

**BUY MY Account - Multipurpose E-Commerce Website
(BMA)**

BY

Rajoan Tamjid Antor
ID: 201-15-13929

FINAL YEAR DESIGN PROJECT REPORT

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

Supervised By

Ms. Sharmin Akter
Lecturer (Senior Scale)
Department of Computer Science and Engineering
Daffodil International University

Co-Supervised By

Mst. Tapasy Rabeya
Lecturer (Senior Scale)
Department of Computer Science and Engineering
Daffodil International University



DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

July 2024

APPROVAL

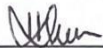
This Project titled “BUY MY Account - Multipurpose E-Commerce Website (BMA)”, submitted by “201-15-13929” “Rajoan Tamjid Antor” to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 14-07-2024.

BOARD OF EXAMINERS



Dr. Sheak Rashed Haider Noori (SRH)
Professor & Head
Department of CSE
Faculty of Science & Information Technology
Daffodil International University

Board Chairman



Most. Hasna Hena (HH)
Assistant Professor
Department of CSE
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner 1



Md. Ferdouse Ahmed Foysal (FAF)
Lecturer
Department of CSE
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner 2



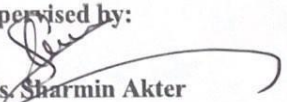
Dr. Md. Arshad Ali (DAA)
Professor
Department of Computer Science and Engineering
Hajee Mohammad Danesh Science and Technology
University

External Examiner

DECLARATION

We hereby declare that this project has been done by us under the supervision of **Ms. Sharmin Akter**, Lecturer (Senior Scale), Department of Computer Science and Engineering, Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for the award of any degree or diploma.

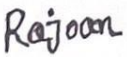
Supervised by:


Ms. Sharmin Akter
Lecturer (Senior Scale)
Department of CSE
Daffodil International University

Co-Supervised by:


Ms. Tapshy Rabeya
Lecturer (Senior Scale)
Department of CSE
Daffodil International University

Submitted by:


Rajoan Tamjid Antor
ID: -201-15-13929
Department of CSE
Daffodil International University

ACKNOWLEDGEMENT

First, we want to give our deepest thanks to the all-powerful God, whose blessings enabled us to finish the final year project/internship smoothly.

We really grateful and wish our profound our indebtedness to **Ms. Sharmin Akter**, Lecturer (Senior Scale) Department of CSE Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of —*Web 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 the **Head of the 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

The "Buy My Account" initiative is an innovative web application fostering cooperation and support between buyers and sellers in online account trading. Users can easily create accounts and find them by looking at their ads. Customized dashboards have features like managing all accounts, viewing recent transactions, and keeping an eye on all profiles to meet the needs of buyers, sellers, and admins. The platform's user-centered design aims to make account trading easier and build a community where people with different skills and knowledge can work together to help the account trading community succeed. "Buy My Account" tries to be an essential resource for people starting their businesses by using technology and encouraging smooth interactions. It does this by creating a collaborative space that is good for account trading and moving up in the digital commerce ecosystem.

TABLE OF CONTENTS

CONTENS	PAGE
Board of examiners	ii
Declaration	iii
Acknowledgements	iv
Abstract	v
CHAPTER	
CHAPTER 1: Introduction	1-8
1.1 Introduction	1
1.2 Motivation	2
1.3 Objective	3
1.4 Problem Statement	3
1.5 Proposed System	5
1.6 Project Management and Finance	6
1.7 Expected Outcome	8
1.8 Report Layout	9
CHAPTER 2: Background	10-15
2.1 Introduction	10
2.2 Terminology	11
2.3 Related Work	12
2.4 Scope of problem	13
2.5 Challenges	14
CHAPTER 3: Requirement Specification	16-22
3.1 Introduction	16

3.2 Business Process Model	16
3.3 Requirement Collection and Analysis	17
3.4 Hardware Requirement	17
3.5 Software Requirement	17
3.6 Use-Case Diagram	19
3.7 Activity Diagram	20
3.8 Sequence Diagram	21
3.9 Class Diagram	22
CHAPTER 4: Design Specification	23-25
4.1 Front-end Design	23
4.2 Back-end Design	23
4.3 Implementation Requirement	24
CHAPTER 5: Implementation and Testing	26-44
5.1 Implementation of Database	26
5.2 Implement of Front-End Design	27
5.3 Testing Implementation	42
5.4 Test Result and Report	43
CHAPTER 6: Impact on Society and Environment	45-47
6.1 Impact on society	45
6.2 Impact on environment	46
CHAPTER 7: Conclusion and Future Scope	48-50
7.1 Conclusion	48
7.2 Future Scope	49
REFERENCES	51
Appendix	52-59

LIST OF FIGURES

FIGURES	PAGE NO
Figure 3.2.1: Business Process Model Diagram	16
Figure 3.6.1: Use- Case Diagram	19
Figure 3.7.1: Activity Diagram	20
Figure 3.8.1: Sequence Diagram	21
Figure 3.9.1: Class Diagram	22
Figure 5.2.1.1: Home	29
Figure 5.2.2.1: Customer Dashboard	28
Figure 5.2.3.1: Customer My Orders	29
Figure 5.2.4.1: Customer Wish list	30
Figure 5.2.5.1: Customer Chat	31
Figure 5.2.6.1: Seller Dashboard	32
Figure 5.2.7.1: Seller Add Product	33
Figure 5.2.8.1: Seller All Product	34
Figure 5.2.9.1: Seller Orders	34
Figure 5.2.10.1: Seller Payments	35
Figure 5.2.11.1: Chat Customer	35
Figure 5.2.12.7: Seller Chat Support	36
Figure 5.2.13.7: Seller Profile	37
Figure 5.2.14.7: Admin Dashboard	37
Figure 5.2.15.7: Admin Orders	38
Figure 5.2.16.7: Add Category	39
Figure 5.2.17.7: Sellers Add	39
Figure 5.2.18.7: Payment Request	40

Figure 5.2.19.7: Deactivate Sellers	40
Figure 5.2.20.7: Sellers Request	41
Figure 5.2.21.7: Chat Seller	42

LIST OF TABLES

TABLES	PAGE NO
TABLE 3.4.1: HEARDWARW REQUIREMENTS TABLE	18
TABLE 3.5.1: SOFTWARE REQUIREMENTS TABLE	18
TABLE 5.4.1: TEST RESULTS AND REPORTS	43

CHAPTER 1

Introduction

1.1 Introduction

In the dynamic realm of account trading and digital commerce, "Buy My Account - Multipurpose E-Commerce Website" emerges as a beacon, a dedicated platform designed to redefine the buying and selling experience of online accounts. With a holistic approach to connecting buyers and sellers, "Buy My Account" stands as an innovative solution in the ever-evolving e-commerce landscape.

At the heart of "Buy My Account" lies a thoughtfully crafted homepage, serving as a gateway to a multitude of features seamlessly integrated to enhance the user experience. From the meticulously designed "Buy Now" option that takes buyers directly to the payment section for instant transactions, to the "My Orders" and "My Sales" sections providing real-time updates and personalized management of transactions, "Buy My Account" aims to streamline the process of buying and selling accounts.

Beyond the practicalities, "Buy My Account" transcends the conventional platform also encourages a sense of community through the "Chat Support" section, fostering a collaborative environment where user experiences contribute to ongoing enhancement.

The "About" section illuminates "Buy My Account's" mission, values, and commitment to fostering meaningful connections. Motivated by a deep understanding of the challenges inherent in the account trading market, "Buy My Account" endeavors to not just bridge the gap between sellers and buyers but to create an ecosystem where digital trade aspirations are nurtured and realized. Join us at "Buy My Account," where each click signifies a step toward a future where digital commerce fulfillment is not just a goal but a shared reality.

1.2 Motivation

Embarking on the journey of buying and selling accounts is akin to navigating a complex and dynamic marketplace, filled with opportunities, challenges, and unexplored potential. At "Buy My Account," we understand the intrinsic motivations that drive individuals to seek and engage in meaningful transactions within the digital realm. Our passion stems from a deep comprehension of the transformative power that the right purchase or sale can have on an individual's life or business.

In the intricate interplay between buyers and sellers, we aspire to be the facilitator, orchestrating connections that transcend mere transactions. "Buy My Account" is driven by the belief that each user brings a unique set of needs, assets, and ambitions that deserve to be recognized and celebrated. We envision a future where every click on our platform catalyzes significant personal and professional growth.

The core of our motivation lies in our unwavering commitment to redefining the account trading experience. We aim to empower our users, offering a comprehensive platform that not only facilitates buying and selling but also supports their ongoing journeys. Through curated content and features like our "Chat Support" section, we aspire to educate and guide, providing insights that inform and inspire.

"Buy My Account" is more than just a marketplace; it's a community, a collective effort to transform the digital commerce landscape. Our motivation is fueled by the stories of individuals and businesses that have found success through our platform, driving us to continuously enhance and innovate. Join us on this transformative journey as we strive to make e-commerce more convenient, personalized, and enjoyable for all parties involved.

1.3 Objectives

1. Improve the e-commerce process:

- Make buying and selling things more accessible by using current technologies like React JS, Tailwind CSS, Node JS, and MongoDB to create a quick and easy-to-use for account transactions.

2. Give Sellers and Buyers Power:

- Let sellers manage their profiles, keep track of orders, and add community through reviews, which will encourage people to share what they know.
- Provide buyers with the tools to quickly buy accounts and receive suggestions tailored to their needs.

3. Encourage helpfulness in your community:

- Establish an active and supportive group where buyers and sellers can excel by exchanging posts, cooperating, and learning from one another, fostering a sense of belonging and connection.
- Provide a platform that encourages more than just transactions and focuses on making essential connections to change how e-commerce works.

4. Help the e-commerce ecosystem grow:

- Give people a place to go for account transfers, help, and collaboration.
- Motivate and help buyers and sellers on their way to driving innovation, shaping the future, and improving the world of digital trade.

5. Ensure the platform is safe and trustworthy:

- Put the platform's safety and trustworthiness first by implementing solid methods for user authentication and secure financial transactions.
- Ensure the safety and privacy of data to maintain user trust in the "Buy My Account" community.

6. Flexibility and Adaptability:

- Be open to flexibility and adaptability in the growth of technology. Monitor new trends and ensure the platform can keep up with the changing needs of the e-commerce community.

7. Help people connect without much work:

- Make it easy for buyers and sellers to meet based on account type, price range, or specialties.
- Set up an easy-to-use registration process to make it easier for people to use the site.

8. Customized dashboards can improve the user experience:

- Create dashboards for buyers, sellers, and administrators that are tailored to their roles and include features that meet their particular needs.
- Provide clear and complete features, such as managing profiles, keeping track of orders, and providing financial reports.

9. Enhance user experience through advanced analytics:

- Utilize advanced analytics to provide insights into user behavior, preferences, and trends.
- Implement data-driven recommendations to offer personalized shopping experiences, increasing user satisfaction and engagement.
- Continuously analyze platform performance and user feedback to identify areas for improvement and to ensure the platform evolves to meet user needs effectively.

10. Expand Market Reach and Global Accessibility:

- Develop multilingual support and currency conversion features to cater to a diverse, global audience.
- Implement SEO best practices and digital marketing strategies to enhance visibility and attract a broader range of users.
- Partner with international payment gateways to facilitate seamless transactions for users from different countries, thereby increasing the platform's global reach and usability.

1.4 Problem Statement

1. Lack of a Supportive Community:

- The "Buy My Account" ecosystem doesn't have a place where buyers and sellers can collaborate to share knowledge and make genuine relationships. This is because most platforms are only for making transactions.

2. Problems with Building Communities:

- It's still hard to make a helpful community in the e-commerce space, making it harder for buyers and sellers to gain from the platform and group projects.

3. Lack of User-Centric Design:

- Many existing e-commerce solutions don't have a user-centric design, which makes the user experience fragmented and makes it harder for buyers and sellers to connect smoothly.

4. Problems with Transparency:

- Some e-commerce websites may need to provide clear instructions, which can make it difficult for users to track orders, manage profiles, and ensure the safety of deals.

5. Insufficient Payment Options:

- Limited payment methods can be a significant barrier for users on e-commerce platforms, restricting their ability to complete transactions in a manner that is convenient for them.

6. Poor Mobile Experience:

- Many e-commerce solutions need to be optimized for mobile devices, which can lead to a subpar experience for users who prefer to shop on their smartphones or tablets.

The "Buy My Account" project aims to create a safe, open, and easy-to-use platform that solves these problems and builds a lively community where both buyers and sellers can do well.

1.5 Proposed System

"Buy My Account" recognizes the importance of fostering a positive community and aims to create a platform for people to trade accounts, connect, and thrive. Through user reviews, boards, and group projects, the community can provide support and opportunities for growth.

The platform will be enhanced with modern technologies such as React JS, Tailwind CSS, Node JS, and MongoDB, allowing it to evolve and adapt to the e-commerce community's changing needs. By staying abreast of the latest trends, the system can dynamically adjust to meet changing demands.

The planned system will empower sellers to manage orders, monitor their profiles, and contribute posts to the community. Simultaneously, buyers can access user-friendly tools tailored to their account needs.

The "Buy My Account" project endeavors to address existing challenges in the e-commerce field by establishing a comprehensive, user-centric platform that caters to the needs of both novice and seasoned sellers.

The primary goal of the "Buy My Account" platform is to facilitate connections between new buyers and experienced sellers. This implementation seeks to resolve the fragmentation in the e-commerce landscape, making it seamless for users to buy and sell accounts.

The proposed system's user-centered design is focused on improving the overall user experience. By developing customized dashboards for buyers, sellers, and administrators, we aim to enhance functionality and ensure easy navigation for all users. These purpose-specific dashboards will offer features such as order tracking and profile management.

1.6 Project Management and Money

Project Management and Money for "Buy My Account - E-commerce Platform" Effective project management and financial planning are crucial for successfully implementing the "Buy My Account - E-commerce Platform." This section outlines the management strategies and financial considerations essential to achieving our project goals within the stipulated time frame and budget.

Project Planning:

We adopted a phased approach to ensure systematic development, from requirement analysis, design, and development to testing and deployment. Detailed project plans with timelines, milestones, and deliverables were established to keep the team aligned and on track. Each phase was meticulously planned to ensure that all aspects of the project were covered, from front-end development to back-end integration and user experience design.

