Software Requirements Specification

for

Shoe Collection

Prepared by,

Group Name: Dream IT

Abdullah Al Rahat	**213-15-4261**	**abdullah15-4261@diu.edu.bd**
Md. Tanvir Tahmid	**213-15-4425**	**tanvir15-4425@diu.edu.bd**
Ashraful Hasan Chad	**213-15-4408**	**Chad15-4408@diu.edu.bd**

Instructor: **Mr. Golam Rabbany**

Course: **Software Project VI**

Date: **7 December, 2024**

Shoes Collection
Daffodil International University
Daffodil Smart City, Birulia, Dhaka, Bangladesh

Dear Sir,

Re: Enclosed Application Agreement for Shoes Collection.

At Dream IT, we understand that creating client-focused applications requires a blend of technical expertise and clear communication, and we are committed to offering both. Our team comprises highly skilled professionals to ensure that you receive a solution that aligns with your unique needs.

We recognize that every client is distinct, and our approach is to deliver a tailored, innovative, and cost-effective proposal while ensuring timely and budget-conscious delivery. Based on your specific requirements, we have designed the Shoes Collection for you.

Enclosed in this agreement document, we have outlined all components and features included in our proposed application. Please review each section carefully, and if it meets your expectations, kindly sign to confirm your agreement.

We look forward to the opportunity to work together and bring this project to fruition.

Sincerely,

Abdullah Al Rahat

Md. Tanvir Tahmid

Ashraful Hasan Chad

Dream IT

Project Overview

In the 21st century, advancements in technology and digitalization have revolutionized every aspect of our lives. To streamline business and professional tasks, we have developed a robust system that simplifies operations and improves efficiency. This system includes a secure login panel, where users and administrators can access their accounts through unique user IDs and passwords.

The system is composed of five main modules: product catalog, order management, Service, Contact us, and analytics. Each module is designed to operate seamlessly, ensuring a smooth and effective workflow. By utilizing this system, businesses can manage their operations with ease, keep track of inventory, handle orders efficiently, and improve overall productivity.

Obstacles

- **Understanding the Requirements**: Thoroughly analyzing and interpreting client needs to ensure the application meets all functional and non-functional requirements.
- **Handling User Roles**: Implementing a user role management system that differentiates permissions and access levels for each user type.
- **Data Storage Using MongoDB**: Developing a robust object-oriented data storage solution to handle and organize the information within the application.
- **Managing Complex Data Sets**: Efficiently unstructuring and processing large and diverse data sets to ensure optimal application performance and usability.

Features Analysis:

Use-case Diagram:

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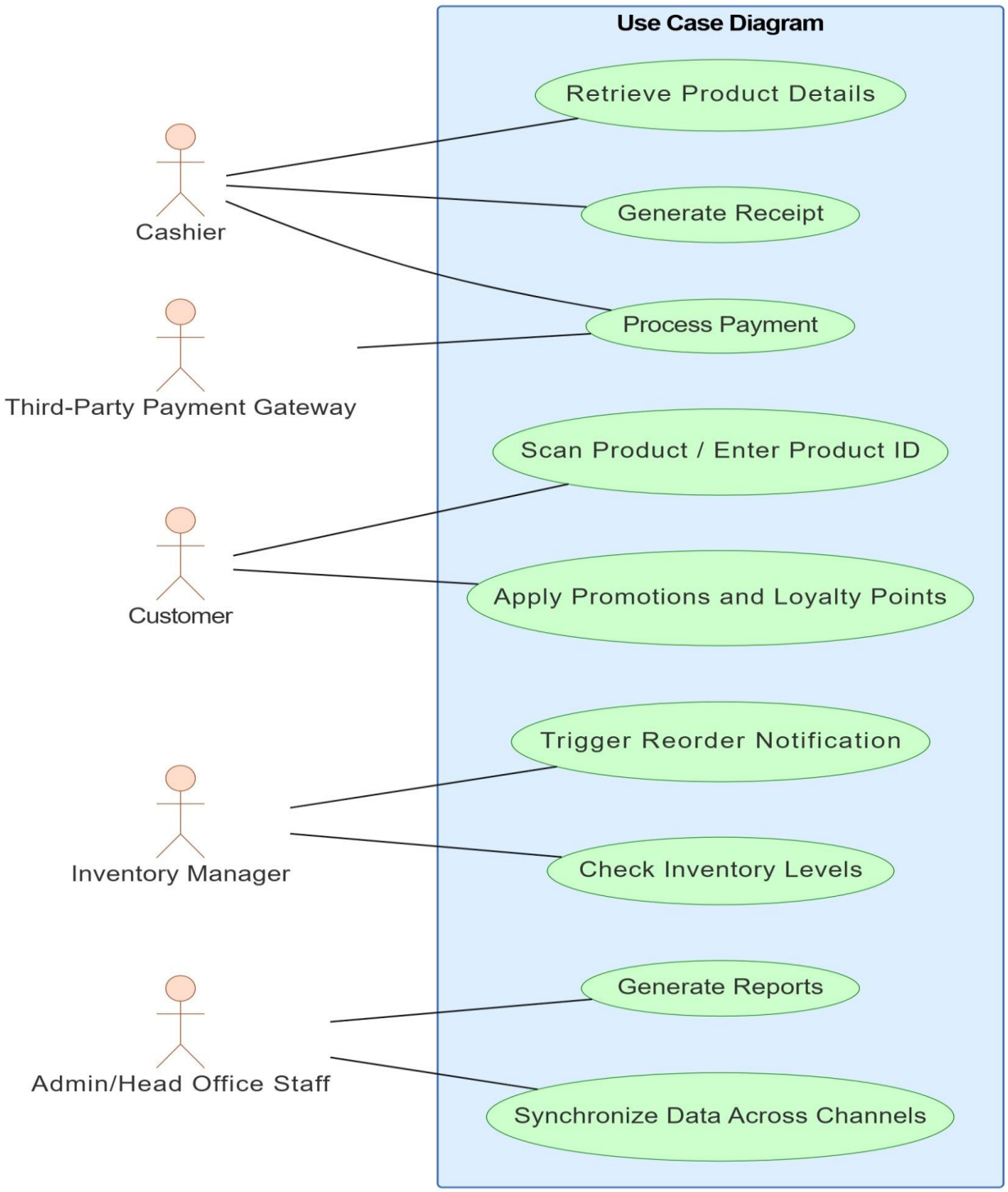

