payment gateway is PCI compliant and uses secure protocols for transactions.
    - ❖ **Customer Data Protection :** Ensure user data like passwords and credit card information is encrypted and stored securely.
    - ❖ **Regular Security Checks:** Conduct vulnerability scans to identify and address potential security weaknesses.
5. **A/B Testing :**
    - ❖ This allows you to compare different versions of your website elements (like product images, calls to action, or layouts) and see which ones perform better with your target audience. This data-driven approach helps you optimize your website for higher conversions.

SCREENSHOTS

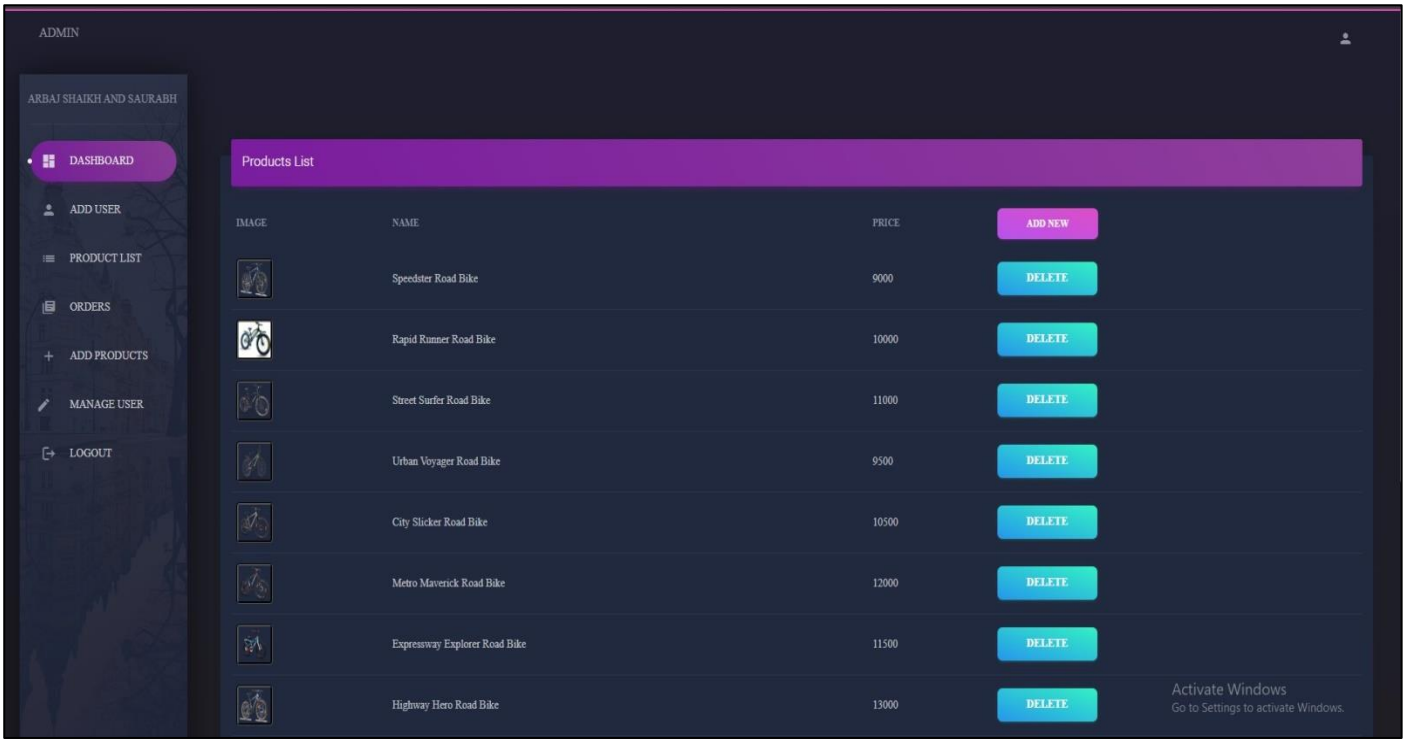
➢ Admin Interface:



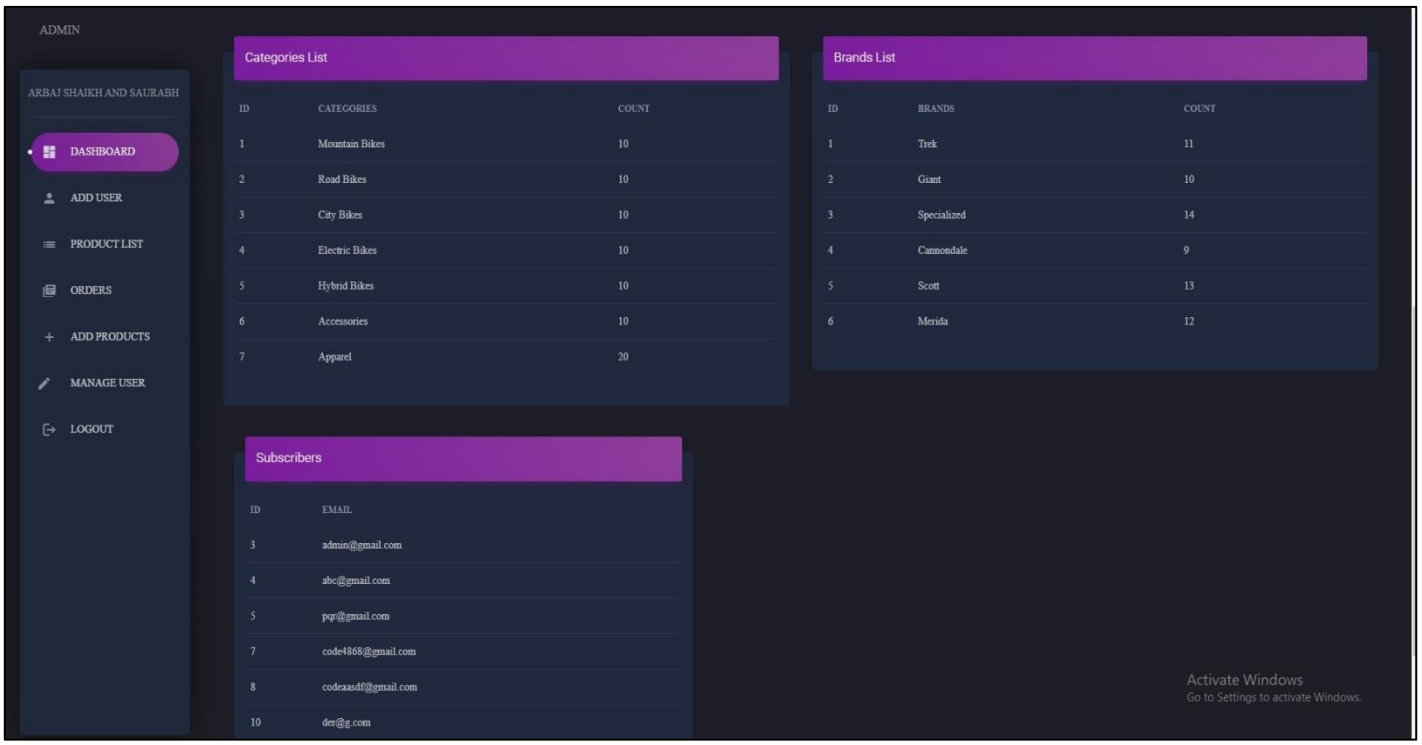
➢ Admin add Product into website:



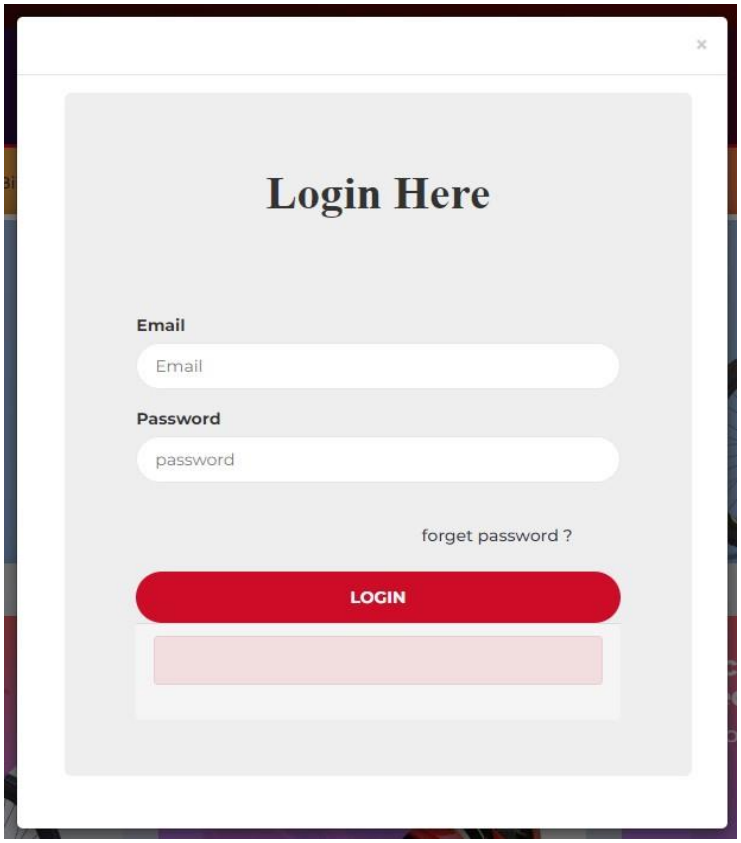
➢ Admin Product lists:



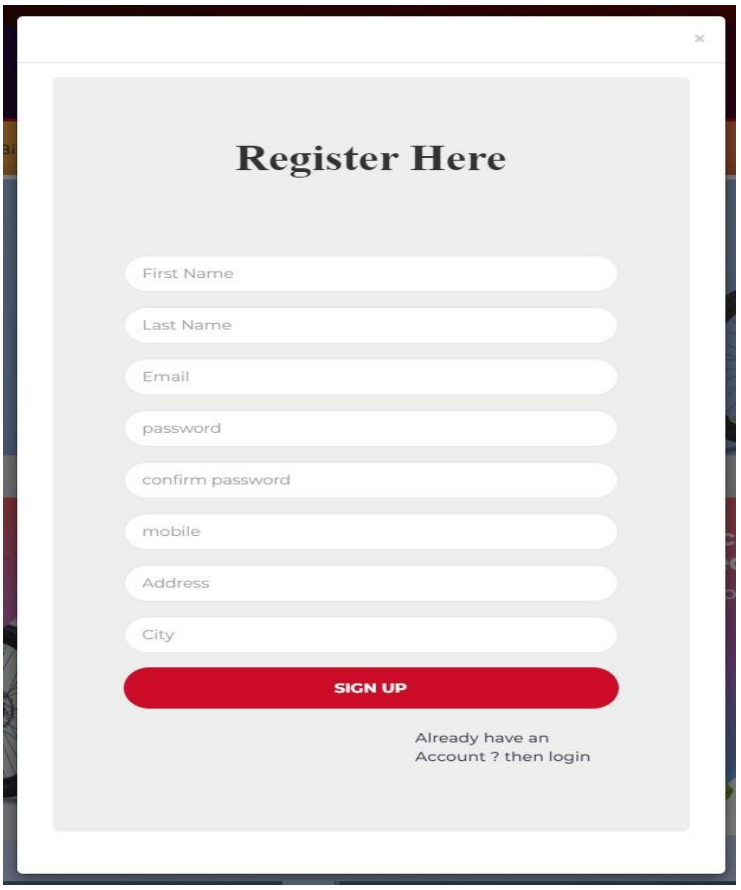
➢ Admin List of the Categories / Brands / Subscriber :