Risk Management:

A comprehensive risk management plan was developed to identify potential risks, assess their impact, and implement mitigation strategies. Regular risk assessments were conducted to address issues that could hinder project progress proactively. This included technical risks, such as software bugs and integration issues, as well as operational risks, like timeline delays and resource shortages.

Communication:

Effective communication channels were established using project management tools like JIRA and Slack. Regular updates, progress reports, and stakeholder meetings were conducted to ensure transparency and stakeholder engagement. These tools facilitated real-time collaboration and informed all team members of the project's status, milestones, and any issues.

Financial Management Budgeting:

A detailed budget encompassing all project phases was prepared. Costs were estimated for software development, hardware procurement, personnel, training, marketing, and contingency funds. The budget was reviewed and approved by stakeholders to ensure financial feasibility. This comprehensive budget ensured that all financial aspects of the project were considered and planned for.

Cost Control:

Cost control measures were implemented to monitor and manage expenses throughout the project. Regular financial reviews and audits were conducted to ensure expenditures remained within budget and any variances were addressed promptly. These measures helped maintain financial discipline and avoided unnecessary overspending.

Financial Reporting:

Transparent financial reporting mechanisms were established to provide stakeholders with regular updates on financial performance. This included budget tracking, expenditure analysis, and financial forecasting to maintain financial health and accountability. Regular financial

reports were shared with stakeholders to inform them about the project's financial status and any adjustments needed to stay within budget.

1.7 Expected Outcome

After implementing the "Buy My Account" project, we anticipate a revolutionary and empowering experience for seasoned sellers and prospective buyers in the e-commerce ecosystem.

1. **Empowering Sellers:** Sellers will have access to a wide range of tools to handle their profiles, keep track of orders, and post things that help the group, enabling them to offer more valuable goods and services.
2. **E-Commerce Ecosystem Growth:** Our goal is to help the e-commerce industry grow by giving people a place to buy and sell accounts, get advice, and collaboration. This will foster new ideas and positive changes in the online market.
3. **Improved Accessibility:** A centralized site will help people find goods that are made just for them and services, creating a more open and helpful e-commerce community for everyone.
4. **Better user experience:** designer dashboards for each job and user-centered design will ensure everything runs smoothly and intuitive user experience, allowing buyers, sellers, and managers to navigate the platform effortlessly.
5. **Transparent Interaction Management:** Clear features for managing profiles and tracking orders will give users more control over their interactions with the platform.
6. **A thriving community:** The platform focuses on building communities and collaborative projects aims to create a lively space for genuine connections and knowledge-sharing within the e-commerce community.
7. **Adaptive Technological Evolution:** By adding new technologies, the platform will stay adaptable and agile, adapting to the latest trends and staying ahead in the ever-changing e-commerce world.
8. **Building trust and confidence:** Keeping security and openness standards high should lead to more trust and confidence among users, buyers, and managers, establishing "Buy My Account" as a trusted and respected e-commerce platform.

1.8 Report Layout

The project report is distributed in the following layout:

1. This chapter includes the project's instructions, motivation, objectives, problem statement, proposed system, expected outcomes, and an overview.
2. This chapter the project's instructions, motivation, objectives, problem statement, proposed system, expected outcomes, and project challenges.
3. This chapter introduces the broad outline of the project, its needs, the plan, the analysis of those needs, and model diagrams.
4. The design plan, how it is put into action, and how it is used are covered in Chapter 4.
5. The implementation of the project, which includes the database, the front end design, and testing are discussed in Chapter 5.
6. Chapter six talks about the effects on people and the world.
7. The end and plans for the future are in Chapter 7.
8. The sources used in the project are listed in the references.

CHAPTER 2

Background

2.1 Introduction

In the changing scenery of buying and selling digital accounts, "Buy My Account" emerges as a guiding light, a purpose-built platform poised to redefine the entire account trading experience. It stands as an innovative solution, designed with a comprehensive approach to connect buyers and sellers seamlessly. In the ever-evolving digital marketplace, "Buy My Account" is a beacon of efficiency and effectiveness.

At the core of "Buy My Account" is a meticulously crafted homepage, serving as the gateway to a plethora of seamlessly integrated features aimed at enhancing the user experience. The platform boasts thoughtfully organized sections such as "My Purchases" and "My Sales," providing real-time updates and personalized management of account transactions. Complementing this is the expansive "All Accounts" marketplace, offering a diverse array of opportunities, illustrating "Buy My Account's" commitment to streamlining the buying and selling process.

Beyond the practical functionalities, "Buy My Account" breaks away from convention with its enriching "Blog" section. Here, users can access insights, trends, and valuable resources that empower them in their trading journeys. The platform further fosters a sense of community through its "Feedback" section, creating a collaborative environment where user experiences actively contribute to ongoing enhancements.

Delving into the "About" section illuminates "Buy My Account's" mission, values, and unwavering commitment to fostering meaningful connections. Driven by a profound understanding of the challenges inherent in account trading, "Buy My Account" seeks not only to bridge the gap between buyers and sellers but also to create an ecosystem where trading aspirations are not merely acknowledged but nurtured into reality. Join us at "Buy My Account," where every click signifies a stride toward a future where trading success is not just a goal but a shared reality.

2.2 Terminology

To help you understand the "Buy My Account" idea better, it's important to know the following key terms:

- i. **Centralized Account Hub:** A single platform where buyers and sellers can easily join, work together, and exchange digital accounts.
- ii. **User-Centric Design:** An approach focused on optimizing the platform's design and features to enhance the overall experience for users, sellers, and administrators.
- iii. **Transparent Functionality:** Implementing open and straightforward features, such as profile management and transaction tracking, ensures users have complete visibility into their interactions.
- iv. **Community Building:** Making a concerted effort to foster a thriving and encouraging community wherein viewers, buyers, and sellers can participate in significant interactions and share insight.
- v. **Adaptive Integration of Technology:** Modern technologies such as React JS, Tailwind CSS, Node JS, and MongoDB are utilized in the app to enhance its flexibility and responsive to emerging trends.
- vi. **Mass Account Transactions:** Facilitated through "Buy My Account's" expansive marketplace, offering a diverse array of digital accounts for individuals with varying needs and interests. The platform's intuitive user interface, in addition to real-time updates and personalized management features, ensures seamless engagement for a large pool of buyers and sellers. "Buy My Account's" commitment to streamlining the trading process and fostering meaningful connections creates an environment conducive to high-volume transactions.
- vii. **Growth of the "Buy My Account" Ecosystem:** The growth of the "Buy My Account" ecosystem will be propelled by its continuous innovation, expanding features, and an ever-increasing user base. As more buyers and sellers join the platform, the network effect will amplify, creating a robust ecosystem where meaningful connections flourish, leading to sustained and organic growth.
- viii. **Building Trust and Confidence:** Making sure that security standards are met and transparency to instill trust and confidence among buyers, sellers, and administrators, establishing the platform as a reliable and reputable space within the "Buy My Account" community.

2.3 Related Work

In the realm of digital account trading platforms, various initiatives have aimed to bridge the gap between buyers and sellers, each contributing unique features to enhance the user experience. Platforms like Player Auctions and Account Warehouse have excelled in creating marketplaces for trading game accounts, emphasizing secure transactions and user verification processes. Similarly, platforms like eBay and Craigslist provide spaces for selling various digital assets but often lack specialized features for account trading.

"Buy My Account" distinguishes itself by amalgamating the best aspects of existing platforms while introducing innovative features to streamline and enrich the trading experience. Unlike traditional marketplaces, "Buy My Account's" centralized hub caters to a diverse array of digital accounts, offering a comprehensive platform for a wide range of users. The thoughtfully organized "My Purchases" and "My Sales" sections provide real-time updates and personalized management, enhancing user engagement and efficiency.

Furthermore, "Buy My Account's" commitment to community-building sets it apart. The "Chat" section goes beyond account listings, offering valuable insights, trends, and resources to empower users in their trading journeys. The "Feedback" section fosters an interactive environment, where user experiences contribute to ongoing platform enhancements, creating a dynamic ecosystem responsive to the evolving needs of both buyers and sellers.

In summary, "Buy My Account" builds upon the successes of existing platforms by integrating a holistic approach, user-centric features, and a commitment to community engagement, thereby redefining the landscape of digital account trading platforms.

2.4 Scope of the Problem

The "Buy My Account" project targets a number of problems in the modern digital account trading market. It provides a complete answer that covers a wide range of areas, including:

- **Fragmented Account Trading Ecosystem:** Buyers and sellers are spread out across numerous locations, making it hard to do business. The "Buy My Account" idea wants to tie this community together by giving buyers and seller's one location to connect, work together, and sell digital accounts.
- **Platforms That Aren't Clear:** Clear Platforms are essential for building trust in account trade relationships. Many sites don't have apparent features, which makes it harder for buyers and sellers to make intelligent choices. The "Buy My Account" project aims to solve this problem by adding features that let users see seller pictures, account information, and transaction histories.
- **Limited Community Engagement:** Successful account trading often benefits from community involvement and places where people work together. The project aims to create a lively community where buyers, sellers, and users can interact in valuable ways, share their knowledge, and contribute to the collective growth of the digital account trading ecosystem.
- **More information is needed on how to access accounts and share knowledge:** Many buyers face challenges accessing verified accounts. This is what the project aims to fix by giving people a place where they can access detailed account listings and blog about useful things you learn. This improves dealings for both buyers and sellers.
- **Community-Driven Data Insights:** By facilitating the exchange of comprehensive data-driven knowledge and expert strategic guidance, "Buy My Account" buyers and sellers with actionable insights, promoting informed decision-making.

2.5 Challenges

The "Buy My Account" project wants to change the way digital accounts are traded, but there are some problems that need to be recognized and dealt with in a planned way for the project to be successful and have a long-lasting effect:

1. **Adoption and Engagement of Users:** Getting buyers and sellers to use the tool and interact with its community takes a lot of work. Getting people to stop resisting change and clearly explain the site's benefits will be needed to get many people to use it.
2. **Ensuring quality and making sure accounts are real:** It is very important to keep the quality of the listed accounts high. It will continue to be difficult to set up effective ways to check the legitimacy of accounts and ensure that shared information is correct. User reviews and strict screening methods may be very important for building credibility.
3. **Security and Data Privacy:** Because account information and financial activities are private, strong security measures and strict data privacy rules are essential. Protecting info from user's possible always be a top concern to build.
4. **Finding the right mix between new and old technologies:** Using new technologies can improve the user experience, but finding the right balance is essential. A constant task will be to keep the platform is easy to use, available, and able to adapt to a wide range of users while avoiding too much technology.
5. **Monetization Strategy:** It's difficult to find a long-term way to make money that fits with the platform's value offering and doesn't make it harder for people to use it. Finding ways to make money, like transaction fees or premium features, while still allowing buyers and sellers of all budgets to use the site will take some careful thought.
6. **Regulatory Compliance:** Navigating the complicated regulatory requirements, especially regarding financial activities and user data, can be challenging. To avoid legal problems, keeping up with changing rules and ensuring everyone follows them will be essential.
7. **Competition from Established Platforms:** Established digital marketplaces may

it already has a large user base. However, to attract people to use the "Buy My Account" tool instead of well-established competitors, it will need to stand out and offer unique value.

8. Maintaining the community's culture: As the platform grows, it may be challenging to maintain a sense of community and teamwork. Strategies that encourage meaningful interactions make sharing knowledge easier and formation of impersonal, which constantly will be created.

To address these problems, you need to be strategic and flexible, adhere to the project's core values, and always seek feedback from users. By addressing these problems head-on, the "Buy My Account" project can become a significant player in digital account trading.

CHAPTER 3

Requirement Specification

3.1 Introduction

The listing of requirements serves as the foundational for the "Buy My Account" project, detailing essential the features and functions necessary for making the site better. This specification ensures a secure and seamless onboarding experience through robust user registration and authentication procedures. The core functionality includes an intuitive account search and matching system that facilitates easy connections between buyers and sellers. By focusing on these requirements, the project aims to create a vibrant, user- centered environment that forms the bedrock of an innovative digital account trading.

3.2 Business Process Model

The "Buy My Account" project utilized the Agile Business Process Model, an iterative and adaptable method emphasizing teamwork, flexibility, and continuous improvement. At the onset, partners from various departments collaborate to create a comprehensive product backlog and prioritize user stories. In sprint planning meetings, these user stories are assessed based on workload and manageability.

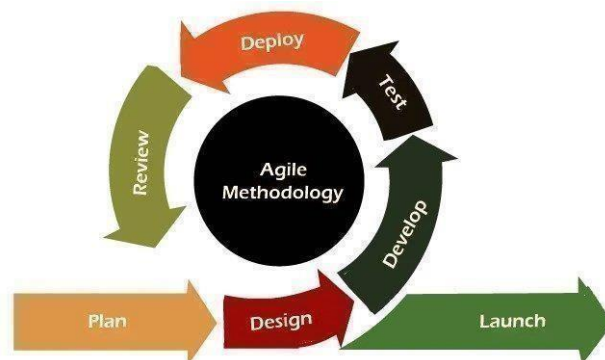


Figure 3.2.1: Business Process Model Diagram

The model focuses on iterative cycles, where teams with different roles collaboratively work to complete development tasks. Daily stand-up meetings are essential for resolving issues promptly and fostering a cohesive team environment. Continuous testing, including user acceptance and automated testing, is integral to each iteration, ensuring the functionality and reliability of the implemented features.

Sprint reviews and retrospectives are regularly conducted, providing an opportunity to showcase developed functionalities, gather feedback, and reflect on team performance. This feedback loop enables continuous improvement, new requirements, and customer expectations.

Put into action is phased, with each iteration delivering visible progress to stakeholders. Pipelines for continuous integration and release ensure reliability and speed by automating the release process. Post-deployment, monitoring mechanisms such as user analytics provide valuable insights into user interactions and behavior. Bug fixing and monitoring are systematically approached to maintain platform integrity. Practices for collaborative documentation that capture iteration results, design choices, and user stories, such as living documentation, guarantee clarity and transparency throughout the development process.

