BIKE STORE- A WEB BASED BIKE SHOWROOM MANAGEMENT SYSTEM

BY

MD. HARUNUR RASHID NILOY
ID:181-15-11308

ARUPRATA PAUL
ID:181-15-11289

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

Supervised By

MOST. HASNA HENA
Assistant Professor
Department of CSE
Daffodil International University

Co-Supervised By

ISRAT JAHAN
Lecturer
Department of CSE
Daffodil International University

DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

AUGUST 2023

APPROVAL

This Project titled **"Bike Store"**, submitted by Md. Harunur Rashid Niloy, ID No: 181-15-11308 and Aruprata Paul, ID No: 181-15-11289 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 6 August.

BOARD OF EXAMINERS

Chairman

Mr.Narayan Ranjan Chakraborty (NRC)
Associate Professor and Associate Head
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner

Raja Tariqul Hasan Tusher (THT)
Assistant Professor
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner

Mr. Md. Ali Hossain (MAH)
Assistant Professor
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

External Examiner

Dr. Ahmed Wasif Reza (DWR)
Professor
Department of Computer Science and Engineering
East West University

©Daffodil International University

DECLARATION

We hereby declare that; this project has been done by us under the supervision of **Most. Hasna Hena, Assistant Professor, Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

Supervised by:

Most. Hasna Hena
Assistant Professor
Department of CSE
Daffodil International University

Co-Supervised by:

Israt Jahan
Lecturer
Department of CSE
Daffodil International University

Submitted by:

Md. Harunur Rashid Niloy
ID: 181-15-11308
Department of CSE
Daffodil International University

Aruprata Paul
ID: 181-15-11289
Department of CSE
Daffodil International University

©Daffodil International University ii

ACKNOWLEDGEMENT

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

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

We would like to express our heartiest gratitude to **Professor Dr. Touhid Bhuiyan, Professor and Head,** Department of CSE, for his kind help to finish our project and also to other faculty member and the staff of CSE department of Daffodil International University.

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

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

ABSTRACT

"Bike Store - A Web-Based Bike Showroom Management System" is a pioneering concept positioned to transform the bike retail business's management and consumer interaction tactics. In relation to the increasingly computerized market situation, this revolutionary system delivers an entire set of features intended to simplify every element of bike showroom management. Key goals include real-time inventory management, a fully immersive and simple-to-use virtual gallery experience, streamlined marketing and administration operations, computerized repair and maintenance history monitoring, and sophisticated data analytics. By seamlessly combining these functions, Bike Store helps bike shops to improve their operations, boost customer happiness, cut expenses, and achieve a significant competitive advantage in the fast-expanding bike-selling expanding bike selling sector. This project report abstract summarizes how the system has the potential to transform the way bike showrooms function and connect with their consumers, eventually moving the sporting goods sector into a new era of effectiveness with customer-centricity and data-informed choices. In an age when the digital revolution is transforming retail, Bike Store emerges as a light of inventiveness. With immediate form management of inventory, bike showrooms can preserve ideal stock levels, guaranteeing consumers have access to their favorite models while minimizing excessive stock and lowering losses. The system's virtual retail environment takes client involvement to new heights, allowing prospective purchasers to explore, investigate details, and even schedule ride testing the convenience of their smartphones. This seamless incorporation of the physical and digital domains not only boosts accessibility but also improves the reach of showrooms that are open growing their client base, the system incorporates a servicing and maintenance log monitoring module. Showroom administrators may plan regular maintenance, monitor service past events, and ensure timely maintenance, decreasing interruptions and boosting client confidence.

Key-words: Bike Shop, Web-Based Showroom Control System, Inventory Administration, Customer Engagement, Online Dealership

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1

INTRODUCTION

1.1 Introduction

The existing manual system's flaws were overcome with the creation of the Motorcycle Showroom Monitoring System. The difficulties our model has been addressed by this program in trouble to remove and, in some circumstances, drop them. Also, this technology is created to meet the specific conditions of the business to collect intelligence successfully and efficiently.

The program is kept as simple as possible to exclude data entry miscalculations. also, it displays an error notice when you fit incorrect data. The stoner does not bear any special training to use this technology. This alone demonstrates how stoner-friendly it is. As preliminarily said, the Bike Showroom Monitoring System may affect in an error-free, safe, reliable, and quick processing system. Rather of fastening on records operation, it might help the individual focus on their other tasks. As a result, it'll prop associations to make better use of their means.

Operating efficiently, bike, client, transaction, and reservation records is a difficulty for every business, whether large or small. We produce unique reclamation and selection systems that are acclimatized to your executive demands because every motorcycle dealership control system has colourful bike objects. This is intended to prop with business strategy and will enable you to make certain that your company has the proper degree of knowledge and depth for your long-term objectives. Our solution includes wireless access options so that busy executives who are constantly on the go can supervise their personnel from anywhere at any moment. In the end, such solutions will allow you to control more efficiently your resources.

1.2 Motivation

It could prop in gathering precise applicable data. The gathering will be apparent, easy to understand, and reasonable in a little while. It'll help notoriety in completely and passionately comprehending the administration of the former time. also, it supports all ongoing systems including the control system for bike showrooms. Additionally, it will reduce the expense of gathering, and the data gathering will go efficiently. Business process management is the focus of our work. We have tried to digitalize many bike showrooms control system procedures.

- In a software system, the stoner must fill out a variety of forms, and numerous clones of each form may be produced snappily and contemporaneously.
- In a software system, creating the manifest is not required; instead, we can just print it, saving time.
- To aid the employees in calculating the amount of time and effort put out in each individual job area.
- To increase means' effectiveness via robotization in order to use them more wisely.
- The scheme creates umpteen tidings kinds that may be fruitful to a diversity of circumstances.
- It acquiesces with the user's appeal.
- Be naive to get thenceforth comprehend for both the client and the operators.
- An excellent user interface, the ability to be replaced, and on-time and within-budget delivery are all requirements.

1.3 Objectives

The administration of bike, organization, variety, client, and data reconciliation is the primary goal of the technology used in bike showrooms. It controls all bike-related data,

including payments and reservations. Since the program was entirely developed on the executive end, only the director is assured availability. The end of the design is to construct

a software operation to count the manual intervention for maintaining the motorcycle, bike related goods, organization, payments, kind. It contains all necessary details on the kind, client, and reservation.

1.4 Expected Outcomes

Anticipated results of the proposed work

- In our system users can buy or book a bike after completing the login and registration part.
- After creating an account user can create his/her own profile and here he/she can see the order details.
- Admin can superintend all the scheme
- Master admin can affix admin if needed and here admin must have user-id
- At first user sees a dashboard Here user can select their choice and our card list will store all the details
- Manage all order sectors then all order details can be viewed, admin
- Pending order: Here approved all orders.
- Add products: The admin can add new products.
- Manage products: If any products are finished and stocked out then the admin can remove them.
- Shop review: Registered and verified users can review here. The guest user only sees and reads the review if he/she wants to write a review he/she must be completed the login and registration part.
- Admin and stoner on both sides need a proper authentication for this WT commemorative is used.
- The home section will only contain some popular products and view all feature contains all of the items.

1.5 Project management and finance

Project management and finance are two important elements linked in the successful completion of the "Bike Store - A Web-Based Bike Showroom Administration System" project. Effective administration of projects is critical for creating clear goals, establishing timetables, assigning assets, and guaranteeing the endeavor continues on track from inception to conclusion. It entails identifying the participants in the project, establishing roles and duties, and producing a thorough project plan that describes the endeavor's scope, goals, deliverables, and milestones. Project administrators play a vital role in coordinating activities, evaluating progress, and reducing hazards that may develop over the project's lifespan. They are accountable for ensuring alignment between project objectives and the resources at their disposal, especially budgets.

On the other hand, Financial Services are the heartbeat of every undertaking. In the overall scheme of this project, accounting comprises spending, cost estimates, scheduling of resources, financial projections, and cost management. The financial side entails evaluating the finances necessary to build and operate the Bike Store Administration System, including expenditures such as creating the software, equipment infrastructure, human wages, marketing, and regular upkeep expenses. It is vital to predict expenses properly, manage resources effectively, and periodically track expenditures to guarantee that the project stays within the budget's boundaries. Economic projections and cost control procedures are crucial to analyze the economic condition of the construction endeavor all through its lifespan as well as implement timely modifications as required.

1.6 Report Layout

Subsequently, sections will go into depth covering the following subjects:

Chapter 1: Introduction

In Chapter 1, we made an attempt to define the development's dawn, relief, pretensions, and projected finish.

Chapter 2: Background

In this chapter, we establish and specify the invention's connected duties and limits.

Chapter 3: Requirements specification

The operational circumstances will be the whole topic of this subsection. simulations of firm activities, assessment of accomplished requirements, and planning and explanation of systems applications.

The project's overall design will be explored in this part.

Chapter 5: Implementation and testing

This is the moment at which the aesthetic is finished in its totality. Mark forward any sweeping statements you have for other business

Chapter 6: Impact on society, environment, and sustainability

Then genuinely bandy floating this design societal rejection, societal rejections, effectiveness, and long-term viability plan

Chapter 7: Conclusion and future work.

Here go on about the upcoming strip and conduct ending prate.

CHAPTER 2

BACKGROUNDS

2.1 Preliminaries/Terminologies

The acceptance of contemporary technology continues to be perfect. The preponderance of labour is now done by automated machines rather than by manual bones. Artificial robotization vent is straight adhering to technological development. This design, which has the working title "Bike Showroom Control Platform," was created with a Microsoft SQL server acting as the back end and XAMPP acting as the front end. Either a major dealer or reseller would be a good fit for this program. The control centre for the bike dealership is available at all times and from any location. The whole method for selling a bike to a consumer from the owner's exhibit is detailed in the Motorcycle Showroom Control System. The bicycle was a real estate in the owner's showroom prior to being sold. In this case, transferring the Motorbike from an investment property to a liquid asset is the key goal. The dealership may actively maintain whether the bike is a fresh or used motorcycle while the procedure is being carried out, allowing for this.

2.2 Related Works

FOXPRO is used to manage the institution's present system. The merchandise invoicing is also kept up to date, as well as the everyday invoicing of the vehicles. That is concerned with the sale of the company's business. Just these two payment types are examples of such methods.

Client, force, profit, vehicles, and customer data are all physically managed, which puts a great deal of pressure and strain on the business side.

2.3 Comparative Analysis

The suggested method was created to address the challenges associated with manual FOXPRO servicing and invoicing administration.

If it must move to the suggested method, it will be able to remedy the problem. The company benefits completely if updated or digitized.

It is sufficient to employ only one individual do all tasks in a machine rather than having several sections and personnel for each and every area. Maximizing efficiency, cash, energy, and other resources is the issue.