Fig. Use-Case diagram of Shoes Collection website

Unified Modeling Language:

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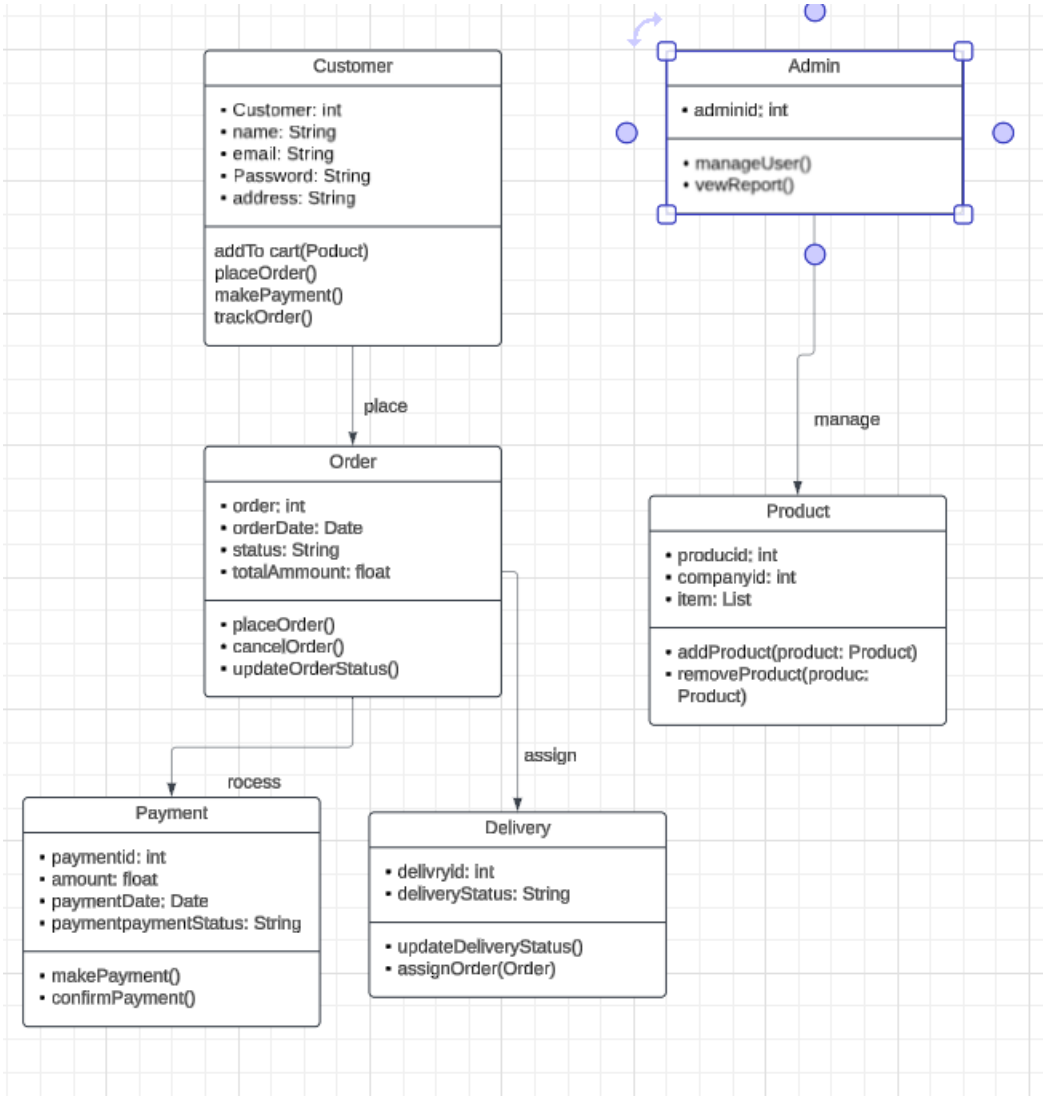

Activity Diagram:

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Detailed Workflows:

Customer Workflow:

- **Registration/Login:** Uses React forms with validation for fields like email and password.
- **Product Browsing:** Renders available items with real-time inventory status.
- **Cart Management:** Uses state management (e.g., React Context or Redux) to add, remove, and modify items in the cart.
- **Order Placement:** Confirmation modal using React components; interacts with backend API for secure transactions.