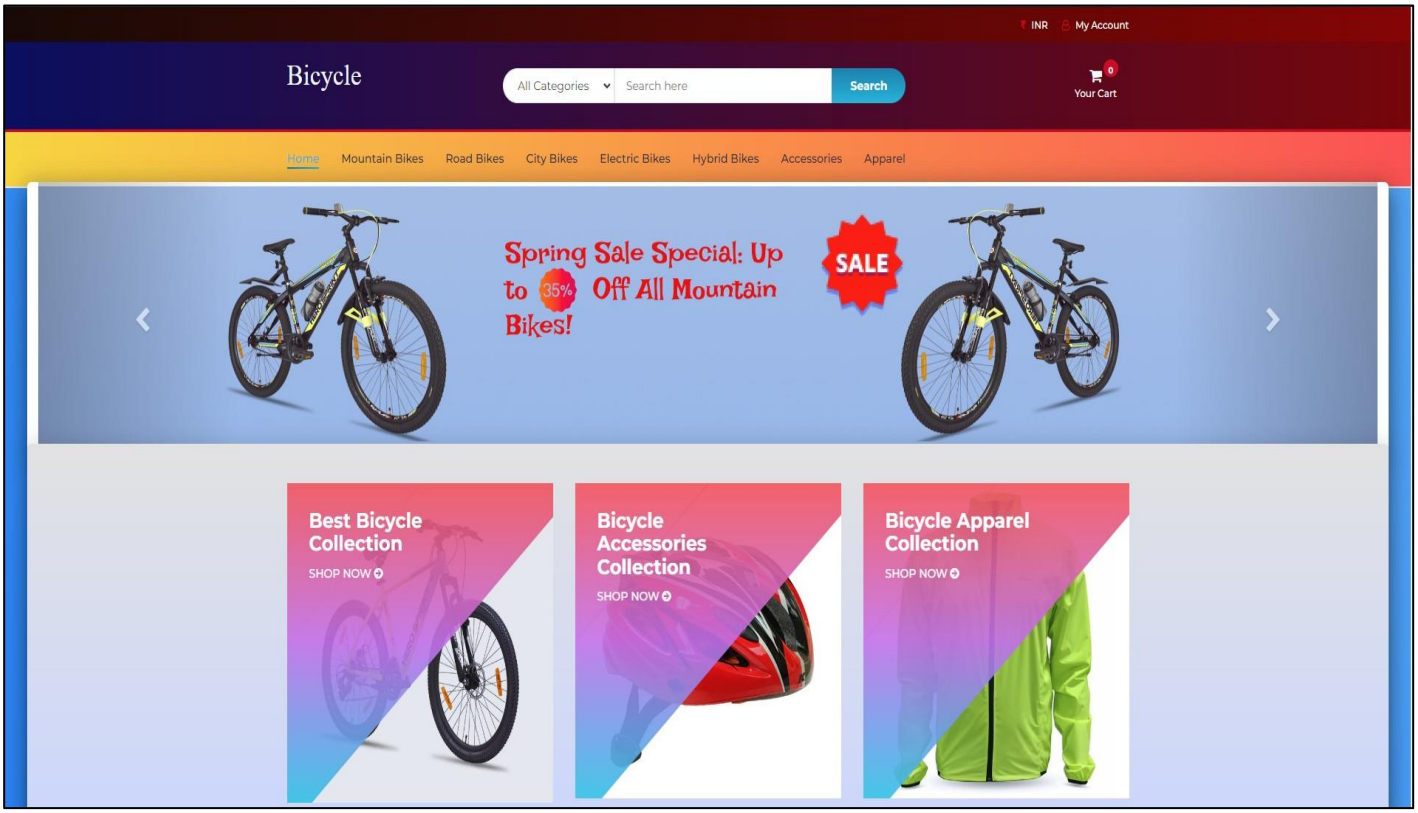
- **Users Login page :**



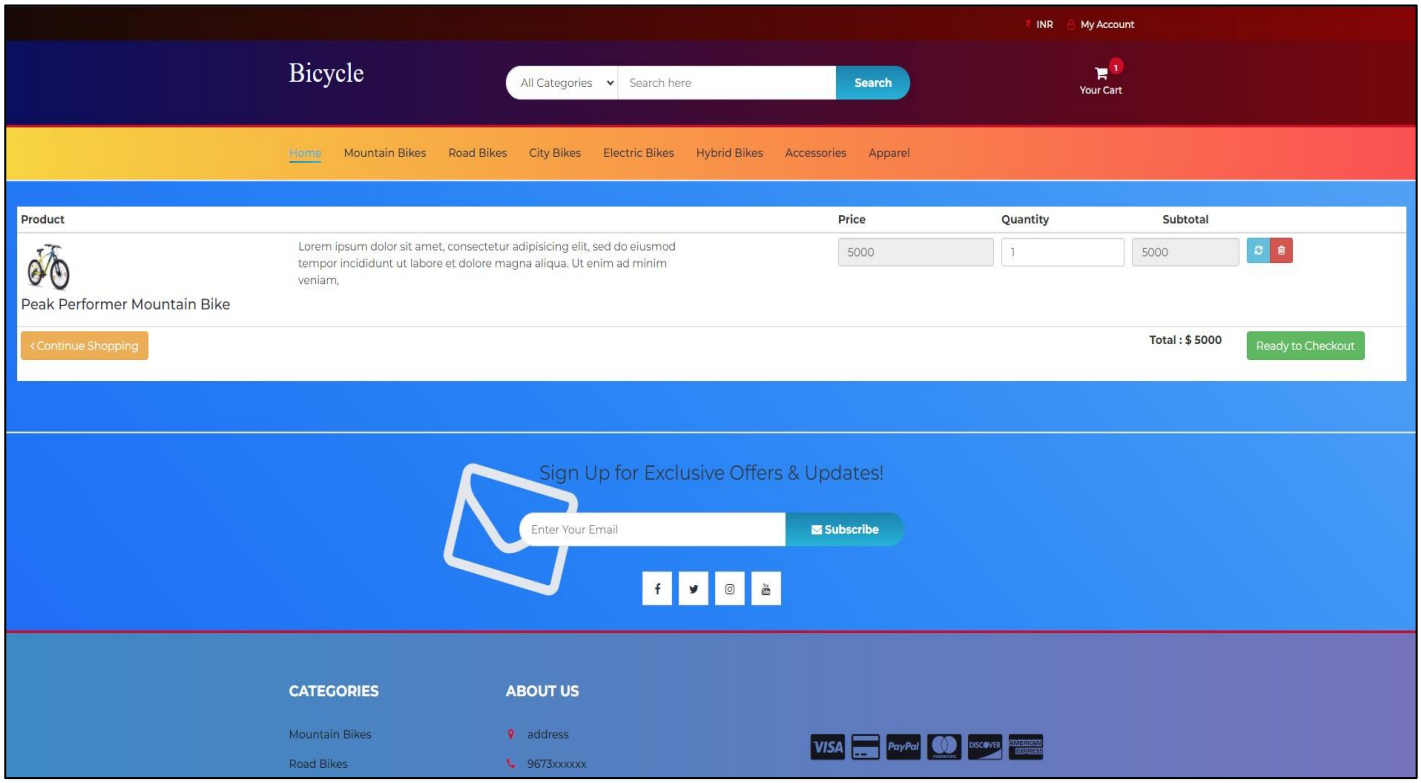