With the user information, sales information, and other facts kept up to date, the stock management system allows for flawless design. The major system description takes the role of manual labour. These are the benefits of the developed framework, which also maintains stock data for possible future use.

Long-term, the suggested fix significantly reduces the costs of the enterprise while enabling each and every task to be completed flawlessly and elegantly. An optical media may hold all the information related to all the activities. Every form will be easily accessible, well organized, and fillable in a matter of seconds. Any material may be simply, correctly, and when required, acquired at any time. It might be updated, amended, or altered. The proposed method includes a large number of amenities like those mentioned previously. The sterling strait may be blithering in a umpteen seconds. As a result, it achieves the system's pretensions. Following is a list of other benefits in addition to those mentioned above.

- validity
- mystery
- surety
- time commitment

2.4 Scope of the Problems

The quest of this task is to develop a Bike Showroom Management System that will assist in managing information on the motorcycles that are accessible as well as the staff members that work there. Moment, the maturity of dealerships operates manually and save information in scrapbooks and documents. Because books serve as the storage substrate, there is a significant likelihood of inaccuracy, retrieving a particular piece is a tedious and time-consuming job, and mathematical mistakes are also highly likely. These shortcomings of the current manual method make the necessity for a new automated system unavoidable. The design stage of issues annex force data, deals information, client records, and transaction facts. Documents and Invoices

The suggested Dual Trader Monitoring System was created to address the issues with the current system.

Before prefacing the abstract design, the diverse factors' designs are found and tidings are drawn.

The suggested bike showroom Administration system collects all available Motor Cycle Engine System information for each client, sale, and inventory before going electronic, and then groups this information depending on the event. Create the file structure after that to keep the data provided.

To preserve the specifics of the bike dealership Control System, programs are created when the file architecture and software base are designed.

2.5 Challenges

Challenges comprise everything that might adversely influence our infrastructures from the outside, such as problems with the distribution chain, shifting market needs, or a worker shortage. It's critical to foresee challenges and take action to combat them before we succumb to them and notice a halt in our development. The Showroom Management

System offers a veritably stoner-friendly layout that takes advantage of ASP.Net’s advantages to make the exercising platform smoother and better. enforcing it to our design, still, isn't an unsolemn undertaking. We deal with a lot of challenges. With the help of MSSQL Garçon 2005, we're suitable to intercept and pierce necessary data in an effective way, saving the customers' time and energy and facilitating precise computations and straightforward workflows.

Besides in our application set admin is a very important task. Admin can add only master admin. It is a changing part that the master admin will select the admin. The site's responsibility rests with the admin, so it's important that the admin makes changes and who gets the admin. The payment gateway has to be done manually. It’s a very secure task for this project.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modelling

In Figure 3.1 below, the basic business process model is displayed. This flowchart shows the way that might be taken to model the business processing model from launch to finish in line with our end. This enables us to grasp and see the precise process. Understanding the entire process through code will be a little more challenging than understanding it through a flowchart. In the case of our project, when the user launches the software, they first see the home screen. On the home screen, they can see some of the expected bike details. The stoner will be able to view 6 to 7 cards. If the user hits Purchase Now, they can see all the details and prices of the bike. Then they can book the bike from here by giving their own phone number, email address, and name. To purchase a bike, the user must register in the system. Without registering no one can be able to purchase or book any bike. By hitting all bikes on the homepage, users can see all the bikes available in this shop. There will be options for This boost control, enhances the process's communication,

and consistency gives an edge over our contenders.

Fig 3.1 Business Process Modelling

3.2 Requirement Collection and Analysis

Gathering requirements is essential for more evenly completing a task. To complete the assignment, it is required to analyze such requirements. By gathering and analyzing each criterion, we can do the assignment more

rapidly.

3.2.1 Functional Requirement

- **Client Authentication:** Customers should be able to log in privately to access the system's functionality.
- **User Registration:** those who are new should have the possibility of signing up for an account.
- **Admin Management:** The operating system should enable administrations to be added and controlled.
- **Payment Verification:** The entire system must offer a mechanism to validate transactions made by clients.
- **Contact Functionality:** Clients should be able to get in touch with support or appropriate persons as required.

3.2.2 Non-functional Requirement

- **Bike Details development:** The structure should ease the development of new bike records.
- **Bike Addition**: There should be an opportunity to add additional bicycles to the database.
- **Inclusion of Bike-Related Products**: The mechanism must facilitate the insertion of attachments and related items for bikes.
- **Update of Latest Bike items:** Frequent updates for the most current bike items must be allowed.
- **Bike Details Deletion:** Additionally, there should be a capacity to delete bike-related data currently stored in the system's database.
- **Booking Viewing:** Customers should be able to see their reservations and associated data.
- **Booking Deletion:** The platform should enable users to reschedule their appointments if required.

- **Shop Review:** Users must have had the opportunity to leave feedback and recommendations for the shop or items sold.

3.3. Use Case Modelling and Description

Utilizing use case modeling is a beneficial tool in the creation of the "Bike Store - A Web-Based Motorcycle Showroom Administration Systems." It assists in determining the system's capabilities and conversations, offering a clear knowledge of how users will engage with the structure of the system. Here, we outline many significant use cases pertinent to the initiate.

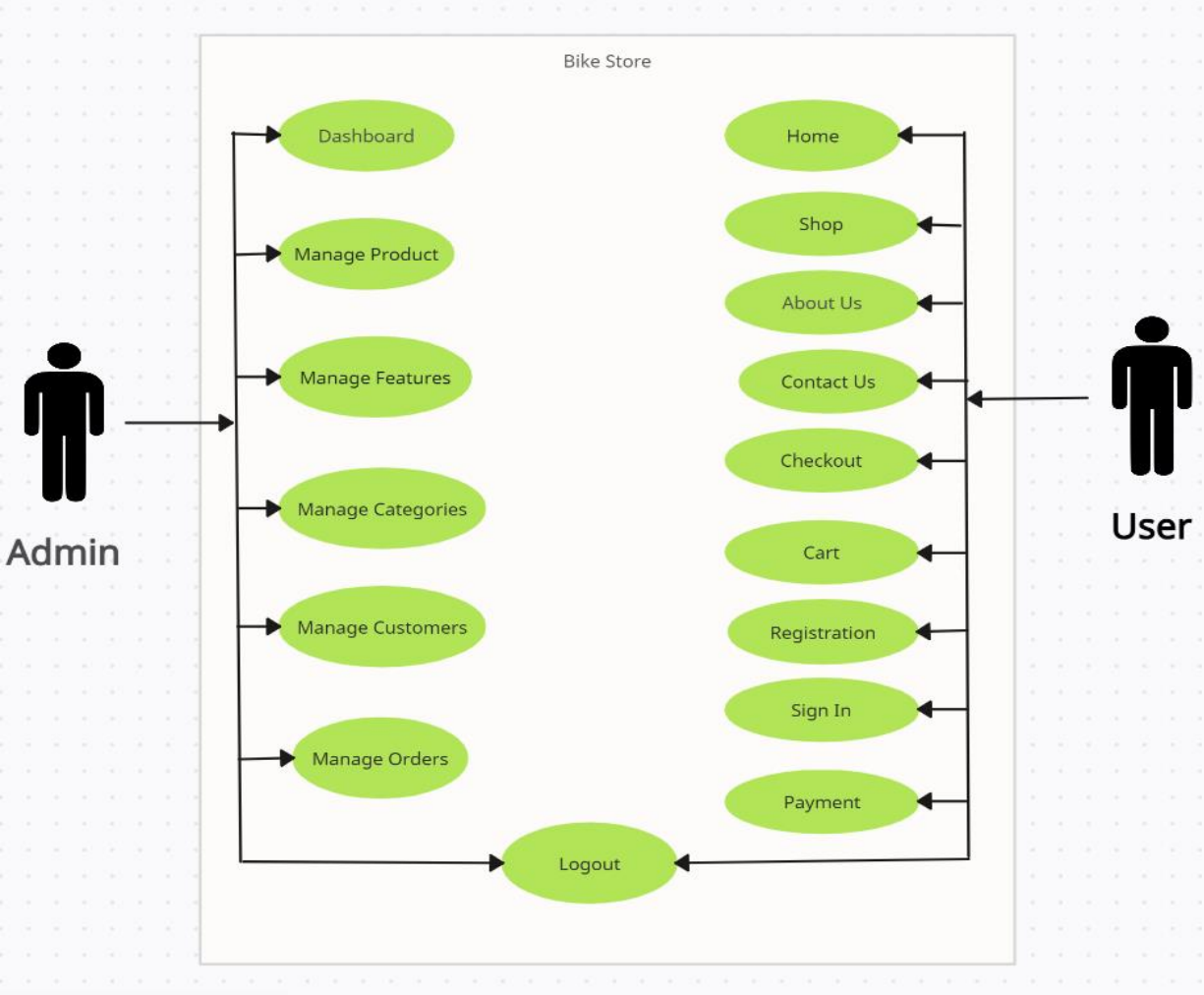


Fig 3.3 Use case model

Use Case: Home

Actor: User, Admin

Primary Actor: User

1. User Authentication

Actors: Verified Customers, Managers

Description: This instance of use concerns the manner in which of both users and managers login into the computer network securely. Users must supply the correct login information (username and password) to access their account information, whereas executives have unique access rights.

2. User Registration

Actors: New Users

Description: Visitors who do not have identities with the system may register by entering the necessary data such as designation, email address, information about themselves, and setting a password. After successful enrollment, they become customers who are registered.

3. Admin Management

Actors: super administrator

Description: The super administration, an advanced manager can oversee other managers' credentials. This involves establishing new admin accounts, changing their data, and disabling or removing admin accounts as appropriate.

4. Payment Verification

Actors: Administrators

Description: Supervisors have the obligation to validate transactions made by clients. This use case requires evaluating payment data, verifying completed payments, and changing the current condition of reservations or orders appropriately.

5. Contact Functionality

Actors: Customers, Administrators

Description: Users as well as administrators may utilize the contact capability to engage with the support staff or any additional pertinent employees. Users may enquire about items or report concerns, while executives can reply to user requests or complaints.

6. Create New Bike Details

Actors: Administrators

Description: The administrator may generate new bike characteristics by inputting details such as bike model, specs, pricing, and availability into the system. This guarantees that the operating system is up-to-date with the newest bike items.

7. Add Bike

Actors: Administrators

Summary: Administrators may add new motorcycles to the system's inventory. The application in this case entails supplying data like the bike's manufacturer, model, year, and volume available for purchasing.

8. Addition of Bike-Related Merchandise

Actors: Administrators

Summary: Administrators may add accessories and related merchandise to enhance the bike offers. This capability involves providing product characteristics, price, and unavailability.

9. Update Latest Bike Products

Actors: Administrators

Description: To keep the item's directory updated, the administrator may update information about the newest bike items. This guarantees that consumers are provided with access to current and precise data.