Future iterations and expansion efforts are guided by user feedback, market dynamics, and the evolving digital account trading landscape. By adopting this comprehensive strategy, the project aims to deliver a reliable, adaptable, and user-focused account trading site. One of the main ideas behind the agile process is continuous and incremental development, ensures each sprint represents a focused. Stand-up facilitate communication, promote transparency, and address any emerging issues. Continuous integration practices ensure a stable and reliable codebase, with regular testing and seamless integration of code changes.

Sprint reviews after each sprint, allow the creation crew to show completed items to customers, gather opinions, and, and make necessary adjustments. This iterative process's flexibility and adaptability enable the "Buy My Account" initiative to respond

Effectively to changing market trends, user feedback, and evolving requirements. The Agile business process model provides a flexible framework that fosters collaboration, adaptability, and the incremental delivery of a robust digital account trading site.

3.3 Collecting and Analyzing Needs

Gathering and analyzing requirements is the first step in the "Buy My Account" project is pivotal, as it identifies and documents the needs of stakeholders to guide the development of the platform. This phase sets the foundation for creating a robust digital account trading platform through use cases, user stories, and groups where people work together. By finding the most important people and having in-depth conversations with them, we ensure that the platform is user-centric and meets the functional requirements and expectations of buyers, sellers, and administrators.

3.4 Hardware Requirements

TABLE 3.4.1: HARDWARE REQUIREMENTS TABLE

Processor	CORE i5 Processor
Motherboard	HP Z-Book
RAM	Minimum storage of ram is 8GB
Internet Card	Whatever kind of internet card
Graphic Card	Any
Hard Disk	Minimum 50GB

3.5 Software Requirements

TABLE 3.5.1: SOFTWARE REQUIREMENTS TABLE

Visual Studio Code	Minimum 1.0.0
NodeJS	15.0.1
Operating System	Windows/Mac
Browser	Google Chrome

3.6 Use-Case Diagram

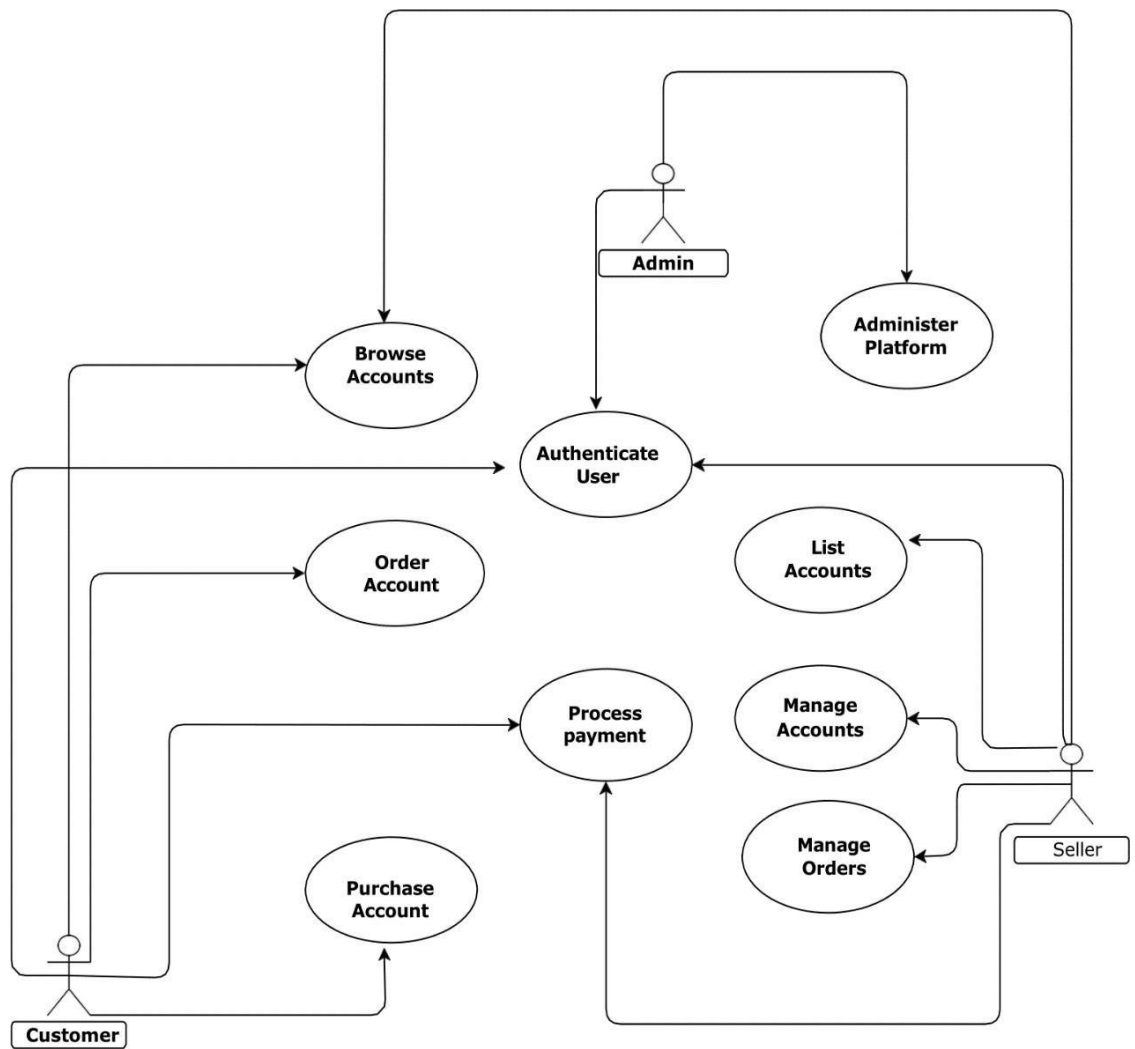


Figure 3.6.1: Use-Case Diagram

3.7 Activity Diagram

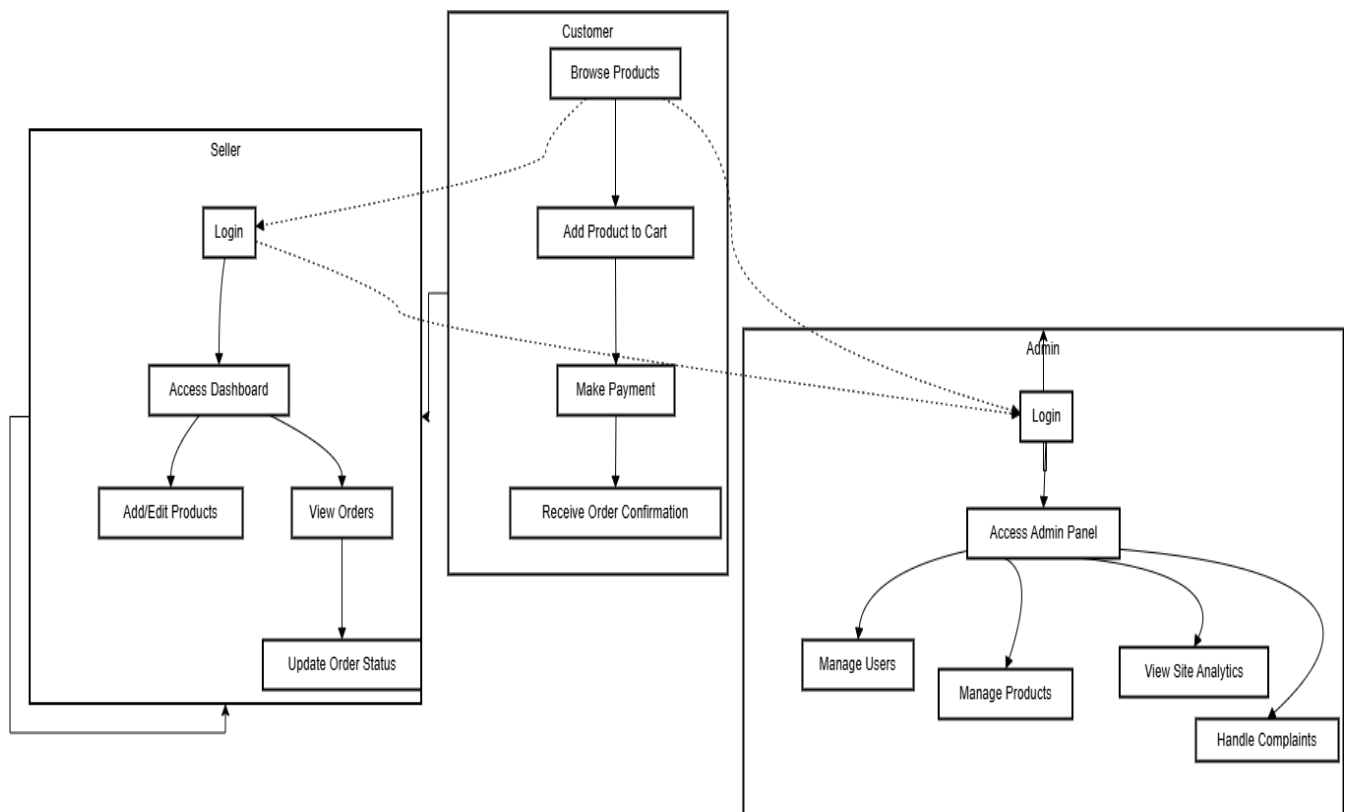


Figure 3.7.1: Activity Diagram

3.8 Sequence Diagram

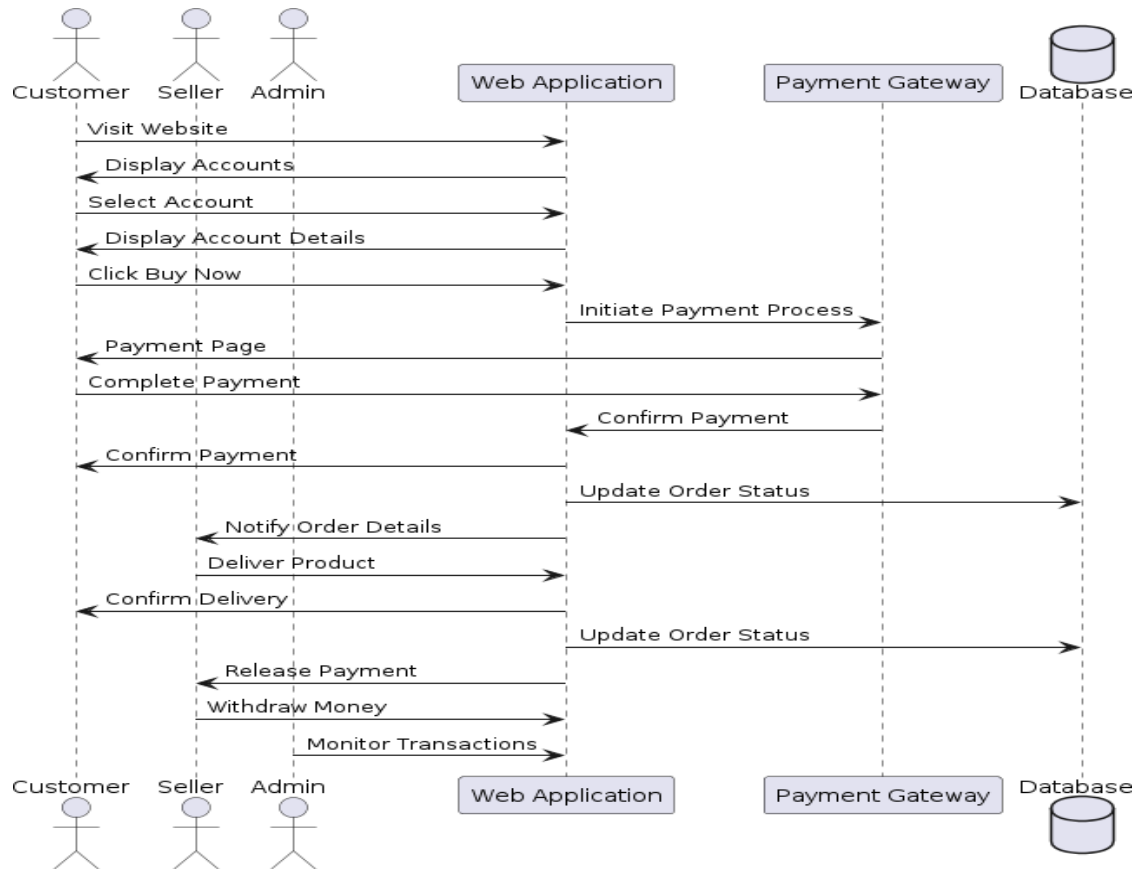


Figure 3.8.1: Sequence Diagram

3.9 Class Diagram

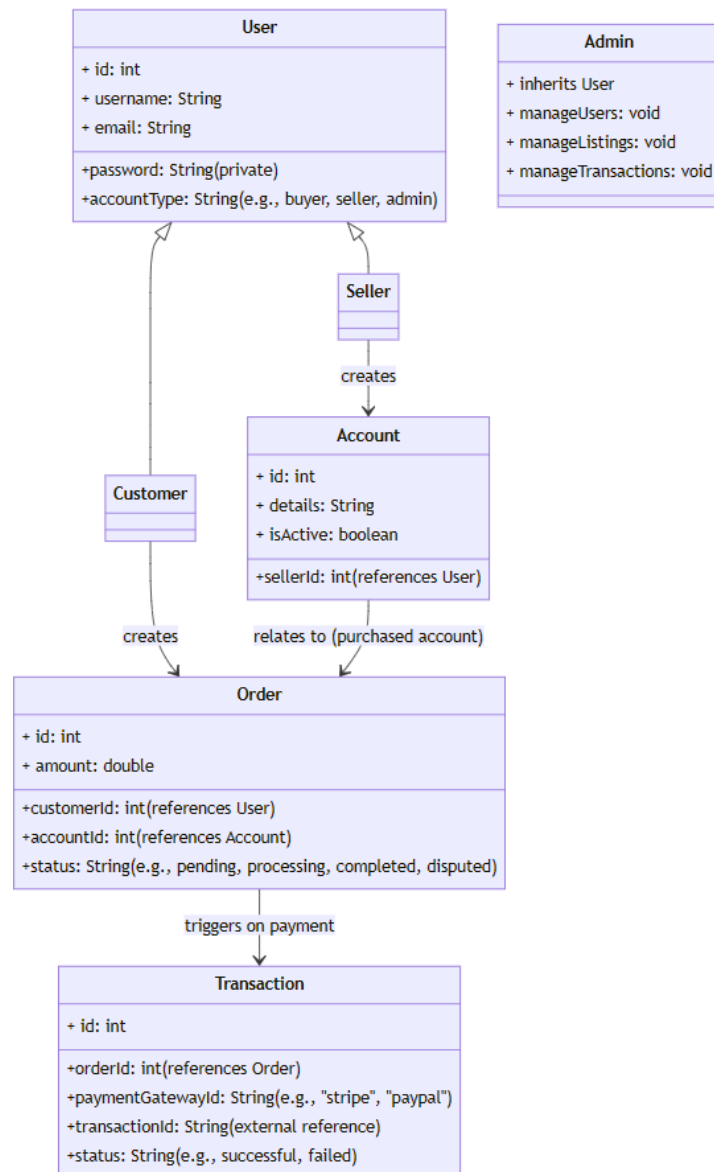


Figure 3.9.1: Class Diagram

CHAPTER 4

Design Specification

4.1 Front-End Design

The shape of the front end of the "Buy My Account" the project has been thought out thought out to make sure users have an easy and smooth experience. Following user-centered design principles, the interface has a clean and appealing look, making it easy for buyers, sellers, and managers to find their way around. Responsive design elements make websites more accessible on various devices, giving users a consistent and enjoyable experience. User interfaces that are easy to understand help with essential tasks like signing up new users, showing accounts, searching for accounts, and managing dashboards. The React.js library makes it possible to present material modern and seamlessly, and Tailwind CSS makes the whole thing look more sophisticated. The front-end design puts functionality and aesthetics first, making an environment that is aesthetically pleasing and easy to use. This helps the project reach its goal of making transactions and exchanges within the digital account trading ecosystem run smoothly.