- **User Register Page :**



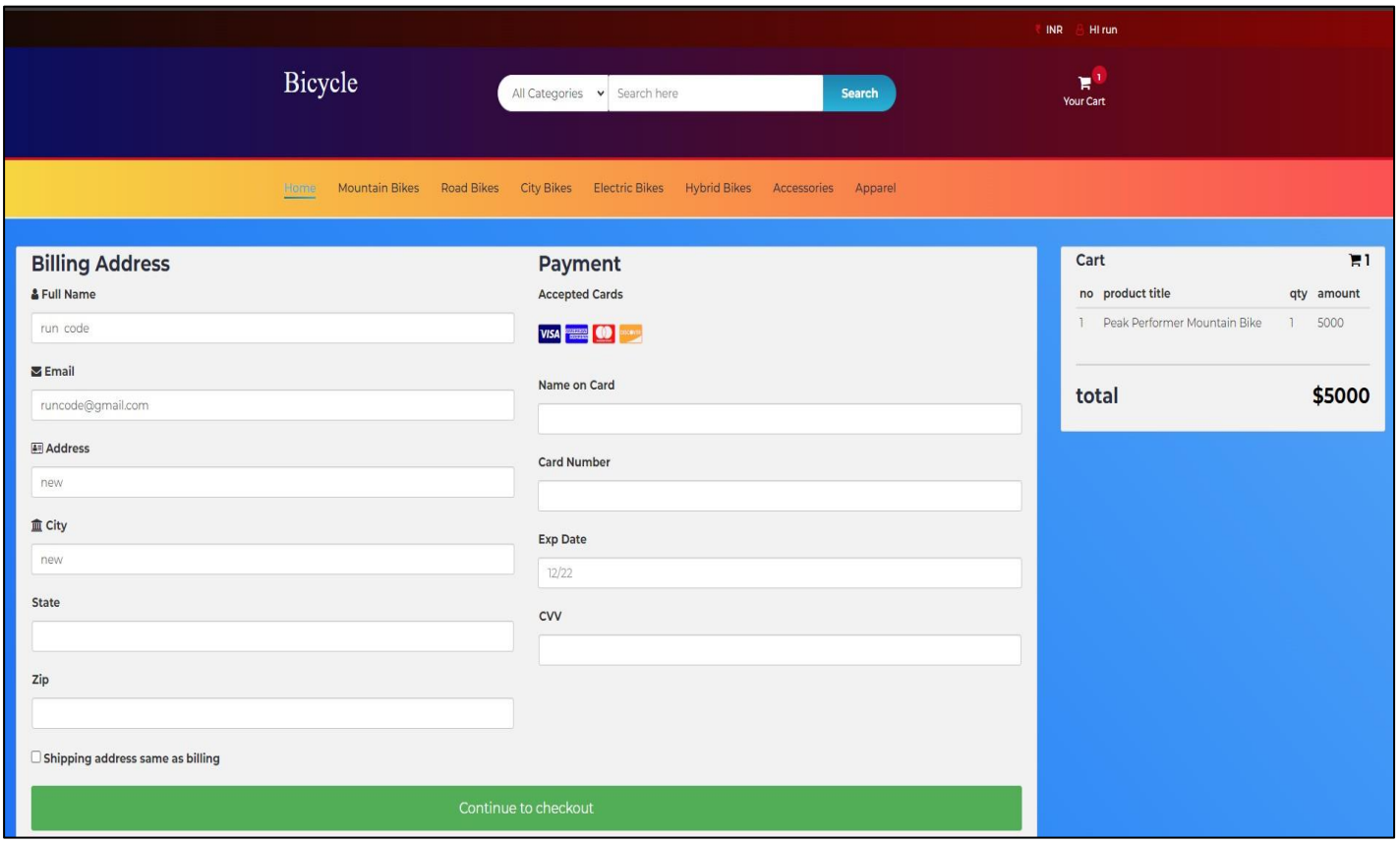
➢ User Interface :