10. Bike Information Deletion

Actors: Administrators

Summary: Supervisors may delete bike-related data stored within the system when required. This may involve retiring a bike model or labeling a product as unavailable.

11. Booking Viewing

Actors: Registered Users

Description: Customers who are registered may access their booking data, containing scheduled bikes, pickup or shipping dates, and the status of their payment. This lets consumers monitor the progress of their bookings.

12. Booking Deletion

Actors: Registered Users

Summary: Registered users may cancel their reservations if they no longer choose to continue with the reservation. This procedure entails withdrawing the reservation from the computer program and maybe processing reimbursements.

13. Shop Review

Actors: Registered Users

Summary: Customers who are registered may leave comments and reviews on the bike showroom or the things they have bought. These evaluations may assist clients to in reaching educated judgments and give vital information to the dealership management.

Modeling of use cases and documentation serve as a basis for system design, construction, and testing, verifying that the "Bike Shop Management System" satisfies the demands of its customers and managers seamlessly and effectively.

3.4 Design Requirements

Design standards are crucial for an aesthetic since they help us to present it to other individuals in a more attractive way.

Efficient: We attempted to make it simple and light for all druggies.

User-Friendly: This serves as a web-based program.

3.5 System Requirements

Languages:

1. HTML
2. CSS
3. React Js
4. Bootstrap
5. Material UI
6. MongoDB
7. Express JS

Tools:

1. React router
2. Editor
3. Browser

CHAPTER 4

DESIGN SPECIFICATION

4.1 Front-end Design

Designing a straightforward and user-friendly front-end design for the Bike Store Management System is vital for guaranteeing an outstanding user experience. Here's a brief overview of the front-end aspects of design.

4.1.1 Home page

This is the Homepage interface. On this page here main most trending and popular products are shown. It’s really helpful to choose user favorite listed brand.

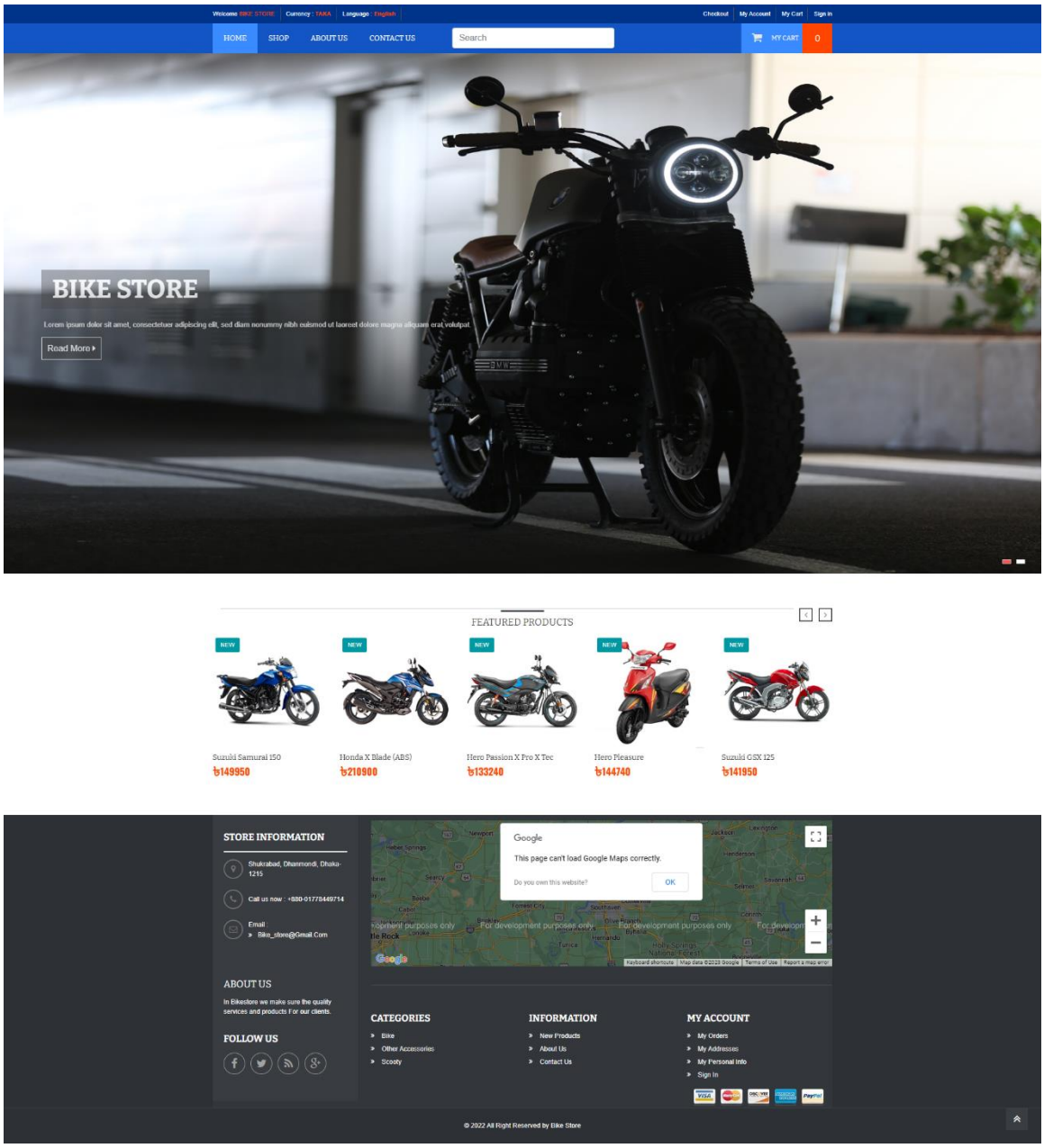


Fig.4.1.1 Home page

4.1.2 Login & Register page

This is the login screen where the client may log in to our organization by employing their passwords and usernames. Without satisfying these prerequisites individuals cannot buy any stuff from the website.

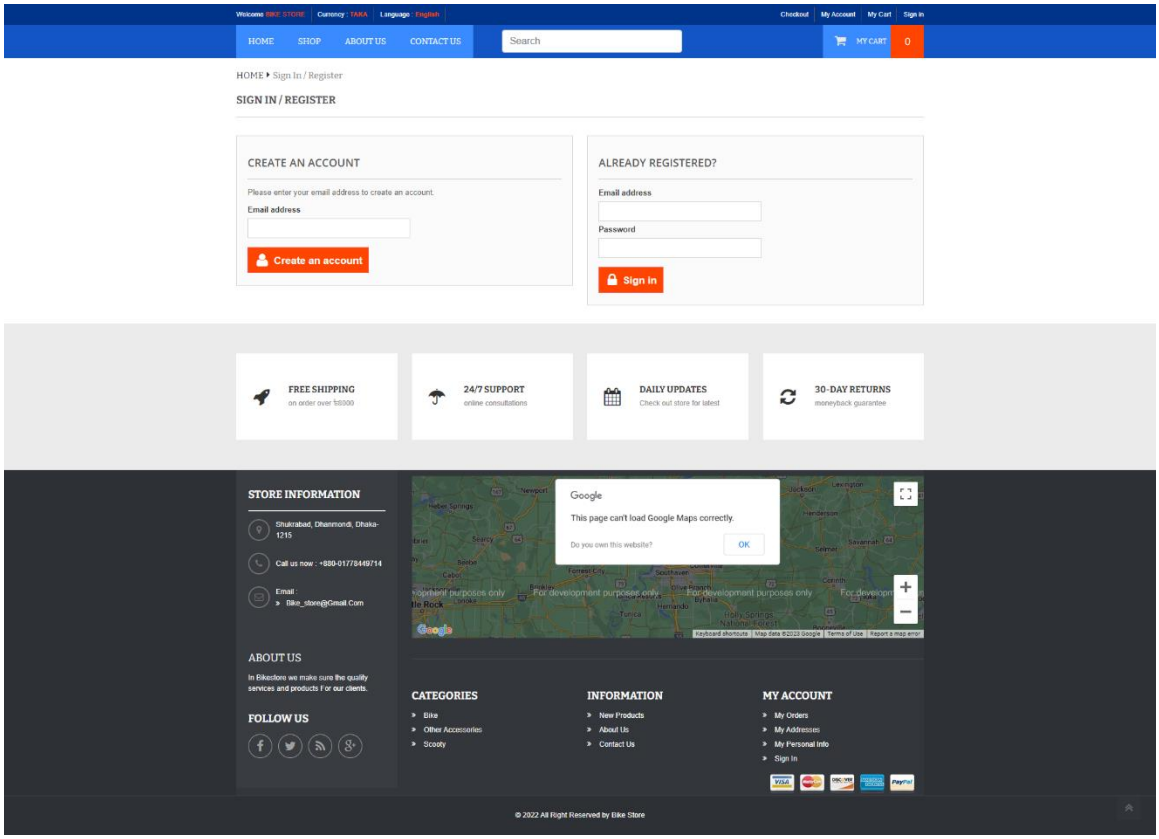


Fig.4.1.2 Login & Registration Page

4.1.3 Available Bikes

Everything obtainable motorcycle information appears in this user interface.