- **Payment Processing:** Secure payment component with validation, integrated with third-party payment API.

Admin Workflow:

- **Product Management:** React-based forms for item addition, price updates, and deletion.
- **Order Processing:** Manage orders from a dashboard view, including order acceptance and status updates.
- **Inventory Updates:** Real-time updates reflected on the customer-side menu through API synchronization.

Delivery Workflow:

Access orders assigned for delivery from a dedicated dashboard. Update order status in real-time, reflected on customer and manager views.

4. Module Description:

Customer Modules:

- **Home Page**: React component with featured restaurants and dynamic offers.
- **Product Browsing**: Menu page with items listed by categories, and dynamic rendering of availability based on stock.
- **Cart Management**: Cart page or sidebar with add/remove item features, connected via context or Redux.
- **Checkout and Payment**: Step-by-step form with fields like delivery address, payment method, integrated with secure third-party APIs.

Admin Management Modules:

- **Menu Management**: Accessible via a dashboard with forms for item details, categories, and price updates.
- **Order Processing**: Order status updates and inventory management integrated with customer-side views.
- **Inventory Management**: Direct API interaction for real-time updates on availability.

Admin Panel (Optional):

- **User Management**: List and management of all users with React components.
- **Content Management**: https://fonts.google.com/ interface for promotional content updates.

- **Reporting**: Generate sales reports, engagement statistics, etc., with charts and data visualizations in React.

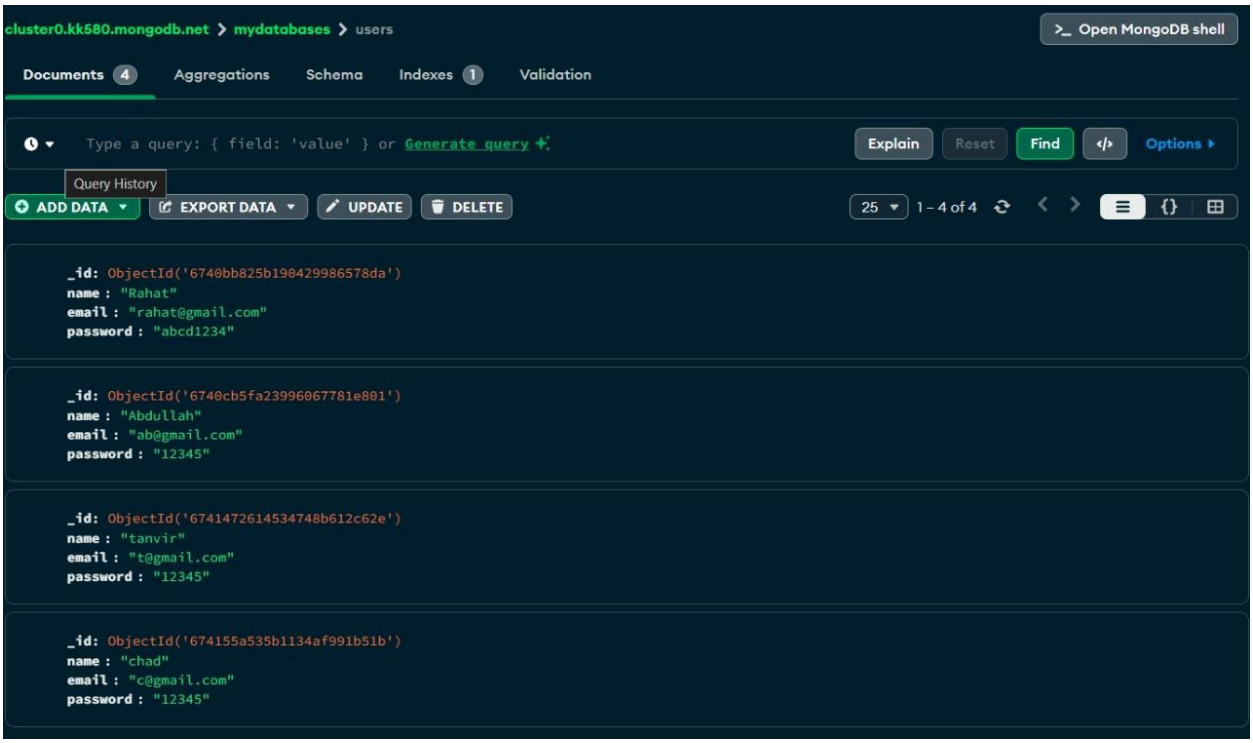


Fig. Screenshot of Shoes Collection website's Database

In the Shoes Collection Web Application System, there are two main user roles:

- **General User**
    - *Viewer*: Can browse general pages of the application. If a viewer wishes to contribute a blog post, they must register within the blog section.
    - *Massage*: When a viewer decides to make a review, they are identified as a reviewer so they can comment after the registration process.
- **Staff User**
    - *Moderator*: Has full administrative control over the web application. Moderators can create new users and assign or update user roles as needed.
    - *Accountant*: Manages all financial transactions within the application. Verifications for payments made through platforms like bKash are handled by the Accountant.
    - *Notice Board Moderator*: Responsible for posting notices and managing access for other staff members. The Notice Board Moderator can also create "General

Staff" users who have permission to view and download notices. Additionally, they manage the removal of outdated notices and user accounts as necessary.