➢ User add cart / Subscriber Form :



➢ User Payment Interface:



User Manual

1. **Introduction:**
    - Overview of the e-commerce website project.
    - Purpose of the user manual.
    - Intended audience (e.g., customers, administrators).

2. **Getting Started:**
    - Accessing the website (provide URL).
    - Creating an account (if required).
    - Logging in.

3. **User Interface Overview:**
    - Navigation structure.
    - Main components (e.g., header, footer, sidebar).
    - Dashboard
    - Search functionality.
    - Filtering and sorting options.

4. **Product Management:**
    - Browsing products.
    - Viewing product details.
    - Adding products to the shopping cart.
    - Managing the shopping cart.

5. **Checkout Process:**
    - Initiating the checkout process.
    - Providing shipping and billing information.
    - Selecting shipping method.
    - Applying discount codes or coupons.
    - Reviewing and confirming the order.

6. **Order Management:**
    - Viewing order history.
    - Tracking order status.
    - Cancelling orders (if allowed).

7. **Payment Process:**
    - Payment methods accepted.
    - Secure payment processing.
    - Handling payment failures and refunds.

8. **Account Management:**
    - Updating user profile.
    - Changing password.
    - Managing addresses (shipping and billing).

9. **Customer Support:**
    - Contacting customer support.
    - Live chat support.

    .

10. **Admin Functions (if applicable):**
    - Managing product inventory.
    - Processing orders.
    - Managing customers.

    .

11. **Security and Privacy:**
    - Data protection measures.
    - Privacy policy.

12. **Troubleshooting:**
    - Common issues and solutions.
    - Contact information for technical support.

13. **Glossary of Terms:**
    - Definitions of key terms and concepts used in the user manual.

14. **Appendix:**
    - Additional resources.

15. **Revision History:**
    - Record of updates and changes made to the user manual.