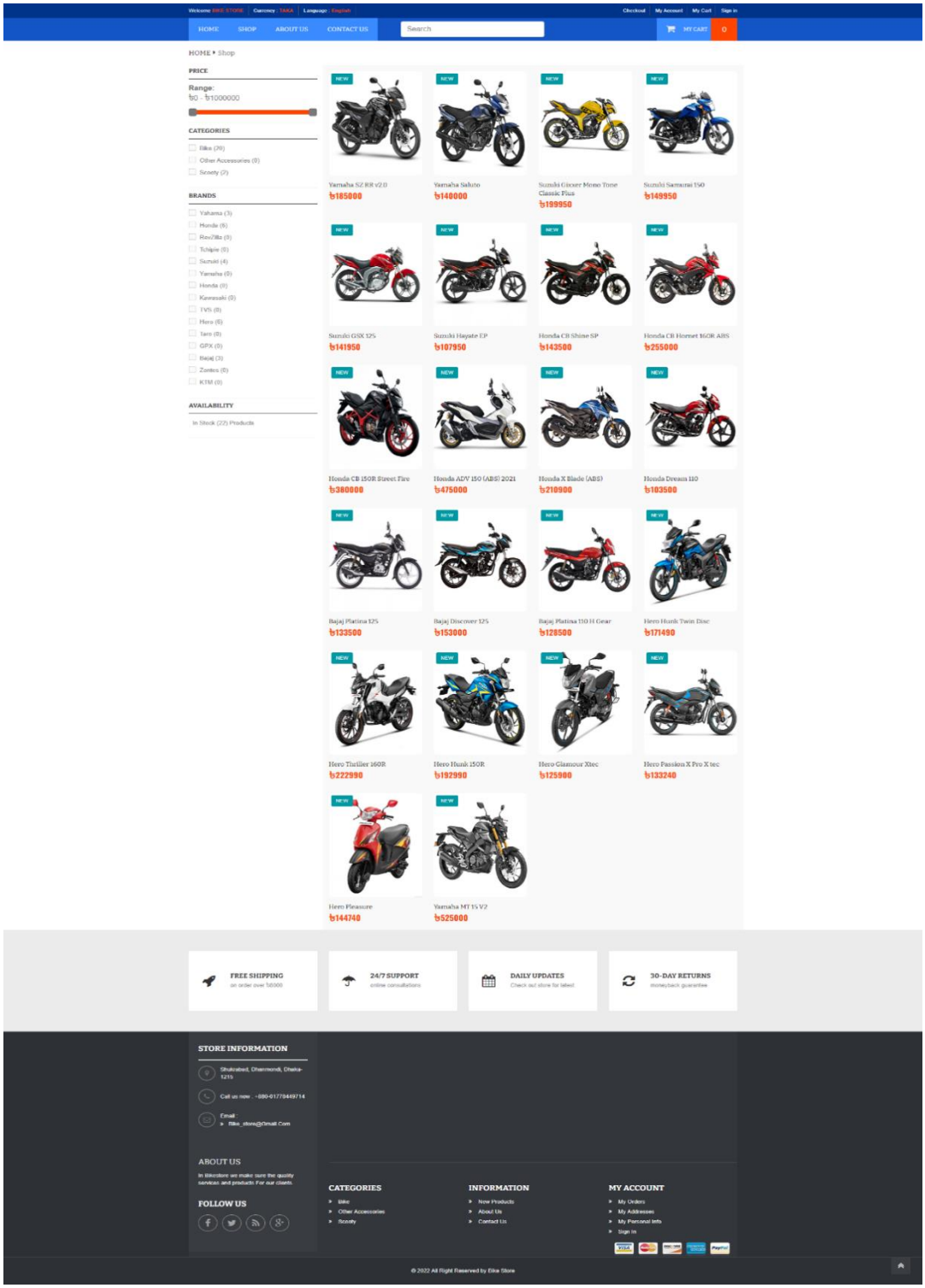


Fig.4.1.3 All available bikes

4.1.4 Individual Bike Description

This is the isolation bike tracking in this approach.

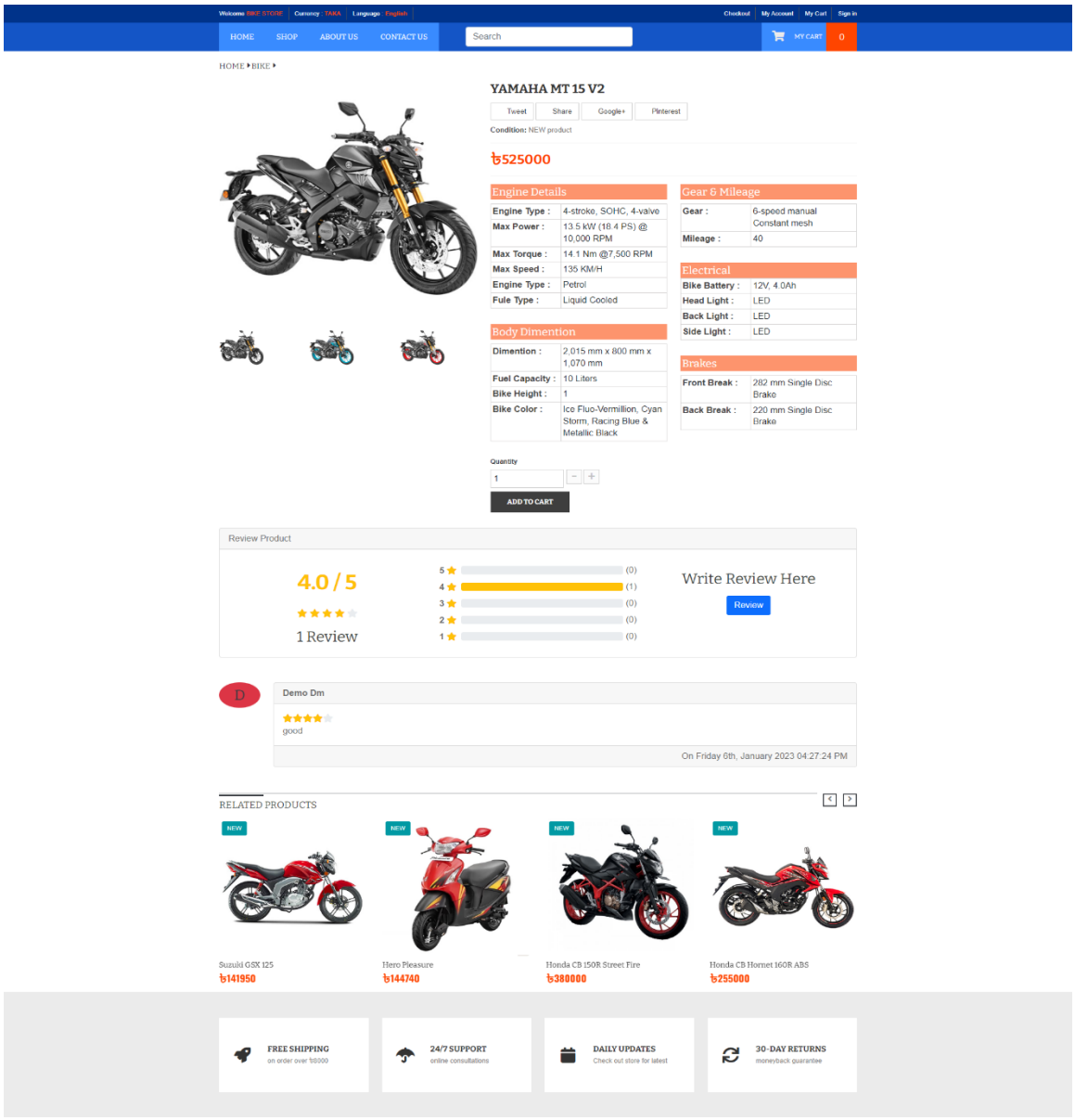


Fig.4.1.4 Individual bike description.

4.1.5 Admin Dashboard

This is the administration dashboard design for Super Administration.

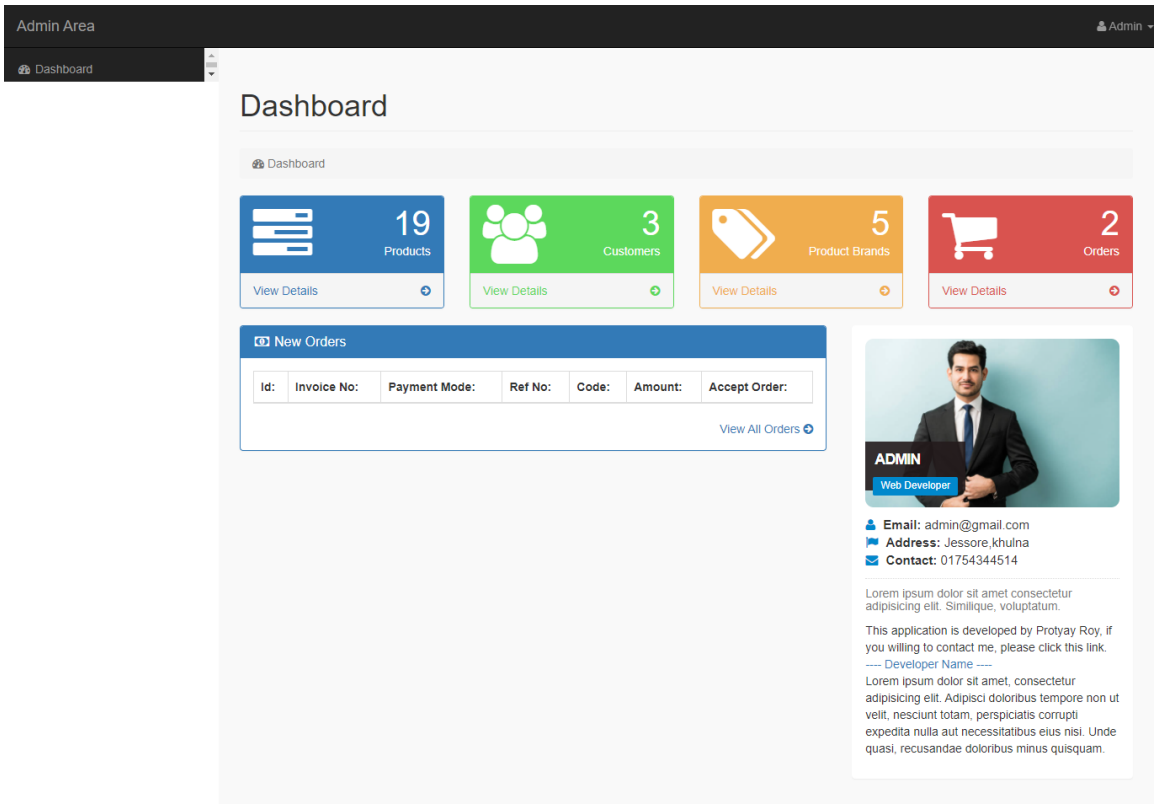


Fig.4.1.5 Admin Dashboard

4.1.6 Manage Order

This is a gadget buying page for the supervisor.

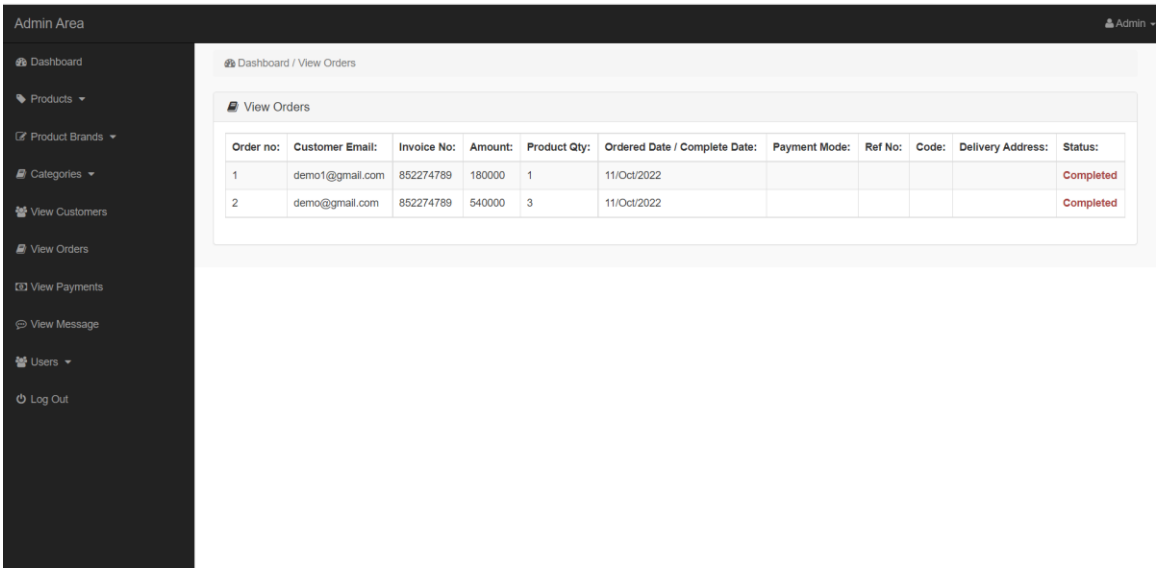


Fig.4.1.6 Manage orders

4.1.7 Make Admin

Admin may create a unique administrator through this particular page.