4.2 Back-End Design

The shape of the back end of the "Buy My Account" the project has been thought out thought to build a framework for the platform that is both reliable and scalable. The back end design uses Node.js and Express.js to ensure that it works well with the MongoDB database, that data interactions are managed well, and that users are authenticated. RESTful API endpoints aim to make it easy for the front-end and back-end components to talk to each other. These endpoints serve essential functions, such as listing accounts, processing transactions, managing users, and giving feedback. When you use JWT, you improve security by making it easier to authenticate and authorize users safely. By carefully planning server-side logic and data structures, back-end design, sets the stage for a strong and flexible digital account trading platform that puts speed, scalability, and maintainability first.

Some of the technologies used are:

- NodeJS
- Express JS
- MongoDB

4.3 Implementation Requirements

Implementing the front end:

1. Making the user interface:

- Use React.js to make user interfaces that are dynamic and flexible and that match the design requirements.
- Add parts for registering as a user, registering as a seller, listing accounts, searching accounts, and creating user panel.

2. Interactivity and State Management:

- Use React state and props to update information on the fly and make the user interface more interactive.
- Use state management tools, and changes work well.

3. API Integration:

- Use Restful API endpoints to connect the front end to the back end, which allows data to be sent and received without problems.
- Use tools like Axios to make asynchronous requests so the client and server can get and send info.

4. User identification:

- Add JWT-based user identification to make the registration and login processes safer.
- Set up secret routes and authorization systems to ensure that only people with the correct permissions can access certain features.

Implementation of the back end:

1. Logic on the server side:

- Use Node.js and Express.js to build server-side logic that can handle incoming requests and do what needs to be done.
- Add middleware functions like logging in, handling errors, and parsing requests.

2. Database Integration:

- Store and retrieve data with MongoDB by making collections and documents that match stated models of data.

- The organization should use API (Create, Read, Update, Delete) processes to track comments, customer profiles, account listings, and transactions.

3. Restful API Endpoints:

- Create and set up Restful API endpoints for every prominent feature, ensuring that the data accessed is consistent and scalable.
- Add endpoints for managing users, showing accounts, processing transactions, and getting feedback.

4. Safety Measures:

- Use data validation, cleanup, and encryption to keep your information safe from common threats.
- Use best practices for safe coding and add HTTPS to ensure data is sent securely.

5. Testing and Debugging:

- Thoroughly test the using both the front end and the back end to find and fix bugs and ensure system works well.
- Test server-side logic and API endpoints automatically with testing tools like Jest and Super test.

6. Deployment:

- Put the app on a hosting platform and ensure the server environments and database links are set up correctly.
- Use continuous development and deployment (CI/CD) pipelines to make deployment processes more accessible, easy to understand, and run automatically.

The "Buy My Account" project wants to make a robust, safe, easy-to-use digital account trading tool by following these detailed design specifications and implementation requirements.

CHAPTER 5

Implementation and Testing

5.1 Setting up the database

Setting up a Mongo DB database is part of the "Buy My Account" project's database development. This database will be the central location for storing different types of data. The collections that are meant to hold user information, account listings, transaction details, and feedback named `—usersCollection`, `—accountsCollection`, `—transactionsCollection`, and `—paymentsCollection` respectively. According to the project's specifications, data models concerning fields, and relationships are meticulously defined. Implementing query optimization and effective indexing is prioritized to maximize the effectiveness of data retrieval. Ensures that data interactions run smoothly for each collection.

Robust validation and sanitization mechanisms are integrated to preserve the integrity and safety of info. With authentication credentials and connection parameters set up, a secure link between the Node.js server and the MongoDB database is made. Integration, unit tests, and thorough error handling and testing methods make database operations more reliable. In the last step, backup and deployment plans are thought through to ensure that the production phase's database environment is scalable and reliable.

There are 4 collections in the `—BuyMy Account` database. These are list

1. `usersCollection`
2. `accountsCollection`
3. `transactionsCollection`
4. `feedbackCollection`

5.2 Implementation of Front-End Design

5.2.1 Home Page

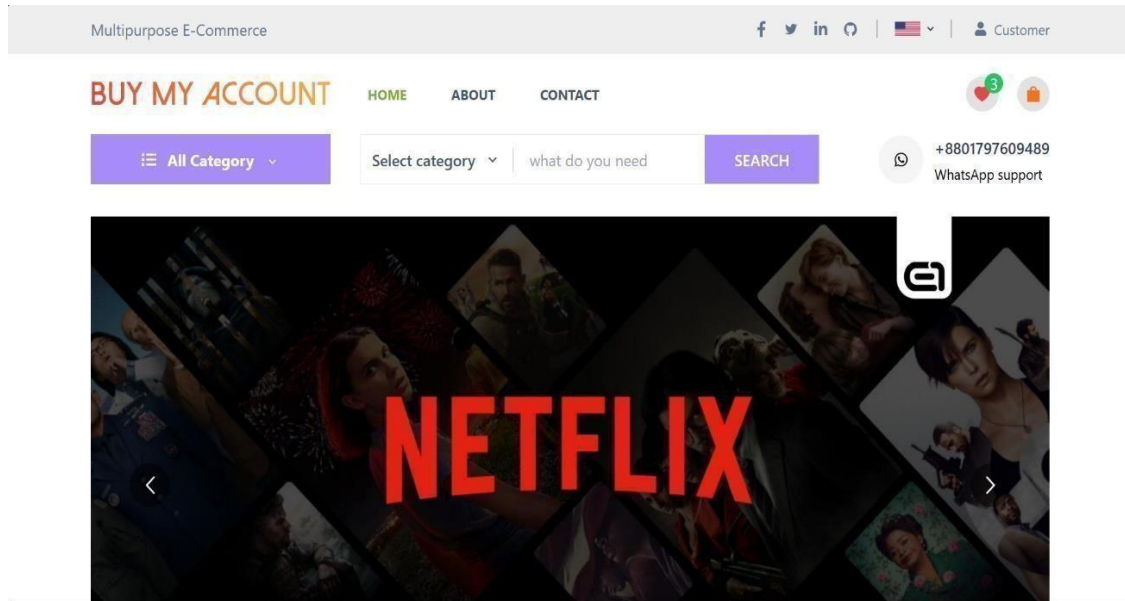


Figure 5.2.1.1: Home Page

This is the home page of Buy My Account - Multipurpose E-Commerce Website. Here show some option as login option, category, about, search bar, feature products, about, contact option etc.

522 Customer Dashboard

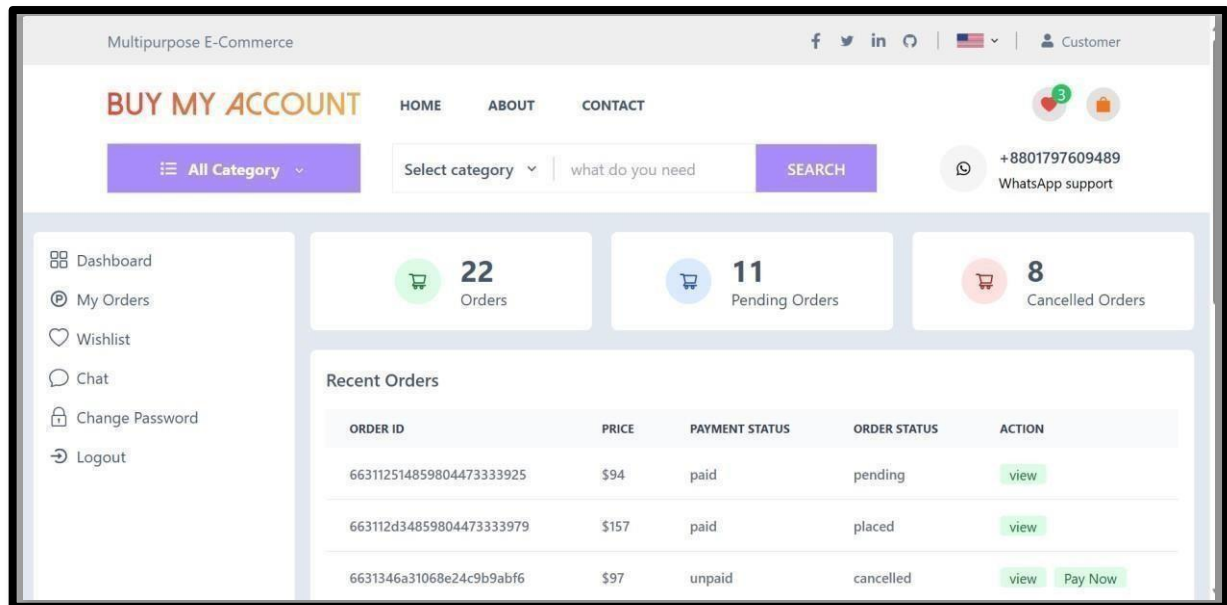


Figure 5.2.2.1: Customer Dashboard

This is consumer dashboard or consumer profile page of "Buy My Account - Multipurpose E-Commerce Website". In this page show the details of consumer and consumer can also edit his or her profile information, my orders option, chat with seller, add to cart, wish list etc.

523 Customer My Orders Lists

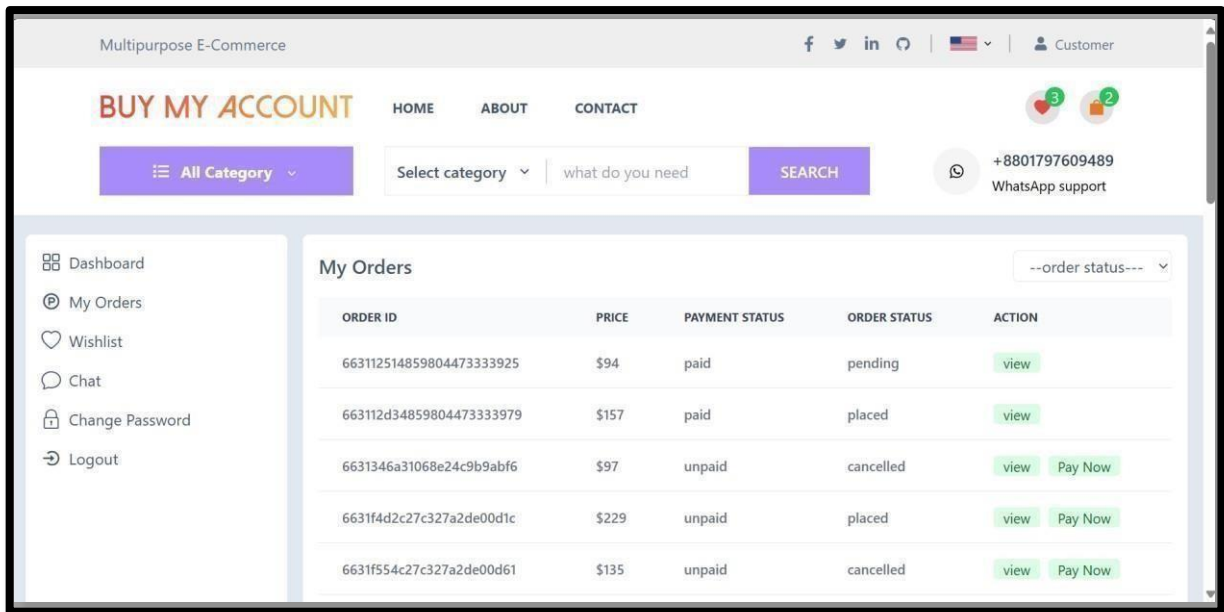


Figure 5.2.3.1: My Orders Lists

On —The my orders page, customer can see their orders and product lists.