These two main user roles control the entire application. While the Staff User role manages and maintains the system, the General User is the primary end-user interacting with the application's functionalities.

Modules Details:

Visiting Website:

- **Home:** The landing page showcasing featured shoe collections, discounts, and trending styles.
- **Products:** Displays the full catalog of shoes, filterable by categories such as Men, Women, Kids, and types like Sneakers, Formal, Sports, etc.
- **Reviews:** Highlight the customer thought
- **Service:** Show the service system and its efficiency.
- **Contact Us:** A contact form where users can reach out with inquiries, feedback, or customer support requests.

Shop and Purchase:

- **Browse Products:** Users can explore various shoe categories, and view product details, sizes, colors, and pricing.
- **Product Registration:**
    - Required details for adding products to the catalog include:
        - Product Name
        - Price (mandatory)
        - Description (mandatory)
        - Category (Dropdown: Men, Women, Kids)
        - Size Options
        - Colors Available

        - Product Images

- **Login and Registration:**
    - Registration:
        - Fields include:
            - Full Name (mandatory)
            - Email (mandatory)
            - Password (mandatory)
    - Login:
        - Fields include:
            - Valid Email
            - Valid Password

Dashboard:

- Profile management
- Add user
- Delete user

Payment Confirmation:

Admin Panel:

- **Admin Dashboard:**

Blog Section:

- **User Registration:**
    - Any visitor can register to share thoughts and experiences related to shoes, fashion tips, or styling ideas.
- **Blog Moderator Access:**
    - Blog Moderators can manage blog posts, approve or delete content, and block or delete users as needed.
- **Post Uploads:**

- Registered users can upload text posts, images, and videos to the blog section.
-

Technology Requirements (Application and Hardware)

Technology:

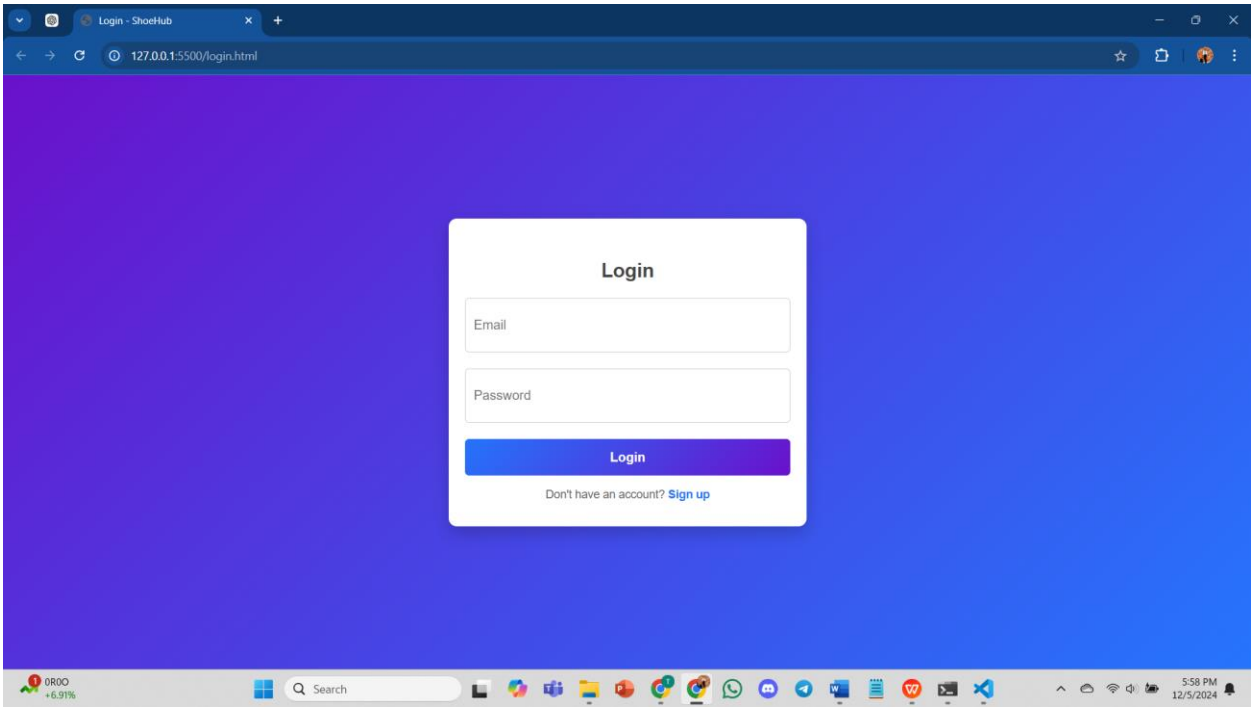
- **Framework**: we use node.js to connect with MongoDB
- **Database**: We use MongoDB for efficient data handling.
- **Design**: Modern, responsive, and optimized for a premium user experience.
- **Coding Architecture**: Modular structure to support scalability and future expansion.
- **Security**: Encryption for data security, including user information, payment transactions, and sensitive data.