SOURCE CODE

Short Code of our Project -

```
<?php
session_start();

?>

<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="utf-8">
        <meta http-equiv="X-UA-Compatible" content="IE=edge">
        <meta name="viewport" content="width=device-width, initial-scale=1">
         <!-- The above 3 meta tags *must* come first in the head; any other head
content must come *after* these tags -->

        <!-- <title>Online Shopping</title> -->
        <title>Bicycle Ecommerce Website</title>

         <!-- favicon icon add into the url -->
         <link rel="shortcut icon" href="img/favicon1.png" type="image/x-icon">

        <!-- Google font -->
        <link href="https://fonts.googleapis.com/css?family=Montserrat:400,500,700"
rel="stylesheet">

        <!-- Bootstrap -->
        <link type="text/css" rel="stylesheet" href="css/bootstrap.min.css"/>

        <!-- Slick -->
        <link type="text/css" rel="stylesheet" href="css/slick.css"/>
        <link type="text/css" rel="stylesheet" href="css/slick-theme.css"/>

        <!-- nouislider -->
        <link type="text/css" rel="stylesheet" href="css/nouislider.min.css"/>

        <!-- Font Awesome Icon -->
        <link rel="stylesheet" href="css/font-awesome.min.css">

        <!-- Custom stlylesheet -->
        <link type="text/css" rel="stylesheet" href="css/style.css"/>
        <link type="text/css" rel="stylesheet" href="css/accountbtn.css"/>
```

```
    </head>
    <body>
        <!-- HEADER -->
        <header>
            <!-- TOP HEADER -->
            <div id="top-header">
                <div class="container">

                    <ul class="header-links pull-right">
                        <li><a href="#"><i class="fa fa-inr"></i> INR</a></li>
                        <li><?php
                             include "db.php";
                            if(isset($_SESSION["uid"])){
                                $sql = "SELECT first_name FROM user_info WHERE
user_id='$_SESSION[uid]'";
                                $query = mysqli_query($con,$sql);
                                $row=mysqli_fetch_array($query);

                                echo '
                               <div class="dropdownn">
                                  <a href="#" class="dropdownn" data-toggle="modal"
data-target="#myModal" ><i class="fa fa-user-o"></i> HI '.$row["first_name"].'</a>
                                  <div class="dropdownn-content">
                                    <a href="" data-toggle="modal" data-
target="#profile"><i class="fa fa-user-circle" aria-hidden="true" ></i>My
Profile</a>
                                    <a href="logout.php"  ><i class="fa fa-sign-in"
aria-hidden="true"></i>Log out</a>

                                  </div>
                                </div>';

                            }else{
                                echo '
                                <div class="dropdownn">
                                  <a href="#" class="dropdownn" data-toggle="modal"
data-target="#myModal" ><i class="fa fa-user-o"></i> My Account</a>
                                  <div class="dropdownn-content">
                                    <a href="" data-toggle="modal" data-
target="#Modal_login"><i class="fa fa-sign-in" aria-hidden="true" ></i>Login</a>
                                    <a href="" data-toggle="modal" data-
target="#Modal_register"><i class="fa fa-user-plus" aria-
hidden="true"></i>Register</a>

                                  </div>
                                </div>';

                            }
                                        ?>
```

```
                            </li>
                    </ul>

                </div>
            </div>
            <!-- /TOP HEADER -->



            <!-- MAIN HEADER -->
            <div id="header">
                <!-- container -->
                <div class="container">
                    <!-- row -->
                    <div class="row">
                        <!-- LOGO -->
                        <div class="col-md-3">
                            <div class="header-logo">
                                <a href="#" class="logo">
                                <font style="font-style:normal; font-size:
33px;color: aliceblue;font-family: serif">
                                        Bicycle
                                    </font>

                                </a>
                            </div>
                        </div>
                        <!-- /LOGO -->

                        <!-- SEARCH BAR -->
                        <div class="col-md-6">
                            <div class="header-search">
                                <form>
                                    <select class="input-select">
                                        <option value="0">All Categories</option>
                                        <option value="1">Men</option>
                                        <option value="1">Women </option>
                                        <option value="1">Kids</option>
                                    </select>
                                    <input class="input" id="search" type="text"
placeholder="Search here">

                                    <button type="submit" id="search_btn"
class="search-btn">Search</button>
                                </form>
                            </div>
                        </div>
                        <!-- /SEARCH BAR -->

                        <!-- ACCOUNT -->
```

```
                        <div class="col-md-3 clearfix">
                            <div class="header-ctn">


                                <!-- Cart -->
                                <div class="dropdown">
                                    <a class="dropdown-toggle" data-
toggle="dropdown" aria-expanded="true">
                                        <i class="fa fa-shopping-cart"></i>
                                        <span>Your Cart</span>
                                        <div class="badge qty">0</div>
                                    </a>
                                    <div class="cart-dropdown"  >
                                        <div class="cart-list" id="cart_product">


                                        </div>

                                        <div class="cart-btns">
                                                <a href="cart.php"
style="width:100%;"><i class="fa fa-edit"></i>  edit cart</a>

                                        </div>
                                    </div>

                                    </div>
                                <!-- /Cart -->

                                <!-- Menu Toogle -->
                                <div class="menu-toggle">
                                    <a href="#">
                                        <i class="fa fa-bars"></i>
                                        <span>Menu</span>
                                    </a>
                                </div>
                                <!-- /Menu Toogle -->
                            </div>
                        </div>
                        <!-- /ACCOUNT -->
                    </div>
                    <!-- row -->
                </div>
                <!-- container -->
            </div>
            <!-- /MAIN HEADER -->
        </header>
        <!-- /HEADER -->
        <nav id='navigation'>
            <!-- container -->
```

```
 <div class="container" id="get_category_home">
            </div>
                <!-- responsive-nav -->

            <!-- /container -->
        </nav>
        <!-- NAVIGATION -->
        <div class="modal fade" id="Modal_login" role="dialog">
                        <div class="modal-dialog">

                          <!-- Modal content-->
                          <div class="modal-content">
                            <div class="modal-header">
                              <button type="button" class="close" data-
dismiss="modal">&times;</button>

                            </div>
                            <div class="modal-body">
                            <?php
                                include "login_form.php";

                            ?>

                            </div>

                          </div>

                        </div>
                      </div>
                <div class="modal fade" id="Modal_register" role="dialog">
                        <div class="modal-dialog" style="">

                          <!-- Modal content-->
                          <div class="modal-content">
                            <div class="modal-header">
                              <button type="button" class="close" data-
dismiss="modal">&times;</button>

                            </div>
                            <div class="modal-body">
                            <?php
                                include "register_form.php";

                            ?>
                            </div>

                          </div>

                        </div>
                      </div>
```