524 Customer Wish list

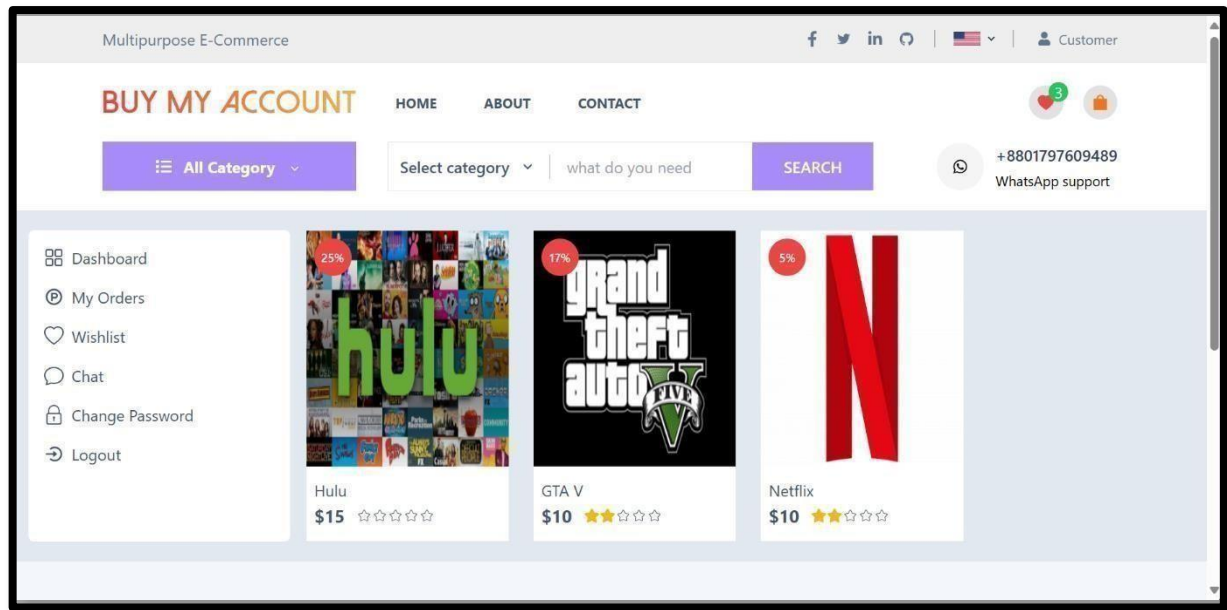


Figure 5.2.4.1: Customer Wish list

In—Wish list customer add any products to their wish list.

525 Customer Chat

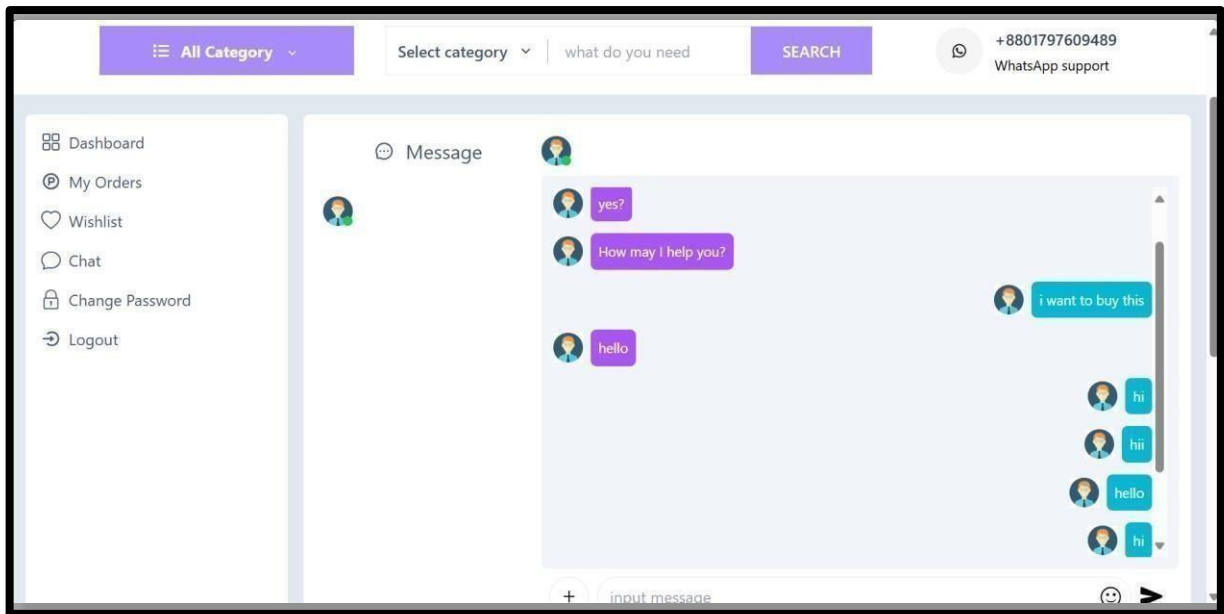


Figure 5.2.5.1: Customer Chat

Here customer can chat with any sellers. They can communicate each other by using this chat box system.

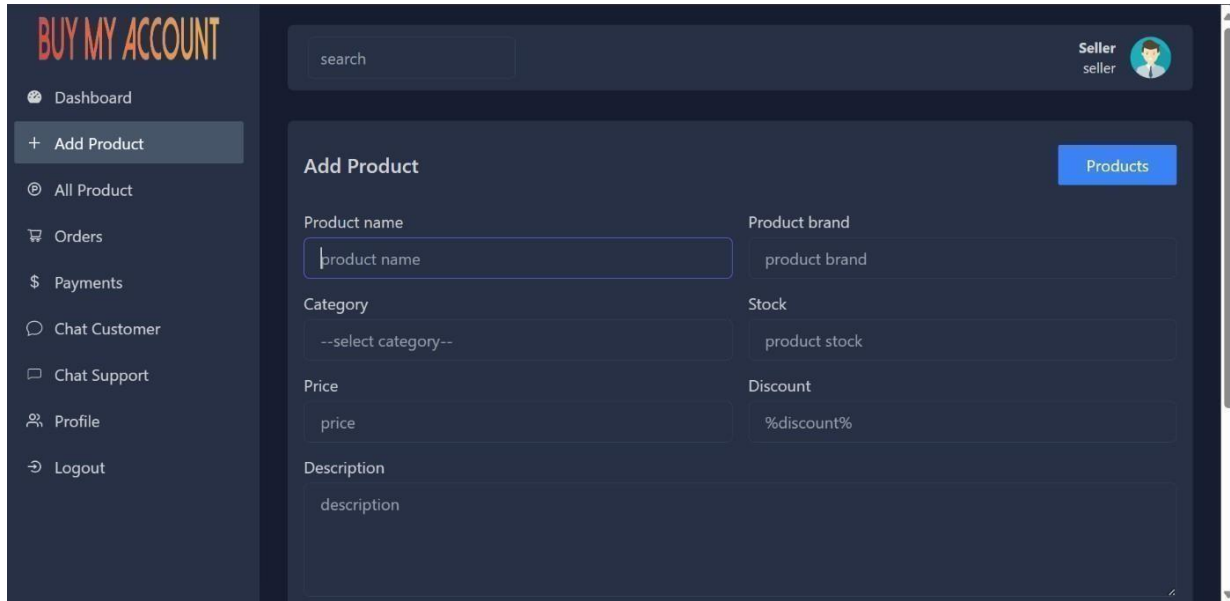
526 Seller Dashboard



Figure 5.2.6.1: Seller Dashboard

The seller dashboard of "Buy My Account - Multipurpose E-Commerce Website". By using this dashboard seller add product, orders, show revenue, show sales, chat customer, edit sellers profile, chat support etc. And also show pending order and customer recent message.

52.7 Seller Add Product



The screenshot shows a seller dashboard with a sidebar on the left and a main content area. The sidebar contains the following links: Dashboard, Add Product (highlighted), All Product, Orders, Payments, Chat Customer, Chat Support, Profile, and Logout. The main content area has a search bar at the top and a 'Seller seller' profile icon. Below the search bar is the 'Add Product' form, which includes a 'Products' button. The form fields are: Product name (placeholder: product name), Product brand (placeholder: product brand), Category (placeholder: --select category--), Stock (placeholder: product stock), Price (placeholder: price), Discount (placeholder: %discount%), and Description (placeholder: description).

Figure 5.2.7.1: Add Product

Here in this page seller can add there product, product name, category, price, description etc.

528 Seller All Product

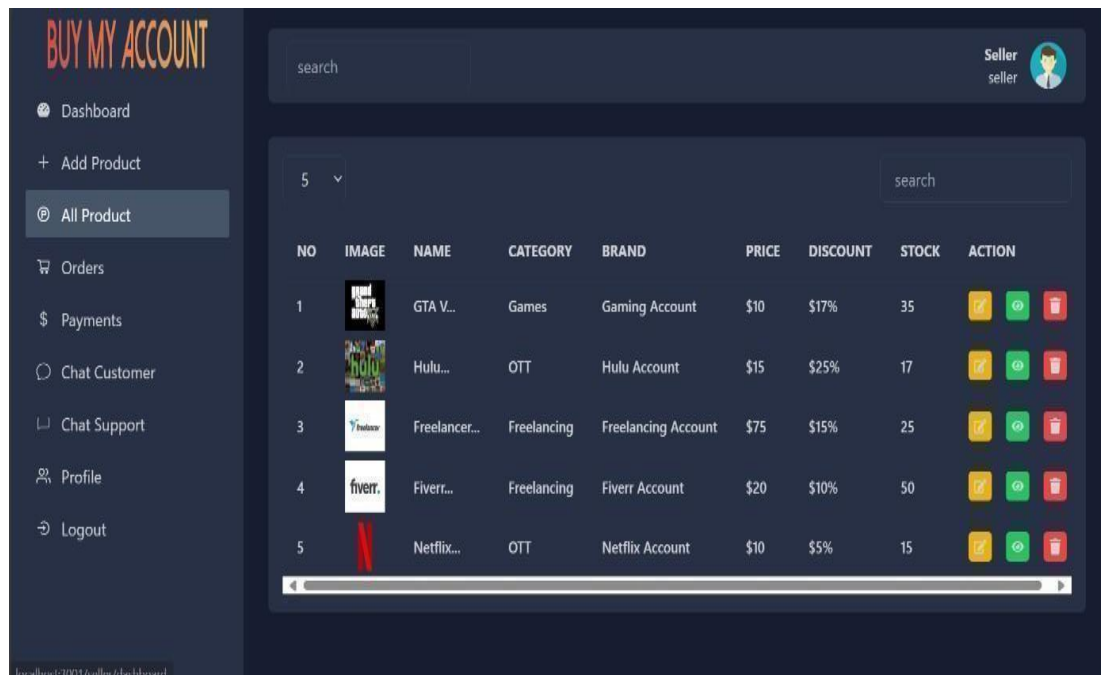


Figure 5.2.8.1: All Product

Here this seller can see their products info.

529 Seller Orders

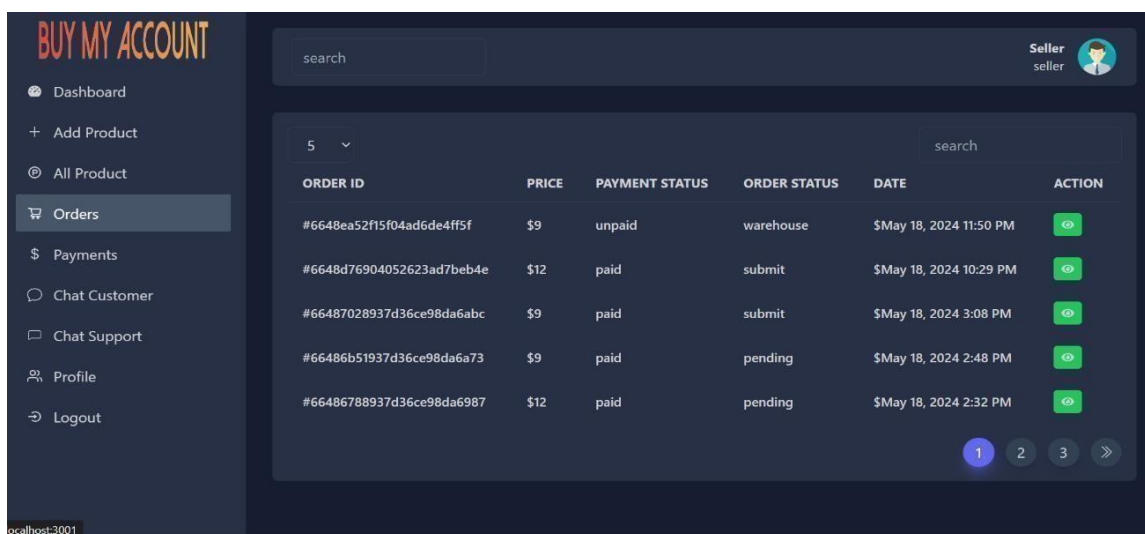


Figure 5.2.9.1: Seller Orders

Here seller see the reorder lists. In this page seller placed their orders.

52.10 Seller Payments

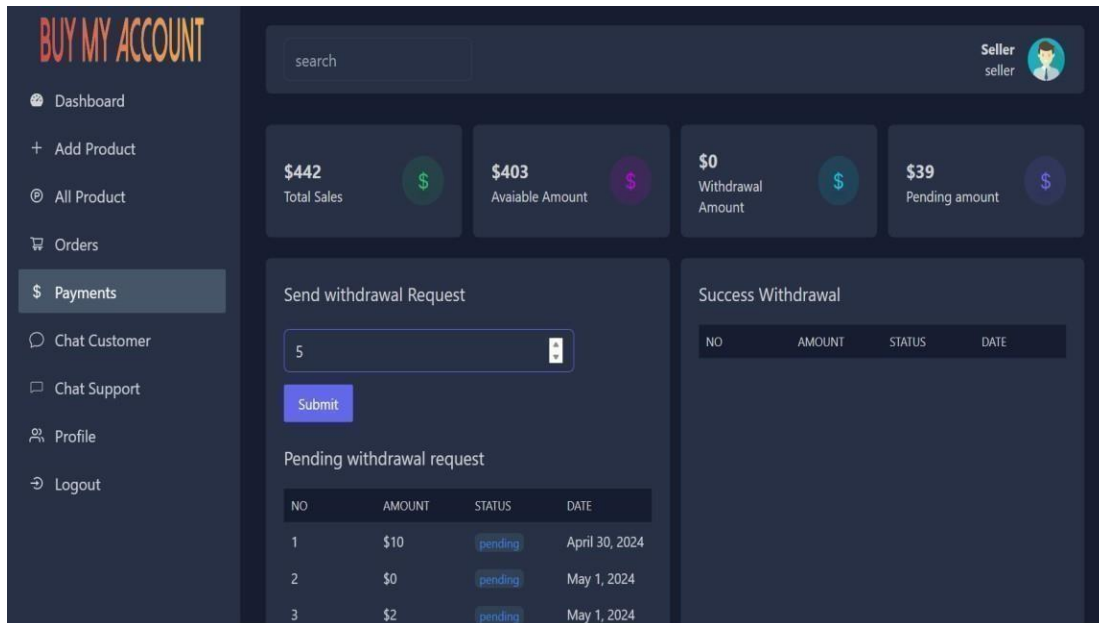


Figure 5.2.10.1: Seller Payments

Seller send withdrawal request to admin here. In this page seller also can see total sales, available amount, and withdrawal amount, etc.