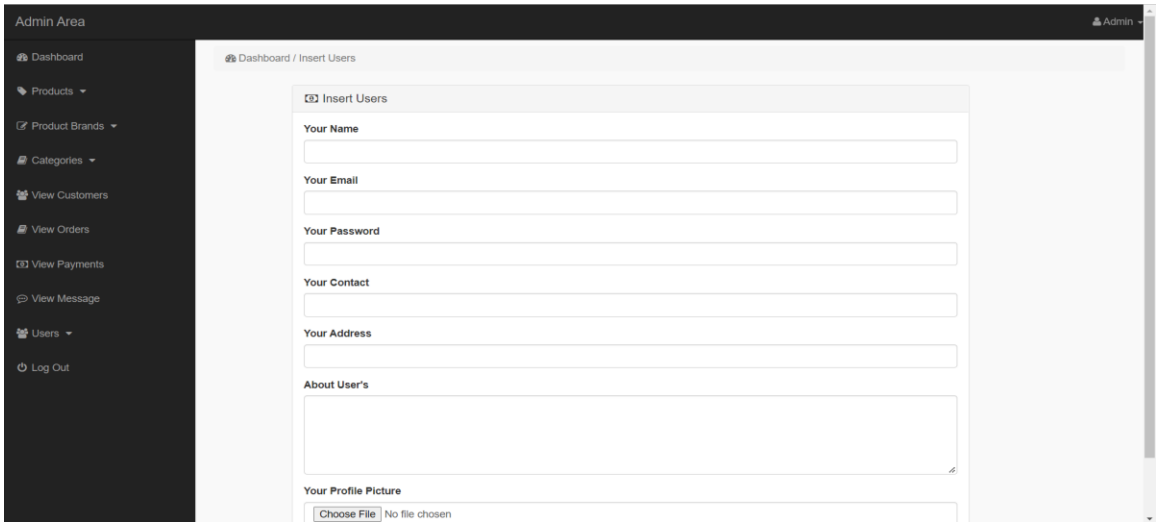


Fig.4.1.7 Make Admin

4.1.8 Insert products

Supervisors may add new motorcycles to the collection. The application case entails supplying data like the bike's manufacturer, hypothesis, year, and numbers accessible to buying.

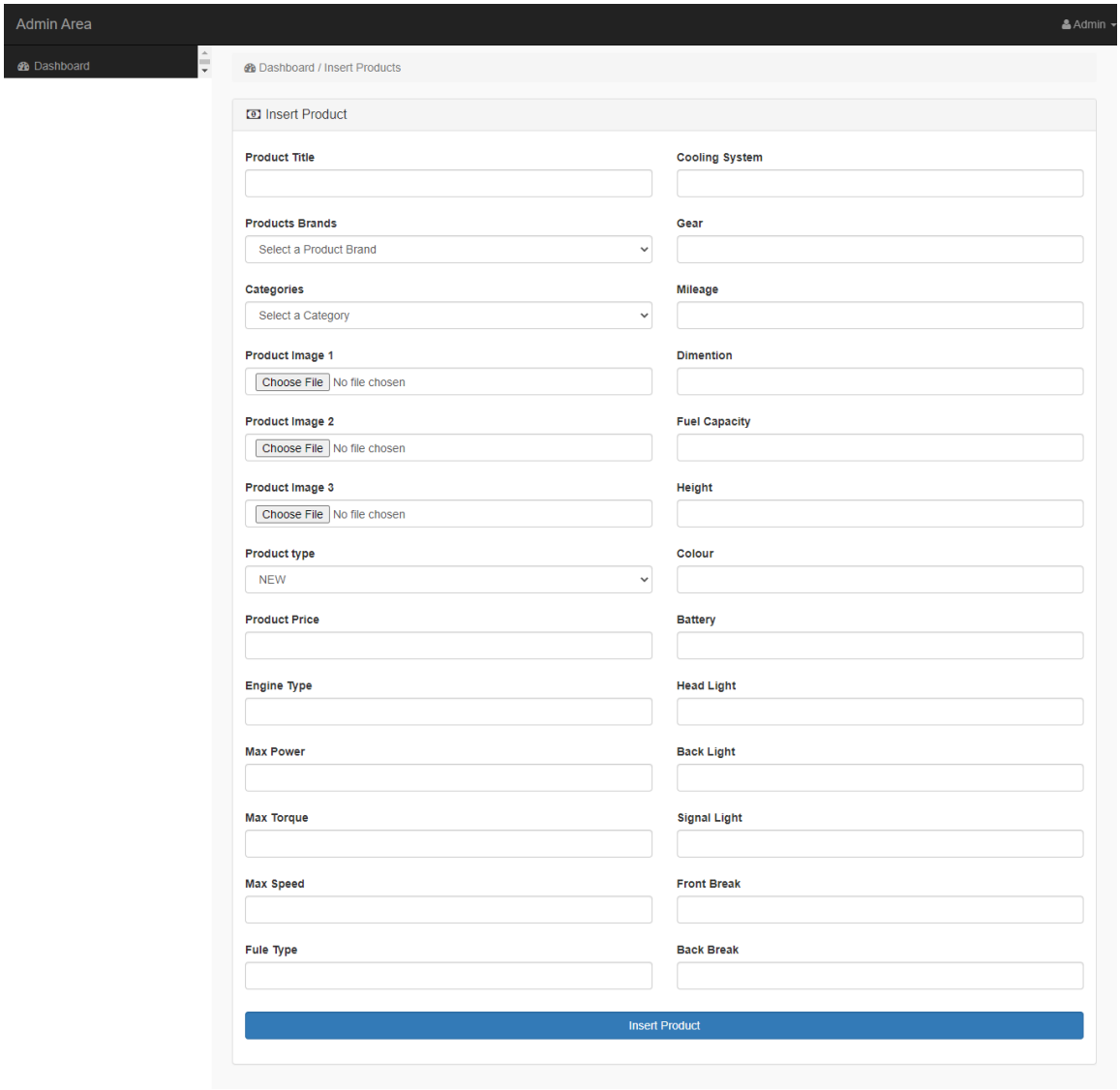
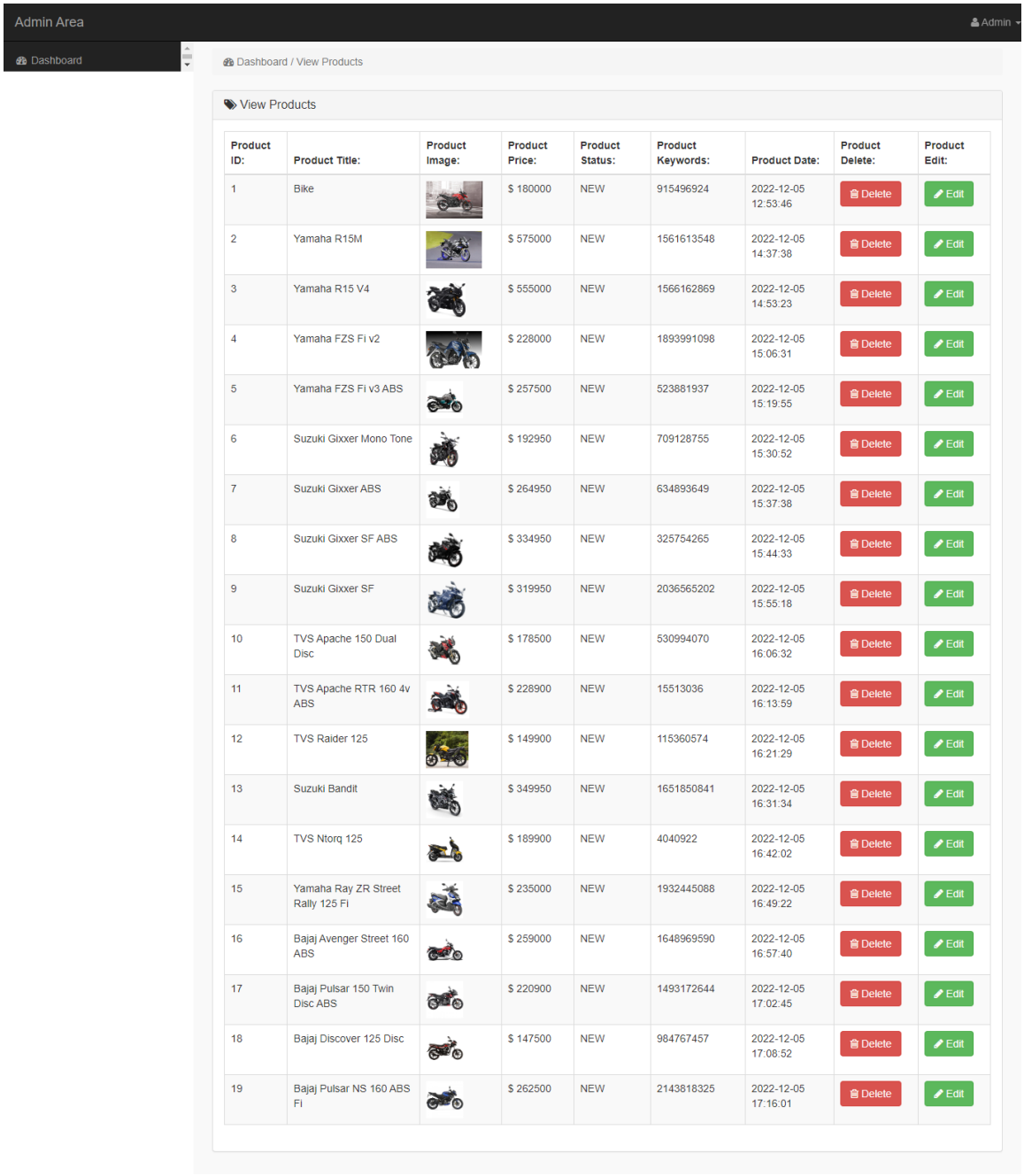


Fig.4.1.8 Insert product

4.1.9 Manage products

Admin may control goods from this section of the site.