DRAWBACKS AND LIMITATION

Drawbacks

1. Limited Scalability :
    - Difficulty in handling high traffic volumes or accommodating a growing number of products and users.
2. Security Risks :
    - Vulnerability to data breaches, fraud, and other security threats.
3. User Experience Challenges :
    - Complex navigation, slow page load times, and usability issues may deter users from completing purchases.
4. Payment Processing Problems :
    - Integration issues with payment gateways leading to failed transactions or delayed payments.

Limitations

1. Logistics and Shipping Challenges :
    - Shipping delays, incorrect deliveries, and high shipping costs can impact customer satisfaction.
2. Competition and Market Dynamics :
    - Ecommerce is a highly competitive market with evolving consumer preferences..
3. Dependency on Third-Party Providers :
    - Reliance on third-party vendors for services such as hosting, payment processing, and shipping.
4. Technology Limitations :
    - Rapid advancements in technology require ecommerce platforms to stay updated with the latest software, security patches, and infrastructure upgrades.

Future Enhancements

1. **Personalization and AI-powered experiences** :

- ❖ Leveraging customer data : Use past purchase history, browsing behavior, and preferences to recommend products, personalize content, and deliver targeted promotions.
- ❖ AI-powered chat bots and virtual assistants : Implement chat bots to answer customer questions 24/7, offer product recommendations, and streamline the buying process.
- ❖ Voice-enabled shopping : Integrate voice search functionality to allow customers to search for products and complete purchases using voice commands.

2. **Augmented Reality (AR) and Virtual Reality (VR) :**

- ❖ AR product visualization : Enable customers to virtually place furniture, try on clothes, or see how makeup would look on them before buying.
- ❖ VR store experiences : Create immersive VR experiences that allow customers to virtually walk through your store and explore products in a 3D environment.

3. **Focus on mobile shopping :**

- ❖ Mobile-first design : Prioritize a mobile-first approach to website design, ensuring a seamless and optimized experience for mobile users.
- ❖ Social commerce integration : Allow customers to purchase products directly from social media platforms like Instagram or TikTok.
- ❖ One-click checkout : Implement one-click checkout options to simplify the mobile buying process and reduce cart abandonment.

Conclusion and Recommendations

In conclusion, the bicycle ecommerce website project aimed to create a user-friendly platform for cyclists to browse and purchase bicycles and accessories. Through thorough analysis, design, and testing, we've crafted a website that meets the needs of our customers. Features like personalized recommendations and secure payment options enhance the user experience. While challenges were encountered, such as ensuring compatibility and security, our team worked diligently to address them. Looking ahead, continuous improvements and customer feedback will drive the evolution of the website, ensuring its success in the competitive ecommerce landscape. Thank you to everyone involved for their dedication and contributions to this project.

Recommendations

1. **Make it Easy :** Design your website for easy browsing and buying, especially on mobile phones.

2. **Know Your Customers :** Use data to recommend products they'll love and personalize their shopping experience.

3. **Stay Updated :** Embrace new technologies like AI and voice search to keep your website modern and engaging.

4. **Be Eco-Friendly :** Offer sustainable products and transparent practices to attract environmentally conscious customers.

5. **Test & Improve :** Regularly test your website and make changes based on what works best for your customers.

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