52.11 Chat Customer

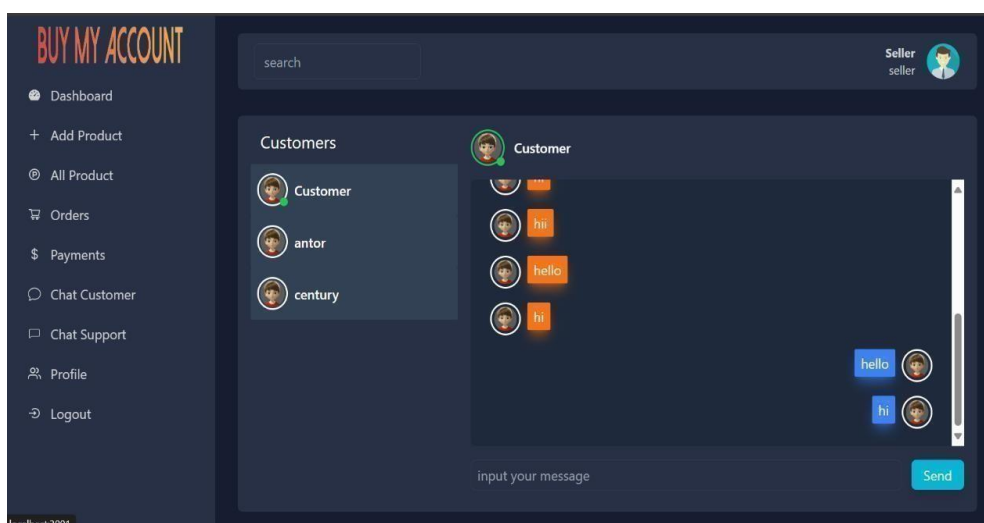


Figure 5.2.11.1: Chat Customer

Seller chat with customer here. Seller and customer can discuss with any product related topic by using this chat section.

5.2.12 Seller Chat Support

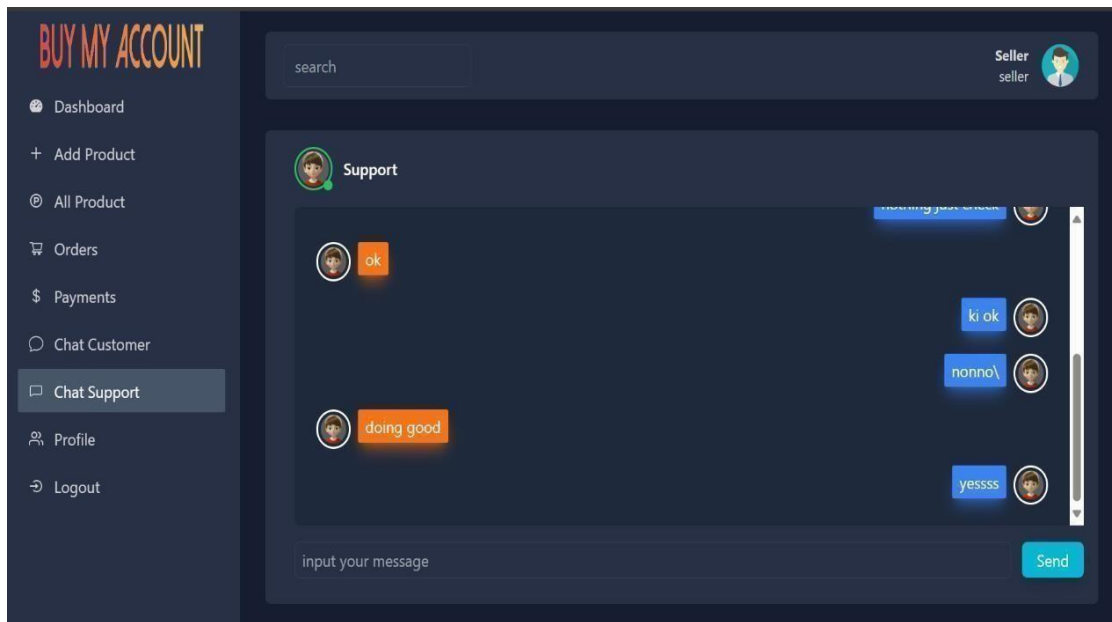


Figure 5.2.12.1: Chat Support

Seller chat with the site admin directly here. If seller need any help from the admin then seller can use this chat support option.

52.13 Seller Profile

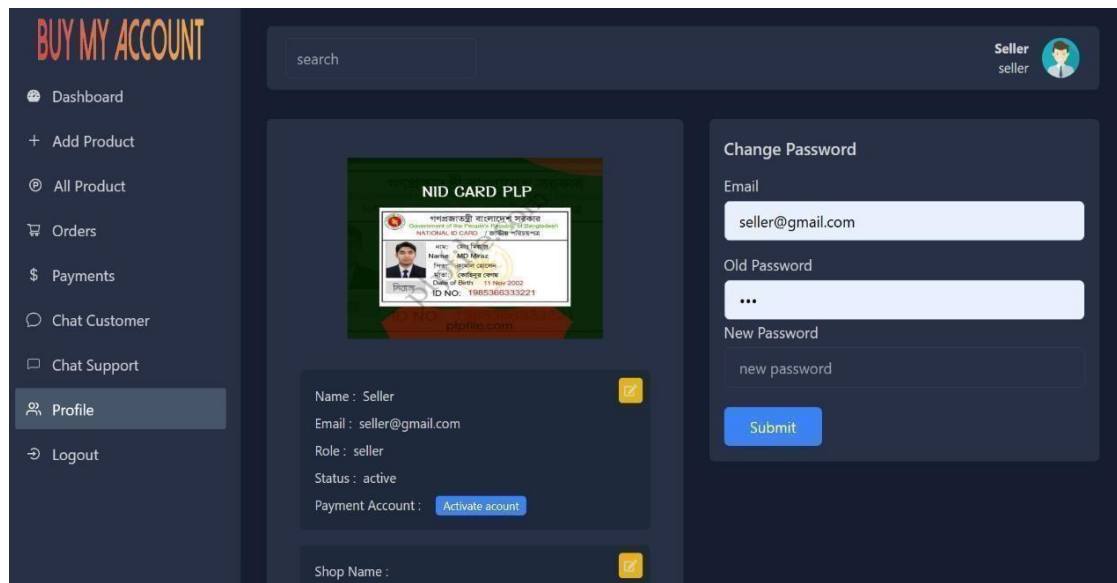


Figure 5.2.13.1: Seller Profile

Seller edit their profile here. In this page seller also change their email and password.

52.14 Admin Dashboard Page

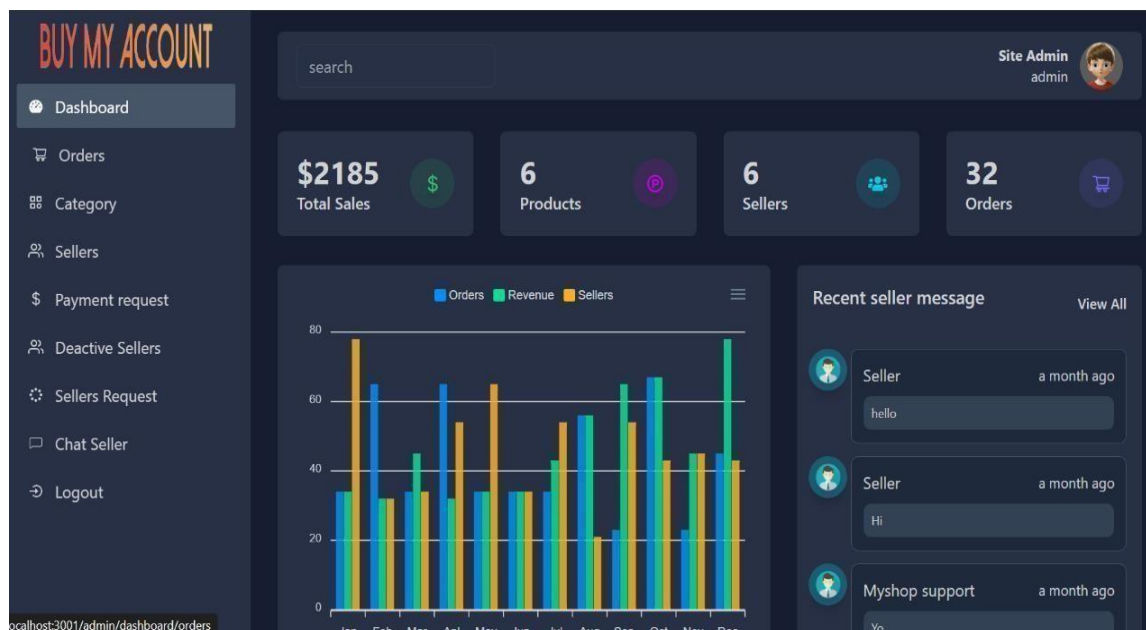
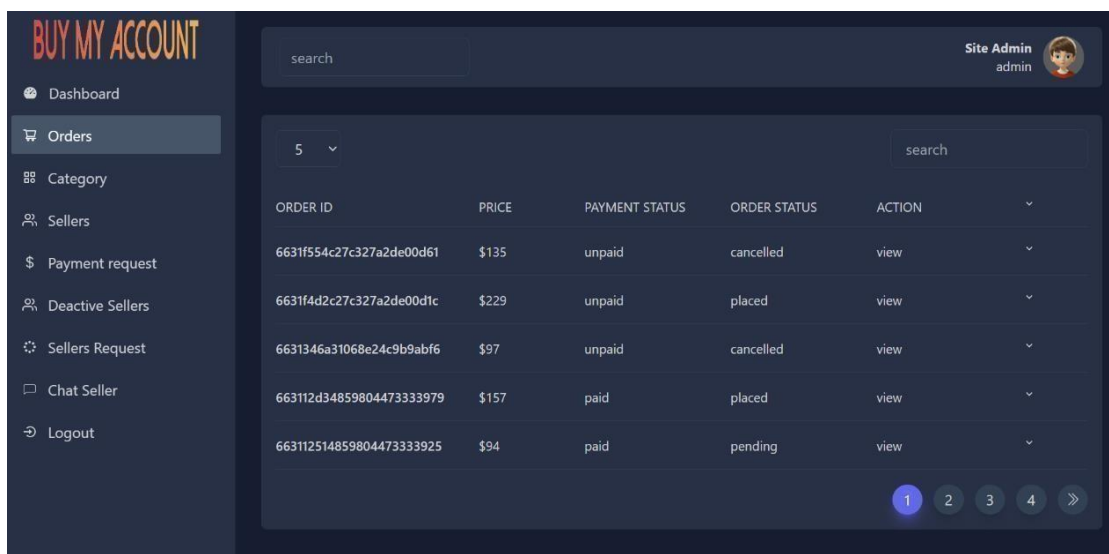


Figure 5.2.14.1: Admin Dashboard Page

This page is admin dashboard of "Buy My Account - Multipurpose E-Commerce Website". And in this page show many options to control this website. And also show revenue, orders, seller's information, category, payment request, chat seller option etc.

5.2.15 Admin Orders List



ORDER ID	PRICE	PAYMENT STATUS	ORDER STATUS	ACTION
6631f554c27c327a2de00d61	\$135	unpaid	cancelled	view
6631f4d2c27c327a2de00d1c	\$229	unpaid	placed	view
6631346a31068e24c9b9abf6	\$97	unpaid	cancelled	view
663112d34859804473333979	\$157	paid	placed	view
663112514859804473333925	\$94	paid	pending	view

Figure 5.2.15.1: Admin Orders List

Here admin can see about the sellers order id list, payment status, order status.

52.16 Add Category

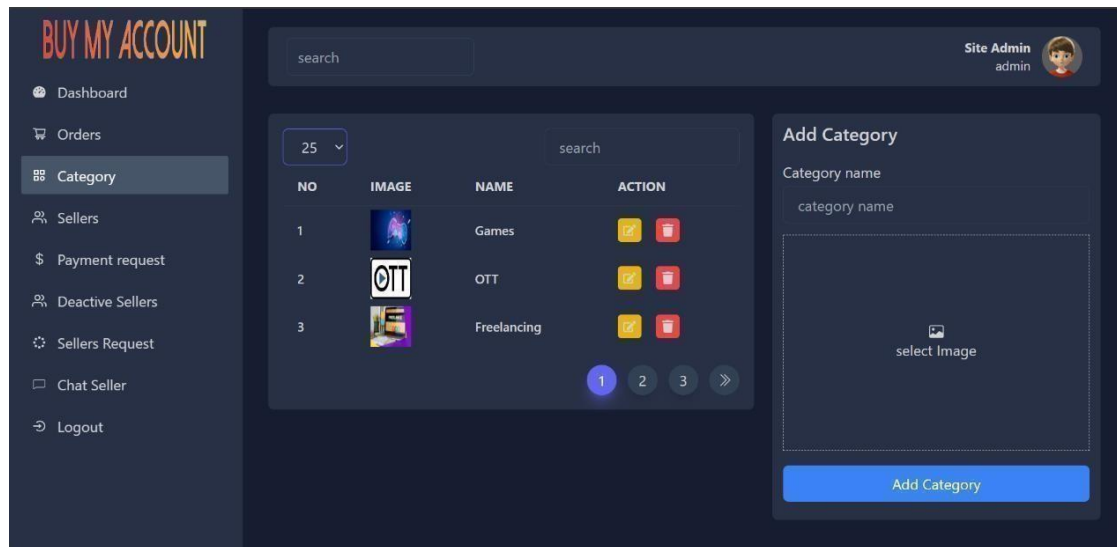


Figure5.2.16.1: AddCategory

Admin can add category. Admin can add category or delete any category, add category name and pictures also.