6. Application

- **Dream IT Web-Application Platform**

7. Milestones and Reporting

Milestone	Tasks	Reporting	Time
Analysis	-	-	5 days
Requirements Collection & Approval	-	-	7 days
Frontend Development	-	-	25 days
Backend Development	-	-	30 days
Testing	-	-	15 days
Deployment	-	-	5 days
Delivery	-	-	3 days
Analysis	-	-	5 days


Login - ShoeHub
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Login
Email
Password
Login
Don't have an account? Sign up
Search
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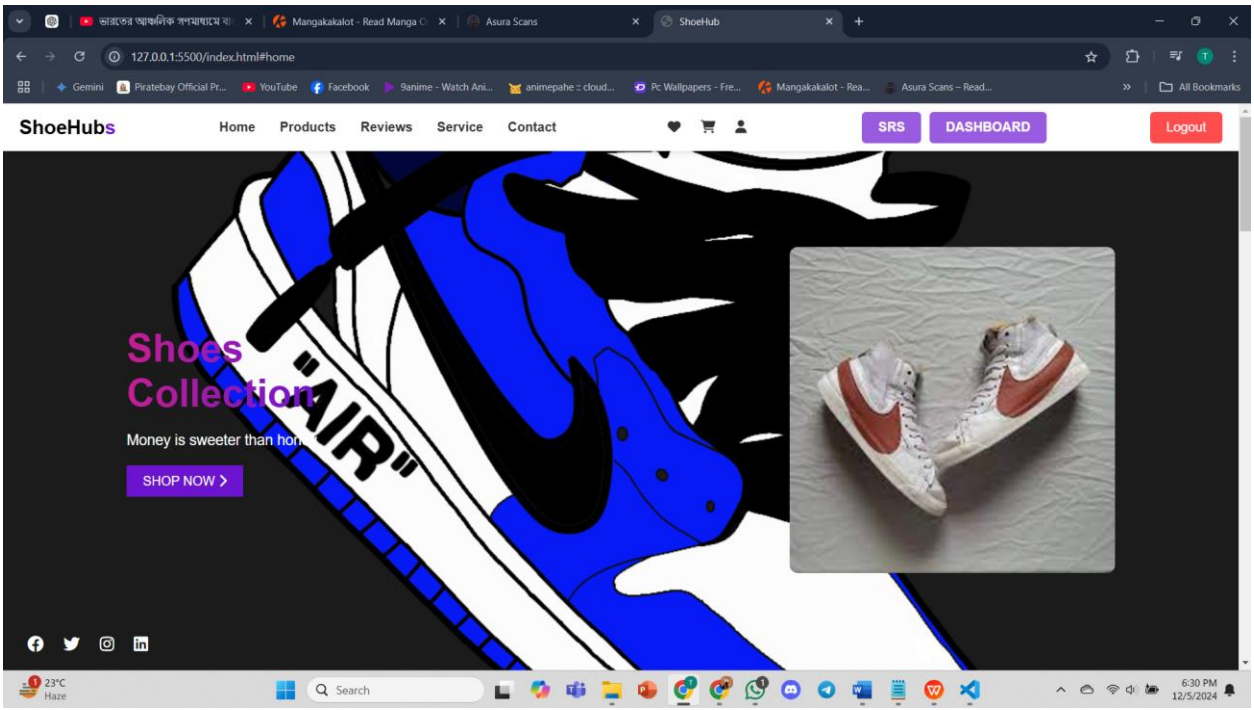
12/5/2024