Product ID:	Product Title:	Product Image:	Product Price:	Product Status:	Product Keywords:	Product Date:	Product Delete:	Product Edit:
1	Bike		$ 180000	NEW	915496924	2022-12-05 12:53:46	Delete	Edit
2	Yamaha R15M		$ 575000	NEW	1561613548	2022-12-05 14:37:38	Delete	Edit
3	Yamaha R15 V4		$ 555000	NEW	1566162869	2022-12-05 14:53:23	Delete	Edit
4	Yamaha FZS Fi v2		$ 228000	NEW	1893991098	2022-12-05 15:06:31	Delete	Edit
5	Yamaha FZS Fi v3 ABS		$ 257500	NEW	523881937	2022-12-05 15:19:55	Delete	Edit
6	Suzuki Gixxer Mono Tone		$ 192950	NEW	709128755	2022-12-05 15:30:52	Delete	Edit
7	Suzuki Gixxer ABS		$ 264950	NEW	634893649	2022-12-05 15:37:38	Delete	Edit
8	Suzuki Gixxer SF ABS		$ 334950	NEW	325754265	2022-12-05 15:44:33	Delete	Edit
9	Suzuki Gixxer SF		$ 319950	NEW	2036565202	2022-12-05 15:55:18	Delete	Edit
10	TVS Apache 150 Dual Disc		$ 178500	NEW	530994070	2022-12-05 16:06:32	Delete	Edit
11	TVS Apache RTR 160 4v ABS		$ 228900	NEW	15513036	2022-12-05 16:13:59	Delete	Edit
12	TVS Raider 125		$ 149900	NEW	115360574	2022-12-05 16:21:29	Delete	Edit
13	Suzuki Bandit		$ 349950	NEW	1651850841	2022-12-05 16:31:34	Delete	Edit
14	TVS Ntorq 125		$ 189900	NEW	4040922	2022-12-05 16:42:02	Delete	Edit
15	Yamaha Ray ZR Street Rally 125 Fi		$ 235000	NEW	1932445088	2022-12-05 16:49:22	Delete	Edit
16	Bajaj Avenger Street 160 ABS		$ 259000	NEW	1648969590	2022-12-05 16:57:40	Delete	Edit
17	Bajaj Pulsar 150 Twin Disc ABS		$ 220900	NEW	1493172644	2022-12-05 17:02:45	Delete	Edit
18	Bajaj Discover 125 Disc		$ 147500	NEW	984767457	2022-12-05 17:08:52	Delete	Edit
19	Bajaj Pulsar NS 160 ABS Fi		$ 262500	NEW	2143818325	2022-12-05 17:16:01	Delete	Edit

Fig.4.1.9 Manage Products

4.1.10 User Dashboard

Display crucial information and data on the dashboard, such as inventory circumstances, recent reservations, and notifications. Employ graphical representations to show data patterns and make it simpler for consumers to grasp crucial information.

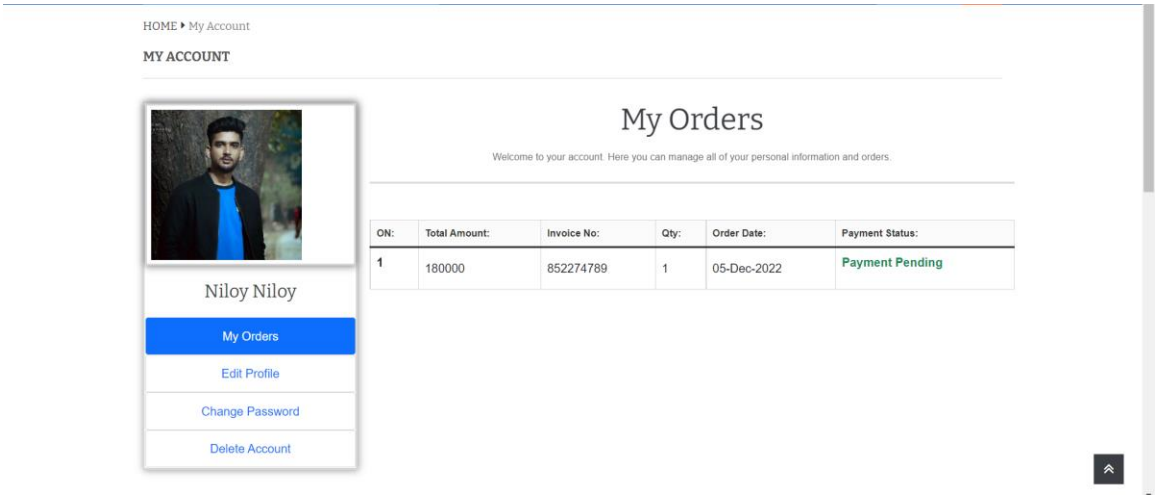


Fig.4.1.10 User Dashboard

4.1.11 User Orders

Here customers may partly their fundamental purchases and determine their payment status.

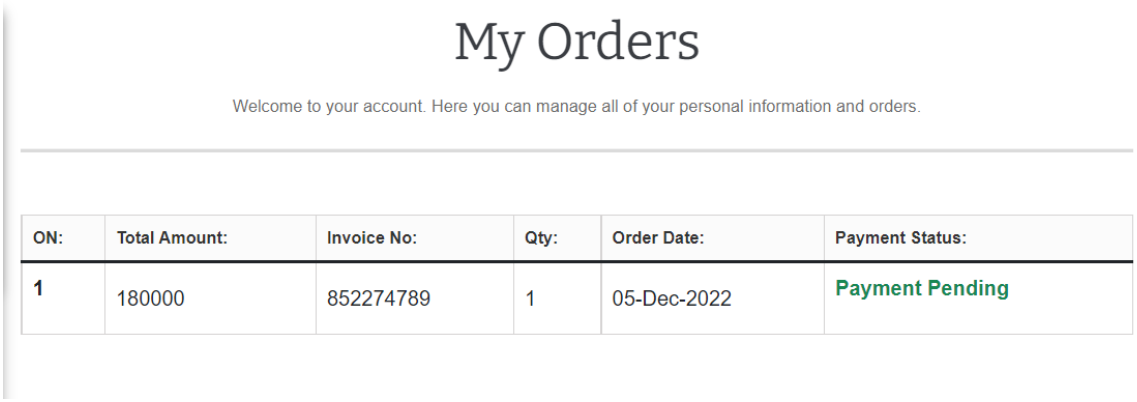


Fig.4.1.11 User orders

4.1.12 Bill Payment

Confirmed who are registered may access the reservation data, comprising booked motorcycles, and collecting the dates, and their payment status. This lets consumers monitor the progress of their bookings.

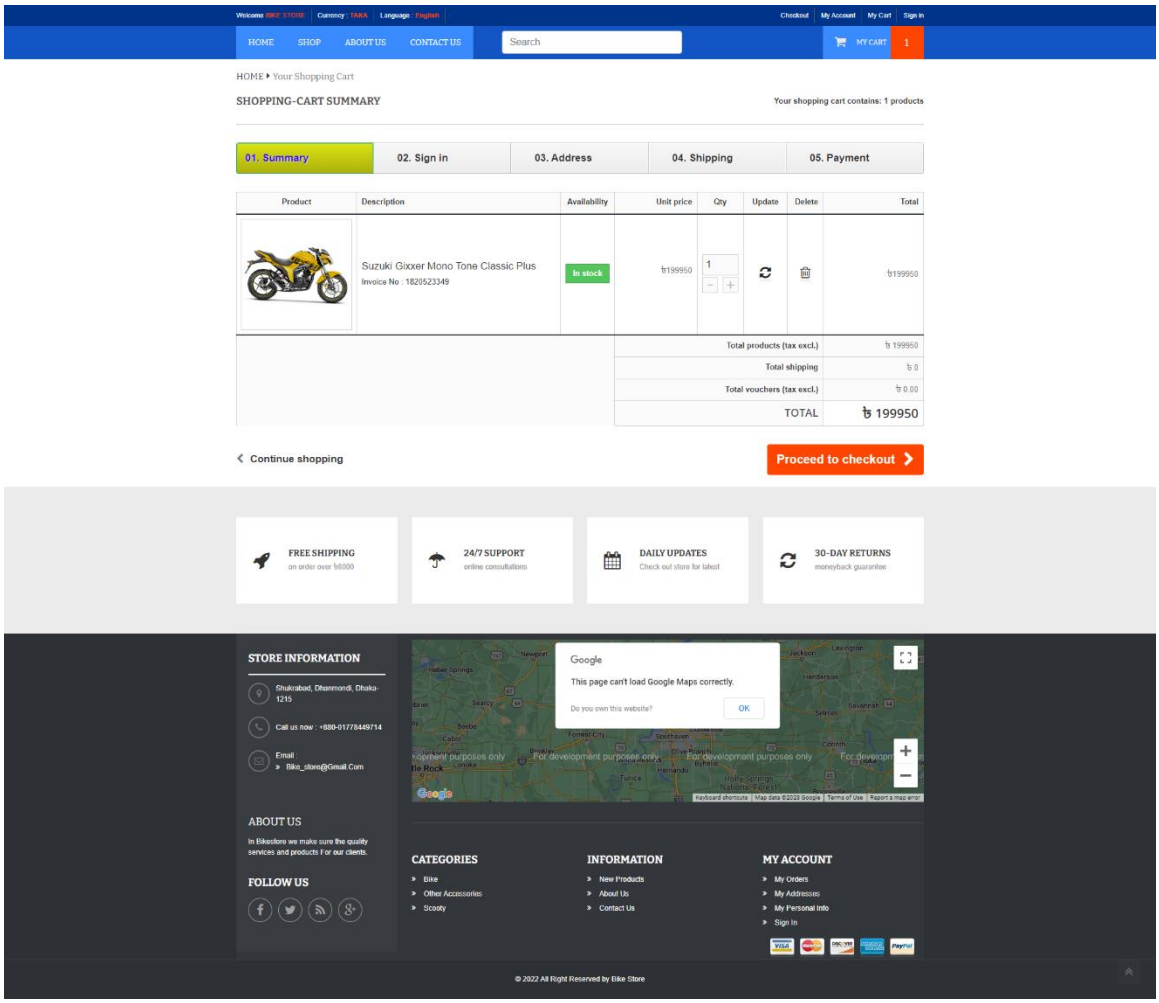


Fig. 4.1.12 Bill Payment

4.2 Back-end Design

The fundamental component of a layout is the reverse- end architecture. The value of a procedure is contradicted by the aforementioned layout. We utilized the PHP as the language of programming for this area.

4.2.1 Visual Studio Code

For the programming portion, we utilize the following languages: HTML, CSS, JavaScript, and the PHP programming language.