52.17 Sellers Add

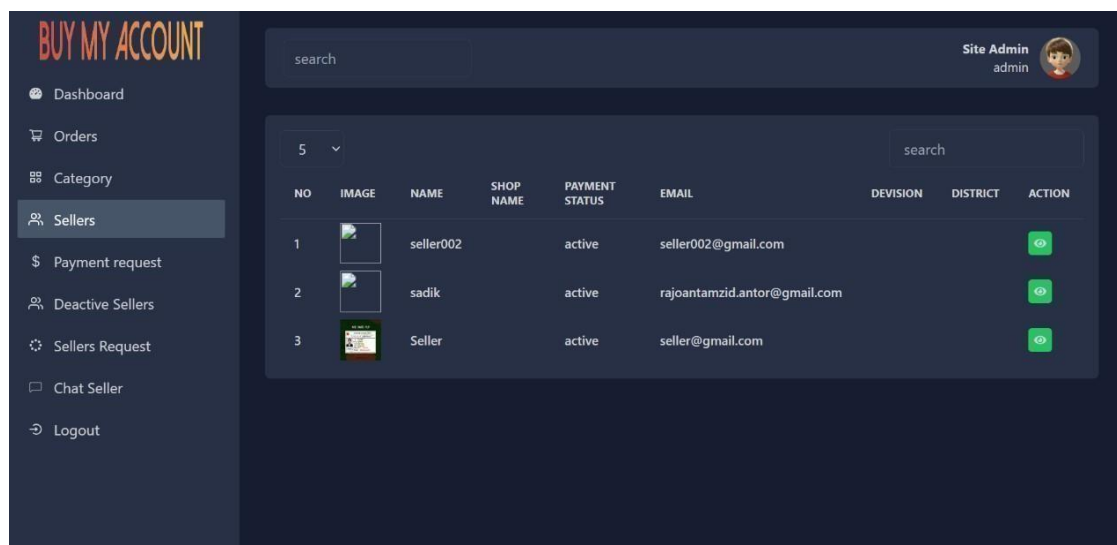


Figure 5.2.16.1: Sellers Add

Admin can see the new seller requests. In this page admin can accept or reject seller requests.

5.2.18 Payment Request

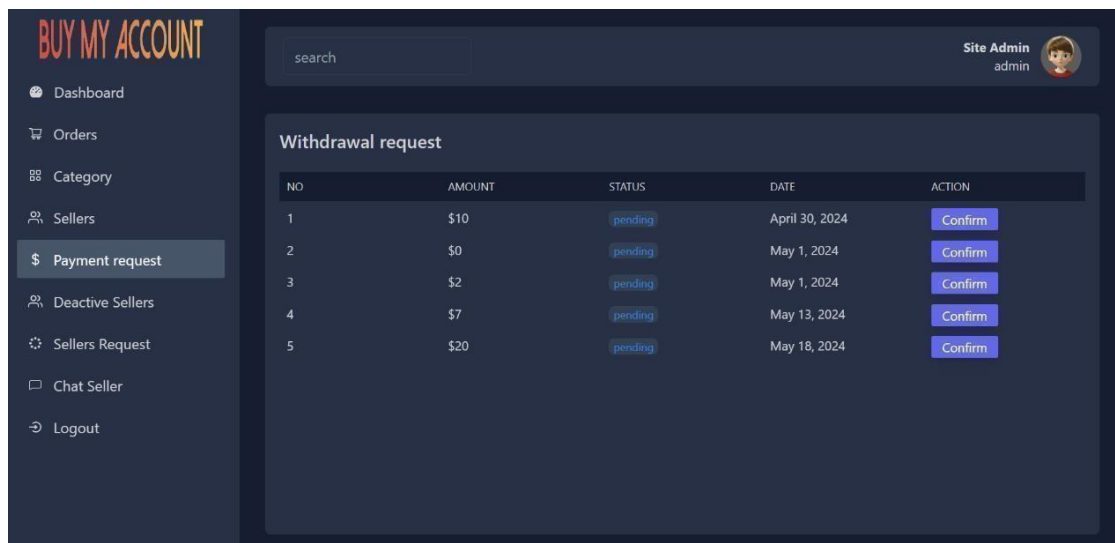


Figure 5.2.18.1: Payment Request

Admin can see seller payment requests. Admin can confirm the seller payment request then seller can get the money.

5.2.19 Deactivate Sellers

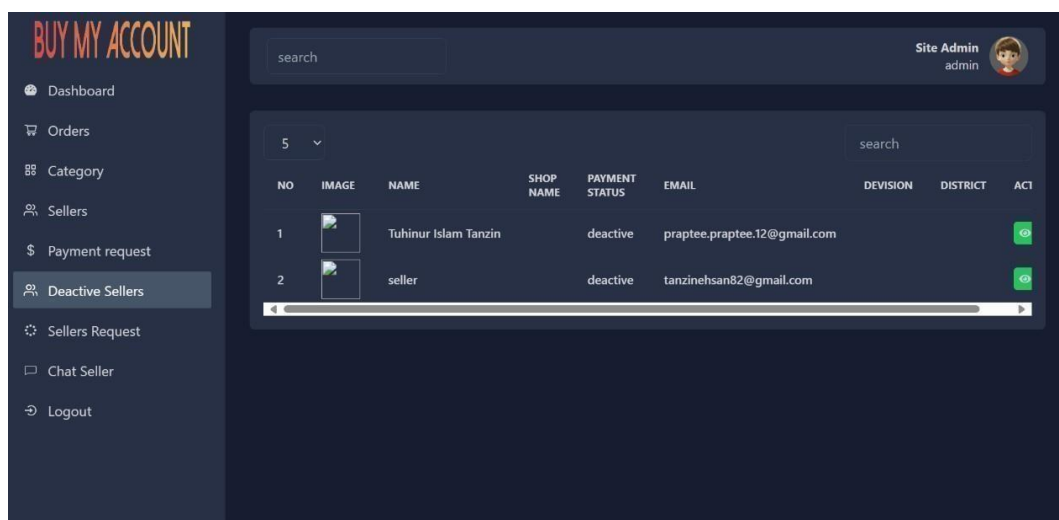


Figure 5.2.19.1: Deactivate Sellers

Admin can deactivate any sellers account. If any sellers brake any rules or customer give any complain about seller then admin can deactivate any seller account.

5.2.20 Sellers Request

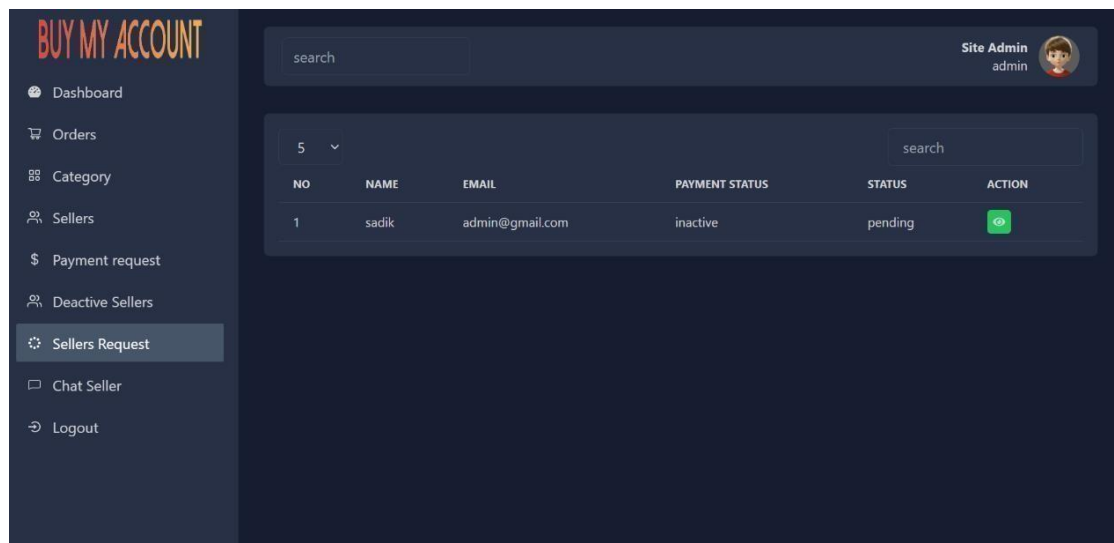


Figure 5.2.20.1: Sellers Request

Admin will accept or reject any seller requests. In this page admin can active sellers account and then a seller account will be register for this website.

5.2.21 Chat Seller

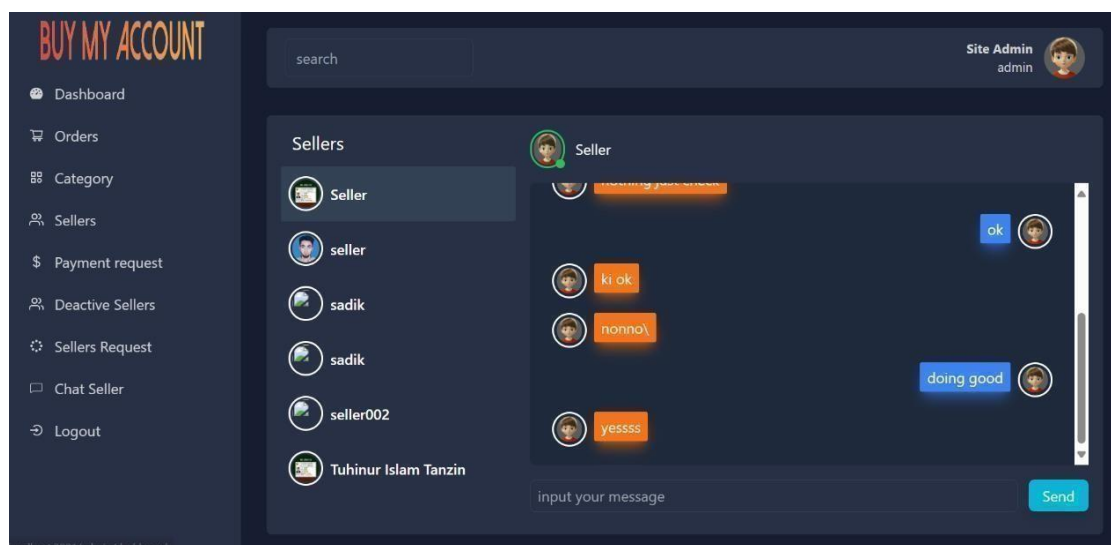


Figure 5.2.21.1: Chat Seller

Admin can chat with all sellers. Admin and sellers can make conversations with each other by using this chat option.

5.3 Testing Implementation

The testing implementation for the "Buy My Account" platform encompasses comprehensive strategies to ensure the system's reliability, functionality, and security. Key testing types include unit testing for individual components like account listing and payment processing, integrity testing to verify seamless interaction between modules, system testing to evaluate overall functionality, and user acceptance testing (UAT) to ensure the platform meets user requirements. Security testing focuses on identifying vulnerabilities, especially in payment processing and user data handling, while performance testing measures the platform's responsiveness under various loads. Testing procedures involve developing comprehensive test cases covering all functionalities and user scenarios, systematic execution and reporting, bug tracking with prioritization of critical issues, and regression testing to maintain platform stability after updates.

User feedback from UAT is incorporated to enhance usability. Testing environments include development, staging, and user testing, with automated testing frameworks like Jest for regression and repetitive tests, and CI/CD pipelines to ensure seamless, rapid, and reliable updates while maintaining high-quality standards.

5.4 Test Results and Reports

TABLE 5.4.1: REPORTS AND RESULTS OF THE TEST

SL.	Test Name	Expected Result	Result
01	Customer Registration	Customer created successfully	Successful
02	Customer Login	Customer Authentication ok	Ok
03	Seller Registration	Seller created successfully	Successful
04	Seller Login	Seller Authentication ok	Ok
05	User Authorization	Can determine admin and normal user	Successful
06	Seller Authorization	Can determine admin and normal seller	Successful
07	Dashboard authorization for each customer	Successful	Successful
08	Dashboard authorization for each seller	Successful	Successful
09	Updating Customer info	Updated	Successful
10	Updating Seller info	Updated	Successful
11	Updating Product Upload	Updated	Successful

12	APIs integration	Fetching Data	Fetching
13	Payment method	Pay to Stipe	Successful

CHAPTER 6

Impact on Society and Environment

6.1 Impact on society

Implementation of "Buy My Account - Multipurpose E-Commerce Website" can significant impact on society in various positive:

- **Economic Empowerment:** The platform provides opportunities for individuals to buy and sell accounts, potentially empowering sellers to earn income and buyers to access desired accounts efficiently.
- **Accessibility and Inclusivity:** By offering a diverse range of accounts for sale, the platform promotes acceptance by meeting the different desires and requirements of users from various backgrounds and interests.
- **Convenience and Efficiency:** Users benefit from the convenience of purchasing accounts directly from the platform, saving time and effort compared to traditional methods of acquiring accounts.
- **Environmental Sustainability:** By facilitating digital transactions and reducing the need for physical goods or services, the platform contributes to environmental sustainability by minimizing resource consumption and waste generation.
- **Promotion of Digital Literacy:** Engaging with the platform enhances users' digital literacy skills as they navigate the online marketplace, improving their ability to interact with e-commerce platforms effectively.
- **Economic Growth:** The platform's support for buying and selling accounts may stimulate economic growth by fostering entrepreneurship, supporting small businesses, and creating new opportunities in the digital marketplace.
- **Transparent Payment Processes:** Adding a safe payment system makes it easier for buyers and sellers to see how their money is being spent. This level of dependability builds trust and adds to the platform's credibility.
- **Technology Progress:** The project uses up-to-date technologies like React.js, Node.js, and Mongo DB, which help the e-commerce industry advance technologically. Using new technologies can lead to similar progress in connected fields.