ShoeHub
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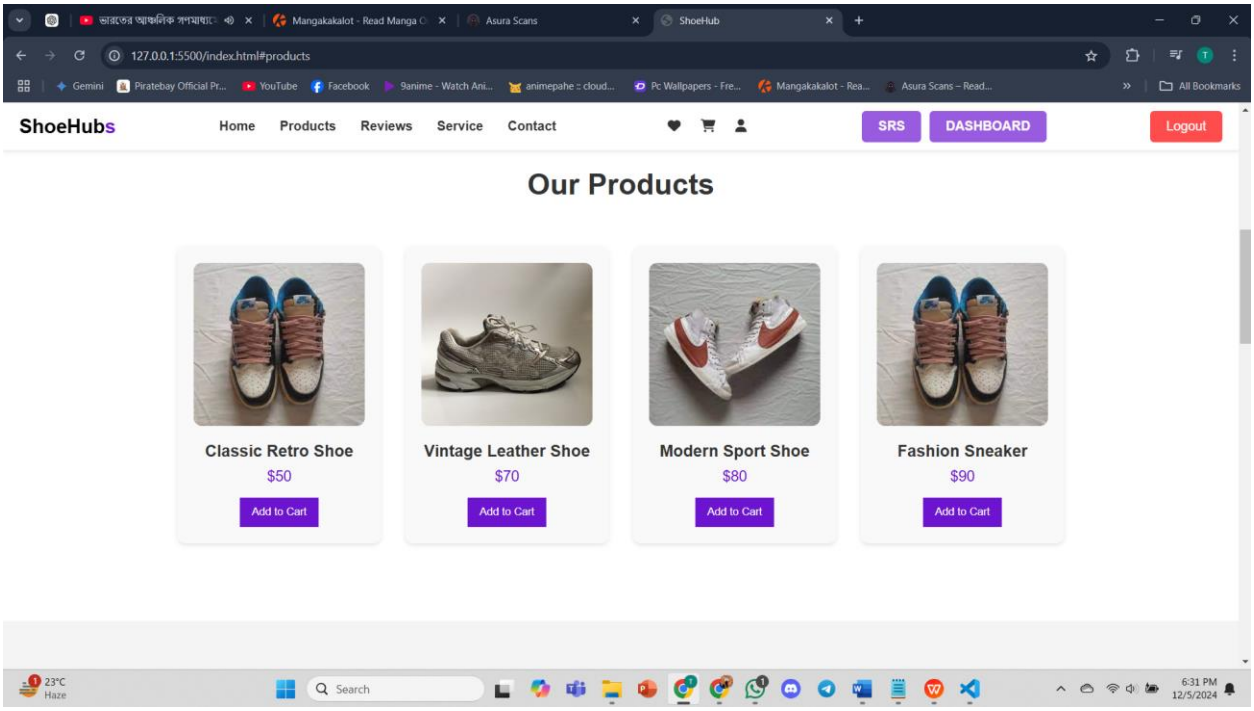
ShoeHubs
Home
Products
Reviews
Service
Contact
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Logout
Our Products
Classic Retro Shoe
$50
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Vintage Leather Shoe