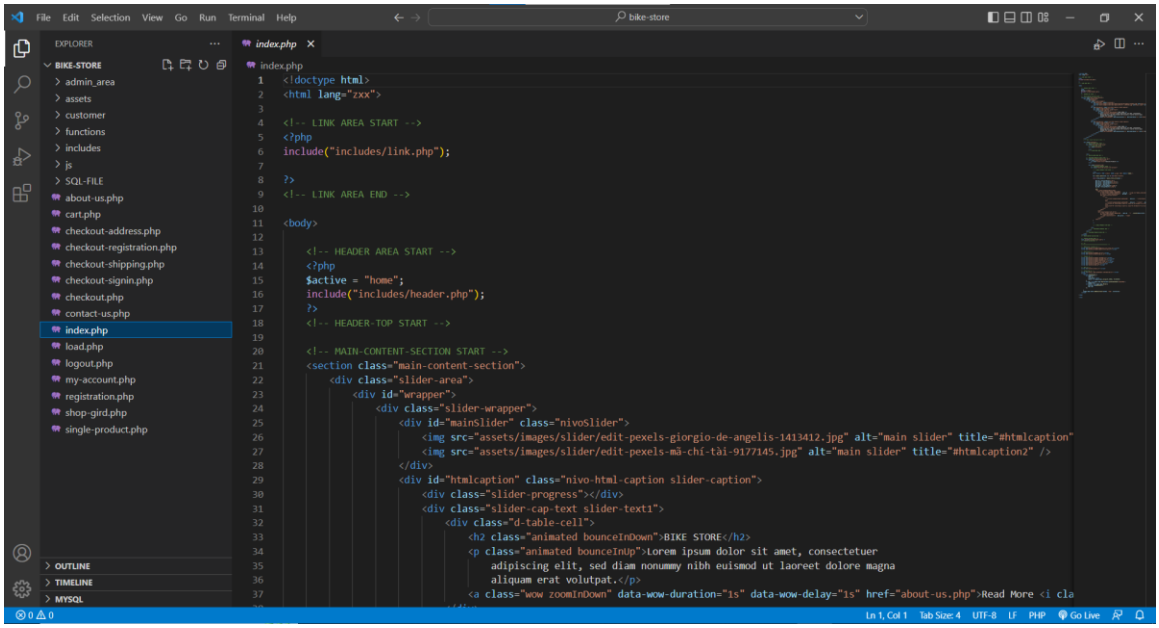


Fig. 4.2.1 Visual Studio code

4.2.2 Live Server

We live our application using XAMPP control panel.

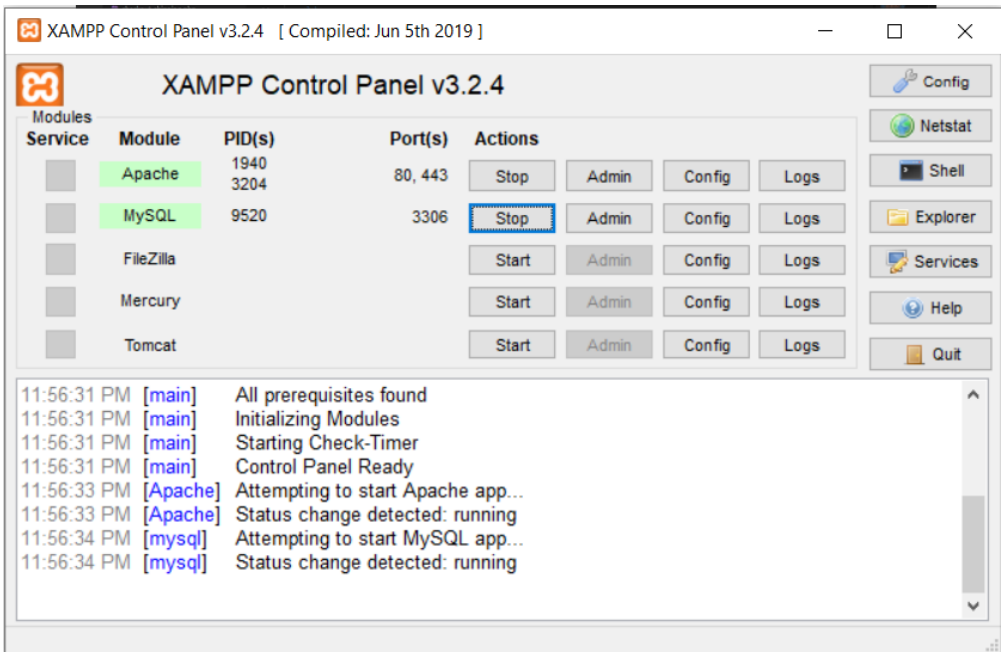


Fig. 4.2.2 XAMPP Server

4.2.3 Manage Database

We genre PhpMyAdmin, MySQL for superintend database file of our application.

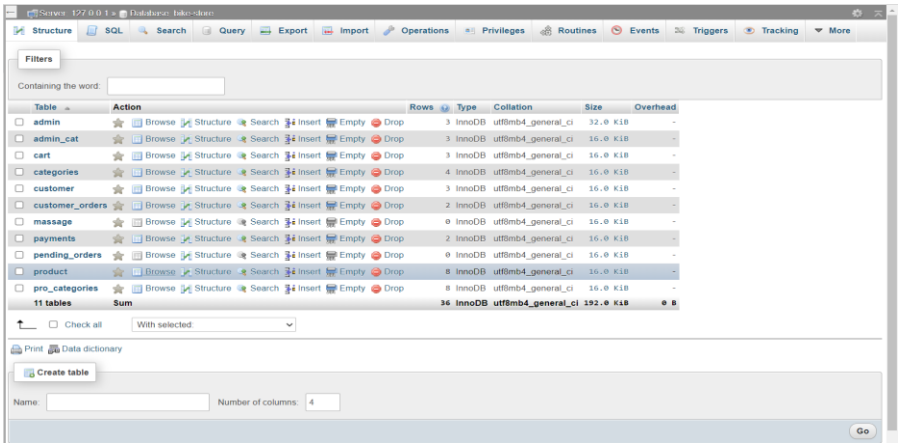


Fig. 4.2.3 PhpMyAdmin

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Implementation of Database

For our project database embodiment, we use MySQL.

5.2 Execution of Front-End Design

To extend the front-end architecture, we integrate a number of languages. A combination of HTML, CSS, and jQuery was utilized for the appearance of the phiz.

5.3 Implementation of Interactions

During the creation of any initiative, interaction with people is crucial. It will be simpler to properly execute any notion the more we engage with others.

We did tell some of our relatives and friends about our plan. We deleted certain things that we feared would not function and added some by sharing.

5.4 Testing Implementation

Conducting extensive testing processes is necessary to assure the dependability, performance, and protection of the "Bike Store - A Web-Based Motorcycle Showroom Administration Software."

Begin by analyzing both the functional and non-functional criteria to get a clear knowledge of the requirements that need to be validated. Identify quantifiable standards for each need.

Construct a detailed test strategy that defines the procedure for testing scope, goals, examples of tests, timelines, and responsibility. Establish testing environments (e.g., growth and development, setting up, but deployment) and determine test data requirements.

5.5 Test Results and Reports

The test findings and statistics for the Bike Store Management System (MS) have been properly recorded and examined. These reports offer complete data on test case results, fault monitoring, indicators of performance, weaknesses in security, and feedback from users. The results reflect a system that passed extensive verification and examination across numerous elements, assuring reliability and dependability. Solutions for improving outcomes, fixing problems with security, and instruction for user upgrades have been made. These documentations serve as an important source of information for consumers, facilitating decision-making processes, identifying changes, and validating that the system is appropriate for production usage while creating a basis for evolutionary modification and continuing assessment.

Test Case Type	Details	Expected Result	Actual Result	Status	Date
Log in Admin	**Log in as admin**	**Log in**	**Logged in successfully**	**Pass**	**05-09-2022**

Log in User	**Log in As User**	**Log in**	**Logged in successfully**	**Pass**	**05-09-2022**
Register	**Register as user**	**Register**	**Registered successfully**	**Pass**	**05-09-2022**
Add Bike	**Add new bike information**	**Add bike**	**Updated successfully**	**Pass**	**05-09-2022**
Delete Bike	**Delete bike**	**Delete**	**Update successfully**	**Pass**	**05-09-2022**
Book or purchase	**Purchasing New model bike**	**Purchase**	**Booked Successfully**	**Pass**	**05-09-2022**

Table 1: A Test Case for the Application

Differences between our website and other websites:

Bike Store	Other Websites
All the information about the bike can be seen in one click on our website.	If you want to see the details of the bike on other websites, you have to go inside and see a lot. Which is much difficult.
Our website shows only those bikes who have a permit to run in Bangladesh.	Other websites show many types of bikes which don't have any permit to run in Bangladesh. Like higher CC bikes.
Our website has online ordering system. Customer can choose the bike and order online.	Other websites do not have online bike ordering system. Because they don't sell bikes themselves
Customer can pay online after ordering the bike on our website. That will reduce customer hassles	As other websites don't sell bikes directly, they also don't have online payment system

Table 2: Difference Between Bike Store and other websites

Our Websites Benefits:

Customers using our website will get several advantages over using other websites. For example, our website is very simple and beautifully designed. Besides, there are no extra bikes on our website which are not permitted in Bangladesh. For example, there are many extra bikes on other websites which have not been given road permission by Bangladesh. Besides, other websites offer bikes with much higher engine power on their website. Where the customer has to get a lot of speed when looking for their preferred bike. Most people of our country do not know the details of motorcycles. So, they look at what they want to buy rather than the more powerful bike. So, we have not kept any bike above 165 cc, so that it is convenient to find the bike of choice.

Since customers can buy bikes through our website, we have put an online order system on our website. Customers can order their desired bikes online. We will deliver the bike

ordered online to the customer's address. We also have online payment system on our website. Customer can order bike online and pay online. Or you can take cash on delivery. Online order and online payment system has been put in place so that customers can buy bike free of charge.

But other websites are opened only for bike details. They don't sell bikes. Also, those who sell bikes do not have a good website. Other websites do not have any online ordering option on their website as they do not sell bikes. And they don't even have a payment system.

Since we have a bike-selling system, we also have a service center. Customers can come and service their bikes at our service center if they want. Customers can call our specific mobile number to make an appointment for their service. Customers can make their appointment on their preferred date and time. But these facilities are not provided by other websites. They only give the details of the bike. Some websites provide the location of certain Brad's dealer points for selling bikes. But we can provide almost all the facilities through our website. Which does not provide any website.

CHAPTER 6

IMPACT ON SOCIETY, ENVIRONMENT, SUSTAINABILITY6.1

6.1 Impact on Society

The installation of the Bike Retailer Management Systems offers the potential for numerous important social impacts:

1. Improved Convenience for consumers: By offering online exhibition expertise, the platform makes it easier for consumers to explore, enquire about motorcycles, and arrange test rides. This ease may inspire more people to adopt riding as a means of shipping, thereby decreasing congestion in the roadways and cutting the release of greenhouse gases.