6.2 Impact on environment

The implementation of "Buy My Account - Multipurpose E-Commerce Website" can positively impact the environment in various ways:

- **Transparency and User Consent:** Provide clear information about data usage, privacy policies, and service conditions to users. Obtain written consent before collecting and utilizing user data.
- **Environmental Impact Consideration:** Promote responsible and sustainable business practices, supporting eco-friendly choices and sustainability measures to minimize environmental impact.
- **Data-Driven Insights:** Leveraging data analytics, the platform can provide insights into consumer behavior and preferences, enabling sellers to optimize inventory management and reduce waste by offering products that align with market demand.
- **Optimized Resource Utilization:** Through efficient account transactions and digital delivery mechanisms, the platform minimizes resource consumption associated with physical product packaging, shipping, and handling.
- **Reduced Paper Consumption:** By operating as a digital marketplace, the platform eliminates the need for printed materials such as receipts, invoices, and account details, reducing paper consumption and waste.
- **Encouragement of Digital Transactions:** By promoting online transactions and digital commerce, the platform reduces the environmental impact of traditional brick-and-mortar retail operations, including energy consumption and emissions from transportation.
- **Support for Sustainable Practices:** The platform can encourage sellers and buyers to adopt sustainable practices by offering eco-friendly accounts, promoting reuse and recycling, and providing information on environmentally conscious purchasing decisions.
- **Technologies That Use Less Energy:** The project uses new technologies that use less energy, like server less design, which can help lower the total amount of energy used. Hosting options that last longer can be found by using cloud services wisely.

CHAPTER 7

Conclusion and Future Scope

7.1 Conclusion

The development of "Buy My Account - Multipurpose E-Commerce Website" marks a significant advancement in the realm of online account trading. This platform serves as a hub for both customers and sellers, facilitating the purchase and sale of accounts while maintaining transparency and security. Through its intuitive interface and robust admin panel, the website streamlines the buying process and ensures accountability throughout transactions.

The platform upholds ethical standards by prioritizing user privacy, fostering fair transactions, and promoting responsible business practices. By implementing strong security measures and obtaining user consent for data usage, "Buy My Account" establishes trust and reliability among its user base.

Despite the challenges encountered during development and testing, the success of the project hinges on its ability to enhance user experiences, promote sustainable practices, and adapt to evolving market demands. Continuous feedback and innovation will be instrumental in driving the platform's growth and maintaining its relevance in the dynamic e-commerce landscape.

7.2 Future Scope

"Buy My Account - Multipurpose E-Commerce Website" presents several opportunities for expansion and enhancement:

- 1. Integration of AI and Machine Learning:** Explore the integration of AI algorithms to enhance personalized recommendations and improve user engagement.
- 2. Enhanced Security Measures:** Continuously update security protocols to safeguard user data and protect against cyber security threats.

3. **Global Expansion:** Expand the platform's reach by incorporating support for multiple languages and currencies, catering to a diverse user base.
4. **Adding Chabot's that AI controls:** Use artificial intelligence to create chatbots that can help users find their way around the site, make appointments, and get the information they need. This AI-powered help can make users happier and more engaged.
5. **Enhanced Sustainability Features:** Expand eco-friendly alternatives and environmental activities, and further encourage partnerships and travel options that are sustainable.
6. **Start a referral system:** This will encourage buyers and traders to join the site and bring new people with them. The tool could grow independently, and those who help it grow could be paid for it.
7. **Integration with Outside APIs:** Look into relationships with outside improve the features of the platform. To give users a whole experience, this could mean connecting to popular chat platforms, project management tools, or financial software.
8. **Making a mobile app:** By developing mobile apps that work seamlessly on both iOS and Android, we can significantly enhance the user experience. This will make it easier for buyers and sellers to engage with our platform, especially when they are on the move.
9. **Sustainability Initiatives:** Introduce eco-friendly practices and partnerships to promote environmental conservation and responsible consumption.
10. **Community Engagement:** Foster user interactions through social integration features, allowing customers to share experiences and insights.

References

- [1] Find the best global talent, available at <<<https://www.fiverr.com>>>, This page was last visited on April 24, 2024, at 9:00 PM.
- [2] Online shopping, available at <<[https://_https://www.Online Shopping in Bangladesh: Order Now fromDaraz.com.bd./](https://www.Online Shopping in Bangladesh: Order Now fromDaraz.com.bd/)>>, This was last used on April 28, 2024, at 9:10 PM.
- [3] React Hook Form, a tool known for its speed, flexibility, and expandability, is available at <<<https://react-hook-form.com>>> It was last used on May 23, 2024, at 8:34 PM.
- [4] Tailwind CSS lets you quickly create modern websites without using HTML. It can be downloaded at <<<https://tailwindcss.com>>> It was last used on April 12, 2024, at 08:28 PM.
- [5] MongoDB: The Developer Data Platform, available at <<<https://www.mongodb.com/>>> last accessed on 28- 05- 2024at 06:48 PM.
- [6] The React Reference Overview can be found at <<<https://react.dev/reference/react>>> It was last used on May 16, 2024, at 6:50 PM.
- [7] DaisyUI has Tailwind CSS Components that you can get at <<<https://daisyui.com/>>> It was last viewed on April 27, 2024, at 7:30 PM.

Appendix A

Course Outcomes, Complex Engineering Problems (EP) and Complex Engineering Activities (EA) Addressing

Title: BUY MY Account - Multipurpose E-Commerce Website

Student ID: [201-15-13929]

CO Description for FYDP

CO	CO Descriptions	PO
Phase -I		
CO1	Combine what you've learned recently with what you already know to find a web-basede-commerce problem for your Final Year Design Project (FYDP).	PO1
CO2	Look at different parts of the goals when coming up with an answer for this FYDP.	PO2
CO3	Do a literature study on various problem areas, list the problems, and set these goals forthe FYDP.	PO4
CO4	While developing the FYDP Phase II, you should do economic analysis, cost estimates,and the proper project management techniques.	PO11
Phase -II		
CO5	Pick the right methods, tools, and up-to-date IT and engineering technologies to handle complicated engineering tasks like modeling and prediction while following therules set out in this FYDP.	PO3
CO6	Use logical thinking and knowledge of the situation to look at societal, health, safety, legal, and cultural issues, along with the responsibilities that come with them, in the context of professional engineering practice and how to solve this problem.	PO5
CO7	Learn how to understand and evaluate the long-term effects and sustainability of professional engineering work that tries to solve complex engineering problems insocial and natural settings.	PO6
CO8	In this FYDP, follow professional standards and ethics and act responsibly.	PO7
CO9	Skilled at working well alone, with others, and as a leader in this FYDP onvarious teams and in interdisciplinary situations.	PO8
CO10	Combine what you've learned recently with what you already know to find a web-basede-commerce problem for your Final Year Design Project (FYDP).	PO9

CO11	Effectively communicate about complicated engineering projects with others in the engineering community and society. This includes being able to read and write detailed reports and design documentation, as well as give and receive clear directions during this FYDP.	PO10
CO12	Know how important it is to learn on your own and throughout your life, especially as technology changes, and be ready and able to start learning new things anytime.	PO12

Addressing CO (1 to 8), Knowledge Profile (K), Attainment of Complex Engineering Problems (EP), and Attainment of Complex Engineering Activities (EA)

Addressing CO (1 to 8), Knowledge Profile (K), Attainment of Complex Engineering Problems (EP):

SN	EP Definition	Attainment	CO	Justification (with Knowledge Profile)	References
1.	EP1: Depth of Knowledge required	Yes	CO1, CO2, CO3, CO5, CO6, CO7 and CO8	The project demonstrates solid proficiency in both Engineering Fundamentals (K3) and Specialist Knowledge (K4). Through effective process modeling, data design and front-end development, you've established a robust foundation for your e-commerce platform. Additionally, your integration of front-end and back-end design, coupled with a focus on interaction design and user experience, showcases expertise in web-based system development. Overall, your project exemplifies a strong application of engineering principles and specialized knowledge in creating a multipurpose e-commerce platform.	Page no: [12,14-16,21], Section: [3.1, 3.3, 3.4, 5.1, 5.2] Page no: [17-24], Section: [4.1, 4.2, 4.3, 5.1, 5.2, 5.3]
				The project applies engineering practice	Page no:

				design (KS) by integrating various design requirements such as user interface security scalability, customization, compatibility Accessibility, and reliability. These considerations ensure the development of	[12-16], Section: [3.1, 3.3,
--	--	--	--	---	---

				robust and user-centric e-commerce platform that adheres to design principles, ultimately enhancing the overall user experience and Satisfaction. The project addresses engineering practice & technology (K6) MongoDB, Angular, React, Node.js.	3.4, 3.5] Page no: [17-20], Section: [4.1, 4.2, 4.3, 4.4]
				The project covers research literature K8 by reviewing analogous platforms, UI/UX studies, security protocols, personalization Algorithms, and industry trends. This comprehensive review enables informed decision-making during the integration of innovative features into the system, ensuring that the platform remains competitive, user-friendly, and secure in the dynamic e-Commerce landscape.	Page no: [8-10], Section: [2.2, 2.3]
2.	EP2: Range of Conflicting Requirements	Yes	CO2, and CO7	The project confronts EP-2 by addressing a range of conflicting requirements. These include integrating diverse features while maintaining user experience, balancing security with functionality, ensuring scalability, implementing real-time data synchronization, adhering to evolving industry standards and privacy regulation compliance, and establishing effective recommendation systems. To overcome these challenges, the project employs careful planning, flexible development strategy and continuous adaptation to meet the dynamic needs of the e-commerce environment.	Page no: [11] Section: [2.4, 2.5]

3.	EP3: Depth of analysis required	Yes	CO2, and CO6	The project tackles EP-3 by prioritizing solutions such as contemporary front-end design to enhance user experience. Additionally, it selects suitable technologies for streamlined back-end development addressing challenges such as use interaction optimization, platform accessibility, and scalability. This approach ensures that the system undergoes thorough analysis to meet the demands of a dynamic e-commerce landscape, delivering a superior and user-centric online platform.	Page no: [17-20], Section: [4.2, 4.3, 4.4]
4.	EP4: Familiarity of Issues	Yes	CO8	The project fulfills EP-4 by integrating insights from e-commerce practices into development. It optimizes processed enhances user experience, ensures data security, and contributes to industry efficiency and effectiveness. By bridging principles of computer science and engineering with the e-commerce domain, It addresses issues beyond traditional boundaries, ensuring a comprehensive and impactful solution for online commerce needs.	Page no: [8-11], Section: [2.2, 2.4]
5.	EP5: Extends of application codes	No	CO5	N/A	N/A
6.	EP6: Extends of stakeholders involved and conflicting requirements	No	CO8	N/A	N/A

7.	EP7: Interdependence	Yes	CO5	The project meets CEP, EP-7 by addressing high-level problems across stages, ensuring data integrity, security, and performance in database implementation. It optimizes use experience through intuitive front-end design and conducts comprehensive testing reflecting the interdependence of various components in creating a reliable and user friendly e-commerce platform.	Page no: [21-23], Section: [5.1, 5.2]
----	----------------------	-----	-----	---	--

Addressing CO11 with Complex Engineering Activities (EA) [Some or all of the following]:

SN	EA Definition	Attainment	CO	Justification	References
1.	E/A1: Range of resources	Yes	CO11	The development of this system leverages a skilled team across domains, meticulous financial resource allocation for infrastructure, marketing, and development. It utilizes tools such as XAMPP, Visual Studio Code and various programming languages, frameworks, and databases for effective execution ensuring a comprehensive and well supported development process..	Page no: [20], Section: [4.4]

2.	E/A2: Level of interaction	No		N/A	N/A
3.	E/A3: Innovation	No		N/A	N/A
4.	E/A4: Consequences for society and the environment	Yes		This project emphasizes social impact and environmental sustainability by facilitating efficient account transaction promoting ethical practices in use interactions, ensuring data security and fostering transparent business operations. Through these measures, the project contributes to societal well-being and environmental stewardship aligning with principles of responsible commerce and ethical conduct.	Page no: [26-31], Section: [6.1, 6.2, 6.4]
5.	E/A-5: Familiarity	Yes		The Comparative Analysis for "Buy My Account - Multipurpose E Commerce Website" evaluates market competitors like eBay and Amazon to highlight the unique features, security measures, personalization options, and customer engagement strategies of the website. This analysis enriches market understanding and informs strategic decisions aimed at enhancing competitiveness and value proposition within the e-commerce domain.	Page no: [7-10], Section: [2.1, 2.3]

Addressing CO (4, 9, 10, and 12):

SN	COs	Attainment	Justification	References
1	CO4	Yes	The project captures CO4 by integrating financial management practices including budgeting, resource allocation, cost management, and risk mitigation, ensuring efficient fund distribution, monitoring expenditures and identifying optimization areas while maintaining quality. This ensures the financial resources are utilized effectively and transparently, aligning with project objectives and maximizing value for stakeholders in "Buy My Account - Multipurpose E-Commerce Website."	Page no: [4-5], Section: [1.5]
2	CO9	Yes	The project upholds ethical practices by prioritizing user privacy, maintaining transparency in data usage, providing fair suggestions, respecting cultural sensitivities, and promoting accessibility, fostering trust, transparency, and integrity among stakeholders.	Page no: [28], Section: [6.3]
3	CO10	No	N/A	N/A
4	CO12	Yes	The project's implementation phase emphasizes lifelong learning through diverse testing protocols, automated frameworks, and CI/CD pipeline ensuring ongoing improvement and adaptation to emerging tech trends, with results analysis refining the platform for enhanced effectiveness.	Page no: [21-25], Section: [5.1, 5.4]

ORIGINALITY REPORT

13 %

SIMILARITY
INDEX

10%

INTERNET SOURCES

0%

PUBLICATIONS

7%

STUDENT PAPERS

PRIMARY SOURCES

1

dspace.daffodilvarsity.edu.bd:8080

Internet Source

7%

2

Submitted to Daffodil International University

Student Paper

5%

3

Submitted to Higher Education Commission Pakistan

Student Paper

<1%

4

Submitted to Apex College

Student Paper

<1%

5

Submitted to INTI Universal Holdings SDM BHD

Student Paper

<1%

6

Submitted to University of Wales Institute, Cardiff

Student Paper

<1%

7

fastercapital.com

Internet Source

<1%

8

Submitted to Asia Pacific University College of Technology and Innovation

(UCTI)

Student Paper

<1%

9

Submitted to University Turku Abdul Rahman
Student Paper

<1%

10

ir.kluniversity.in
Internet Source

<1%

11

repository.president.ac.id
Internet Source

<1%