$70
Add to Cart
Modern Sport Shoe
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Fashion Sneaker
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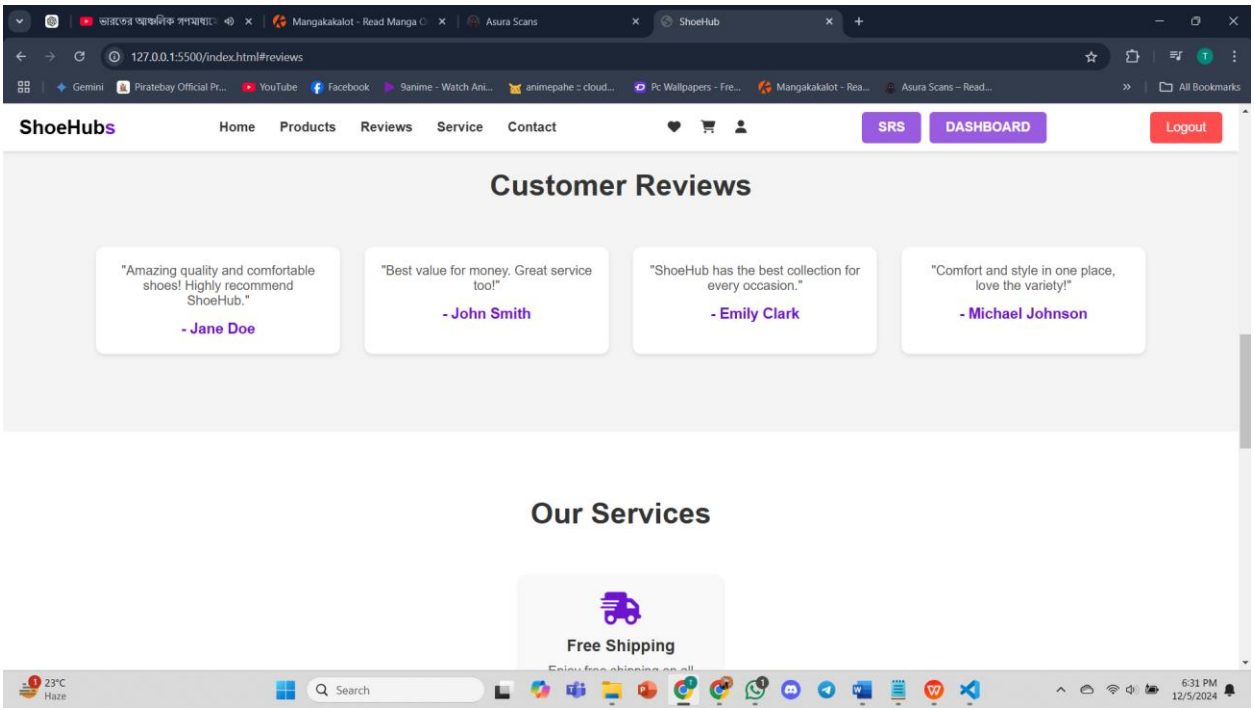
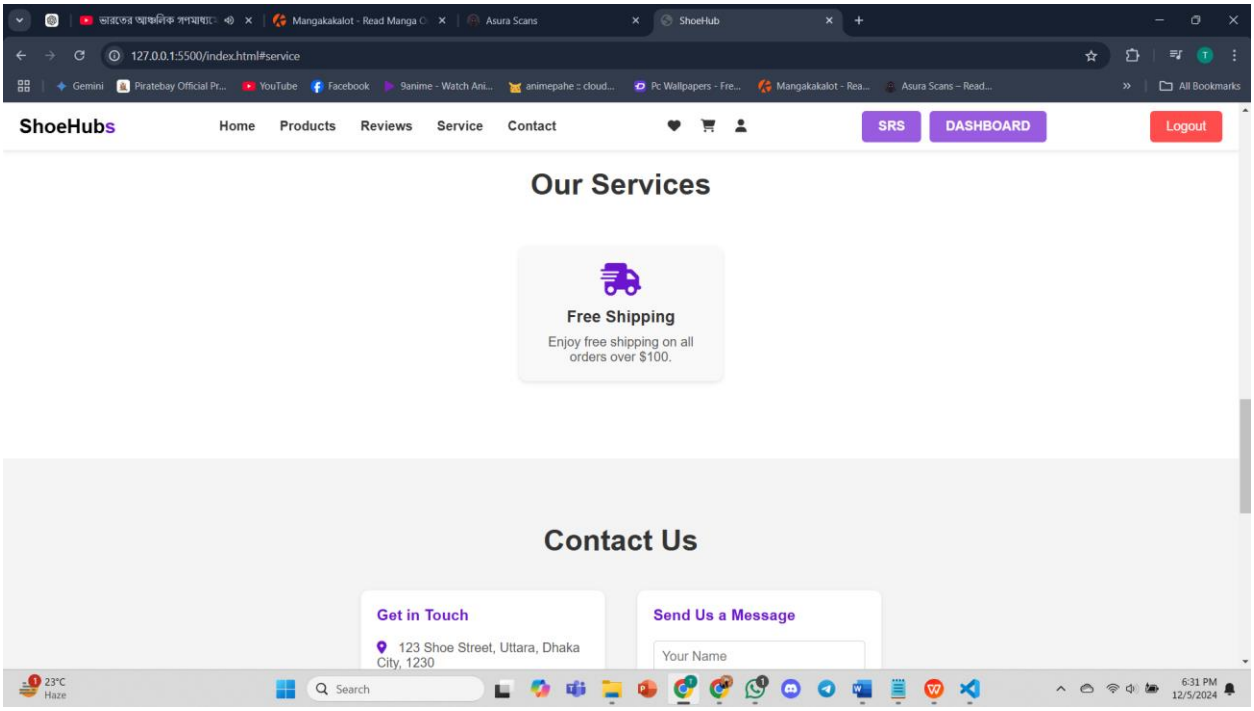
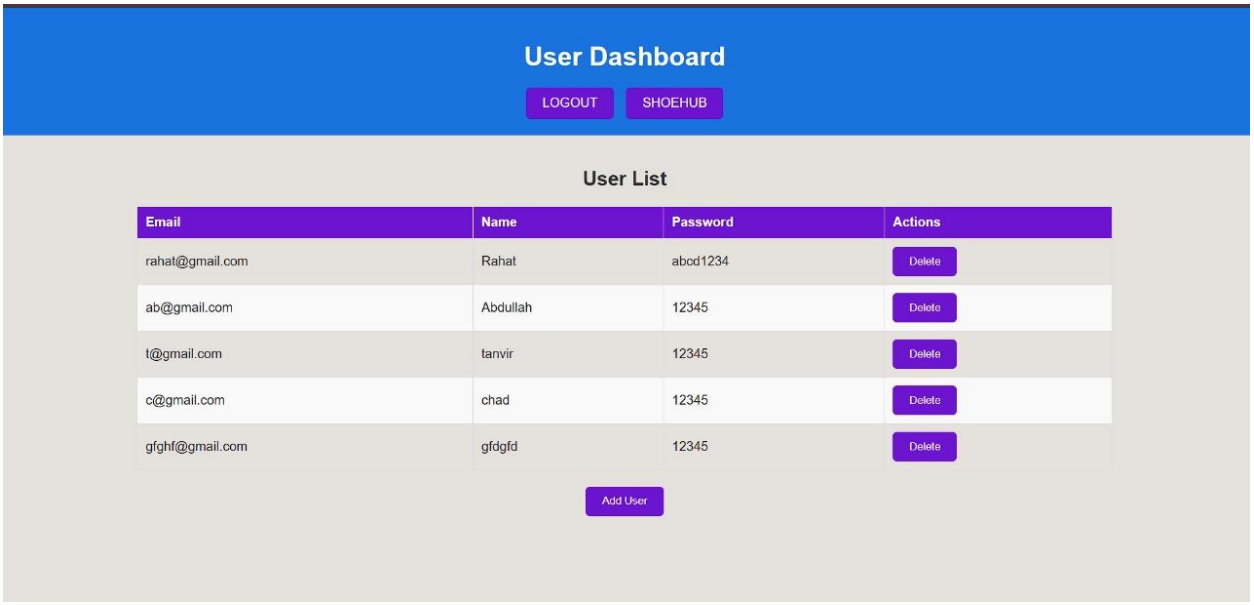