2. Job Creation: The operation and upkeep of the Bike Store Administration System will offer job possibilities, notably in IT development, assistance to customers, and bike repair services. This may lead to local revenue generation and boosting employment prospects.

3. Promoting Ecological Transport: By enabling the purchase as well as upkeep of motorcycles, the infrastructure subsequently promotes environmentally conscious and environmentally friendly forms of transportation. Promoting a greater number of individuals to ride bikes may have a good influence on the surroundings by lowering pollution while supporting healthier lives.

4. Enhanced Road Safety: As a greater number of individuals choose for riding, there may be a greater focus on safety precautions and equipment to the infrastructure, such as specialized bicycle paths and regulations regarding traffic, which could benefit community by minimizing incidents and collisions.

5. Information-Driven Decision-Making: The system's statistics and analytics features enable dealership operators to make educated choices based on consumer preferences and current market conditions. This may lead to more effective handling of inventory, decreased waste, and improved utilization of resources, significantly improving corporate profitability and environmental performance.

6. Availability and Inclusivity: The online showcase aspect of the system promotes mobility for those with impairments or others who may have trouble accessing real bike showrooms. This inclusion guarantees that a larger range of the people can take advantage from the offers of the bike shop.

7. Reduction of Paperwork: The computer's digitalization of processes minimizes the requirement for paper-based maintaining records and administrative chores. This not only cuts dollars but also helps to a decrease in the usage of printed material and the impact it has on the environment.

8. Support for Local Industries: More compact, local bike shops could benefit from the online presence as well as effectiveness given by the system, perhaps allowing them to go up against more successfully with bigger, chain outlets.

9. Community Building: The Ride Store Management System can promote a feeling of camaraderie among riding enthusiasts by offering a forum for users to exchange reviews, situations, and suggestions, establishing a lively online bicycling group.

In the end, the Bike Store Management System (MS) has the ability to positively influence community by encouraging sustainable mobility, generating employment, boosting availability, and making a contribution to a more information-driven and concerned-with-the-environment method for the bike retail business. While these consequences may be slow, their overarching impact could eventually contribute to a more resilient and environmentally responsible future, paired with economic development and enhanced practicality for cycling enthusiasts and passengers worldwide.

6.2 Impact on Environment

The enactment of the Bike Store Management Software offers an opportunity to benefit significantly to the surroundings by increasing the use of bikes as an environmentally friendly form of mobility. As the system supports the sale as well as upkeep of motorcycles, it subsequently promotes environmentally conscious commuting choices, lowering the negative environmental impact connected with traditional autos. Providing greater availability of motorcycles and bike-related items, it promotes a greater number of people to choose to ride, eventually contributing to lower emissions of atmospheric greenhouse gases, fewer pollutants in the atmosphere, and a better atmosphere in metropolitan areas. In addition, the system's focus on repairs and servicing may increase the lifetime of bicycles, lowering the requirement for new bike manufacture and further preserving resources. These sustainability benefits match with worldwide efforts to mitigate the impact of climate change and develop environmentally friendly and greener urban settings.

6.3 Ethical Aspects

The Bike Store management platform involves major ethical problems, mainly addressing information security and confidentiality. It must prioritize preserving user and client data and guaranteeing that personal knowledge and financial information are private and safeguarded from illegal access or breaches. In addition, legal responsibilities extended to reasonable and open pricing policies, prohibiting price tampering or unfair treatment of consumers. The structure of the system should promote openness in dealing with consumers, give honest details about products, and assure fairness in managing bookings and sales. In addition, ethical standards should drive the system's availability, ensuring sure it welcomes different consumers, including people with limitations. By following these fundamental values of ethics, the Bike Store Management Organization may develop confidence, trustworthiness, and civic duty in its day-to-day activities, establishing a good identity and sustainable connections with the customers it serves.

6.4 Sustainability Plan

The environmentally friendly strategy for the Bike Store Management System comprises numerous critical features. Firstly, the infrastructure will emphasize eco-conscious activities by supporting the use of bikes as an ecologically beneficial means of journeys, so contributing to lower greenhouse gas emissions and cleaner air. Secondly, the system strives to reduce its own negative environmental effects by effective resource use, environmentally friendly data website hosting, and accountable management of electronic trash. Furthermore, a commitment to continual repair and improvement will preserve the system's life and relevance, eliminating the necessity for periodic system changes and the accompanying negative environmental impact. Last but not least, this strategy includes measures to assist local companies, enhancing the economic climate in the area and increasing community involvement, which coincides with the ideals of social viability. Collectively, these parts comprise a complete environmentally friendly approach that strives for equilibrium among economic development, caring for the environment, and community engagement within the framework of the Bike Store Management Framework.

CHAPTER 7

CONCLUSION AND FUTURE PLAN

7.1 Discussion and Conclusion

The creation and execution of the "Bike Store - A Web-Based Bike Showroom Management System" constitute a big step advance in automating bike shop operations and boosting customer satisfaction. Throughout the undertaking, different areas have been methodically handled, from functional needs by means of testing, social consequences, concerns regarding ethics, to environmental management. The framework's straightforward to use front-end architecture offers an easy reading procedure for clients while simplifying the system's backend procedures for administration. By supporting secure usernames and passwords efficient inventory control, and easy booking procedures, the system promotes accessibility and ease of use, possibly boosting environmentally conscious transportation preferences. Development has been a vital aspect in ensuring the system's dependability, with a variety of testing kinds, spanning integration and unit development to functionality and safety evaluations. These measures guarantee that the Bike Store administration system is sturdy, safe, and intuitive. In terms of social effect, the system is projected to offer employment possibilities, encourage environmentally friendly modes of transportation, and build a feeling connected to one another among bicycling aficionados. Its promise to lessen the impact on the environment via increasing bicycle utilization and eco-conscious habits meshes with larger sustainable aims.

7.2 Scope for Further Development

The "Bike Store - A Web-Based Bike Display Administration System" has significant prospects for future growth and enlargement. development. Future improvements may involve the incorporation of sophisticated data analysis as well as machine learning techniques to deliver individualized product suggestions for consumers, enhancing their overall shopping experience. Furthermore, including geographical elements might help

customers to identify local bike dealerships or rental stations simply. The network of sensors might potentially grow to incorporate IoT (Internet of Things) technological advances, which would enable real-time monitoring of bike whereabouts and conditions of use, which can assist in preventative care. Additionally, the creation of a mobile application sidekick may expand the platform's reach, allowing consumers an effortless on-the-go interaction. Overall, the framework's modular design and constant dedication to innovation guarantee that it stays at the forefront of motorcycle merchandising technology, always addressing the increasing demands by customers and the rest of the sector.

REFERENCE

[1] “MySQL” Available at:
https://en.wikipedia.org/wiki/MySQL[last accessed on 15.07.23 at 02 AM]

[2] “phpMyAdmin” Available at:
https://www.phpmyadmin.net/[last accessed on 15.07.23 at 02 AM]

[3] “Localhost” Available at:
http://localhost/[last accessed on 15.06.23 at 02 AM]

[4] “XAMPP” Available at:
https://www.apachefriends.org [last accessed on 15.05.23 at 02 AM]

[5] “Motorcyclevalley” Available at:
https://www.motorcyclevalley.com/ [last accessed on 12.07.23 at 010 AM]

[6] “Bikebd” Available at:
https://www.bikebd.com/ [last accessed on 15.05.22 at 02 AM]

[7] Activity diagram, Business Process Model, UML diagram- diagram make by “L”
https://www.lucidchart.com/ [Last access on 1-08-23 at 12.05 AM]

[8] HTML code practice on- code find and about their courses, and also take some supports from https://www.teachucomp.com/ [last access on 22-07-2023 at 12 AM]

Turnitin Originality Report

Processed on: 16-Oct-2023 08:15 +06
ID: 2196838245
Word Count: 7558
Submitted: 1

181-15-11308 By Md. Harunur Rashid Niloy

Similarity Index	Similarity by Source	
24%	Internet Sources:	23%
	Publications:	0%
	Student Papers:	14%

4% match (Internet from 22-Jul-2023)
http://dspace.daffodilvarsity.edu.bd:8080/bitstream/handle/123456789/10379/23136.pdf?isAllowed=y&sequence=1

3% match (Internet from 06-May-2023)
http://dspace.daffodilvarsity.edu.bd:8080/bitstream/handle/123456789/9195/21330.pdf?isAllowed=y&sequence=1

3% match (Internet from 21-Jul-2023)
http://dspace.daffodilvarsity.edu.bd:8080/bitstream/handle/123456789/10062/22738.pdf?isAllowed=y&sequence=1

3% match (Internet from 21-Jul-2023)
http://dspace.daffodilvarsity.edu.bd:8080/bitstream/handle/123456789/10034/22669.pdf?isAllowed=y&sequence=1

2% match (student papers from 20-Jan-2021)
Submitted to Daffodil International University on 2021-01-20

1% match (Internet from 29-Sep-2023)
http://dspace.daffodilvarsity.edu.bd:8080/bitstream/handle/123456789/10593/23353.pdf?isAllowed=y&sequence=1

1% match (Internet from 21-Nov-2022)
http://dspace.daffodilvarsity.edu.bd:8080/bitstream/handle/123456789/8575/181-15-11295.pdf?isAllowed=y&sequence=1

1% match (Internet from 06-May-2023)
http://dspace.daffodilvarsity.edu.bd:8080/bitstream/handle/123456789/9140/21366.pdf?isAllowed=y&sequence=1

1% match (Internet from 29-Jun-2023)
http://dspace.daffodilvarsity.edu.bd:8080/bitstream/handle/123456789/9187/21378.pdf?isAllowed=y&sequence=1

1% match (Internet from 22-Jul-2023)
http://dspace.daffodilvarsity.edu.bd:8080/bitstream/handle/123456789/10403/23078.pdf?isAllowed=y&sequence=1

1% match (student papers from 25-Nov-2019)
Submitted to St. Petersburg High School on 2019-11-25

1% match (student papers from 24-Sep-2023)
Submitted to University of Northampton on 2023-09-24

< 1% match (Internet from 15-Oct-2023)
http://dspace.daffodilvarsity.edu.bd:8080/bitstream/handle/123456789/10961/23877.pdf?isAllowed=y&sequence=1

< 1% match (Internet from 05-Aug-2023)
http://dspace.daffodilvarsity.edu.bd:8080/bitstream/handle/123456789/10614/23387.pdf?isAllowed=y&sequence=1

< 1% match (Internet from 23-Jul-2023)
http://dspace.daffodilvarsity.edu.bd:8080/bitstream/handle/123456789/9928/22825.pdf?isAllowed=y&sequence=1

< 1% match (Internet from 21-Nov-2022)