ShoeHubs
Home
Products
Reviews
Service
Contact
SRS
DASHBOARD
Logout
Customer Reviews
"Amazing quality and comfortable shoes! Highly recommend ShoeHub."
- Jane Doe
"Best value for money. Great service too!"
- John Smith
"ShoeHub has the best collection for every occasion."
- Emily Clark
"Comfort and style in one place, love the variety!"
- Michael Johnson
Our Services
Free Shipping


ShoeHubs
Home
Products
Reviews
Service
Contact
SRS
DASHBOARD
Logout
Our Services
Free Shipping
Enjoy free shipping on all orders over $100.
Contact Us
Get in Touch
123 Shoe Street, Uttara, Dhaka City, 1230
Send Us a Message
Your Name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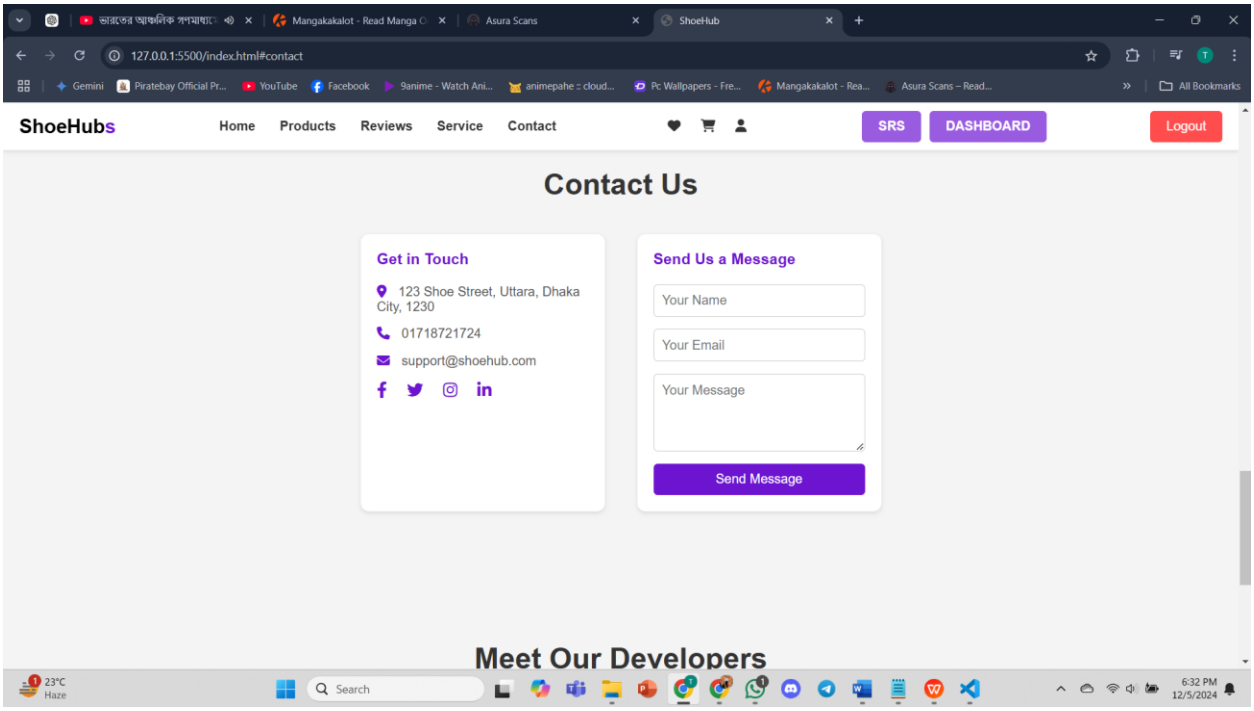

8. Deployment The application will be developed based on the requirements specified by our client Mr. Golam Rabbani. Only features agreed upon in the project requirements document will be included in the initial development. Any additional features requested by the client will be subject to additional fees based on the complexity of the new requirements.

9. Testing The application will undergo a thorough testing process, including:

- **Automated Testing**: Conducted using a Continuous Integration (CI) pipeline to verify code quality and functionality.
- **Manual Testing**: Ensuring the platform functions across all intended devices and browsers.

10. Support

- **Support Availability**: 24/7 support will be available based on a support package and payment terms. Maintenance contracts can also be arranged for continuous updates and support.

11. Pricing The total project fee for end-to-end development will be **One Lakh Taka** (100,000 Taka).

- Breakdown:
    - **Frontend Development**: 40,000 Taka
    - **Backend & Database Integration**: 40,000 Taka
    - **Testing and Deployment**: 20,000 Taka

12. Payment Terms The payment terms are as follows:

Milestone	Payment
On Proposal Acceptance	10% (10,000 Taka)
On Agreement Signing	40% (40,000 Taka)
At 70% Project Completion	25% (25,000 Taka)
At Project Delivery	25% (25,000 Taka)

12. Responsibility This project is ordered by Dream IT. All content and data management within the application will be the client's responsibility.

13. Project Team

- **Developers**: Abdullah Al Rahat, Md. Tanvir Tahmid, Ashraful Hasan chad

14. Contact Us For further assistance or inquiries, please reach out through any of the following:

- **By Phone**: 01629247253
  [Your Name]
- **By Email**: abdullah15-4261@diu.edu.bd
- **On our website**: http://127.0.0.1:5500/backend/index.html
- **By post**:
  Daffodil Smart City, Birulia, Dhaka

We look forward to building this project with you!

Agreement Signed By:

……	……	……
Client Signature	Client Signature	Authority Signature
Golam Rabbani	Monir Uddin	Arifuzzaman Arif
Chairman	Chairman	Head of HR
Dream Fill Foundation	Dream Fill Foundation	Dream IT