A

PROJECT REPORT

ON

Coupon Trader

Submitted by

Ayushya Savani (18IT430)
Harshilkumar Buha (19IT401)
Sanket Detroja (19IT413)
Ayush Sakariya (19IT416)

For Partial Fulfillment of the Requirements for Bachelor of Technology in Information Technology

Guided by

Dr. Nilesh Prajapati

May, 2023

Information Technology Department

Birla Vishvakarma Mahavidyalaya Engineering College

(An Autonomous Institution)

Vallabh Vidyanagar – 388120

Gujarat, INDIA

Birla Vishvakarma Mahavidyalaya Engineering College

(An Autonomous Institution)

Information Technology Department

AY: 2022-23, Semester II

CERTIFICATE

This is to certify that the project work entitled **Coupon Trader** has been successfully carried out by **Ayushya Savani (18IT430), Harshilkumar Buha (19IT401), Sanket Detroja (19IT413) and Ayush Sakariya (19IT416)** for the subject **Project II (4IT32)** during the academic year 2022-23, Semester-II for partial fulfilment of Bachelor of Technology in Information Technology. The work carried out during the semester is satisfactory.

Dr. Nilesh Prajapati IT Department BVM		Dr. Keyur Brahmbhatt Head, IT Department BVM

ACKNOWLEDGEMENT

Our project and its research have been the sole focus of all our time and efforts. However, it would not have been possible without the kind support and help of many individuals. We would like to extend our sincere thanks to all of them for their valuable Assistance.

We are extremely grateful to our project guide, **Dr. Nilesh Prajapati**, Faculty of Information Technology, for guiding us throughout the project and for the effective doubt-solving sessions with patience and knowledge.

We are grateful to our Course Coordinator **Prof. Vishal Polara** for giving us the support and encouragement that was necessary for the completion of this project.

We would like to express our gratitude to the Head of the IT Department, **Dr. Keyur Brahmbhatt** and we are also grateful to all our **faculty members of BVM Engineering College**, IT Department for their kind cooperation and encouragement which helped us in completing this project and preparing the report.

Thank You

Ayushya Savani (18IT430)

Harshilkumar Buha (19IT401)

Sanket Detroja (19IT413)

Ayush Sakariya (19IT416)

ABSTRACT

The Coupon Trading system is an online platform that enables users to buy, sell and trade coupons with other users. The system provides a marketplace for the buyers and sellers to connect, and allows them to modify coupons prices as per their convenience. The platform typically requires users to create an account, and register before they can start buying and selling coupons. Users can then search for available coupons, and request unavailable coupons. The system may also include verification processes, and a transparent trading environment. The system can benefit both consumers and businesses in a number of ways. For Consumers, thye system provides a way to save money on purchases by buying or selling coupons at discounted prices. This can b0e specifically used for trading of unused coupons provided by online Fintech companies like paytm, Gpay, PhonePe, and so on. For Businesses, this system can be effective as it promotes its products, services, and also reaches a wider customers.

LIST OF FIGURES

LIST OF TABLES

TABLE OF CONTENTS

Chapter 1: Introduction

1.1 Aim of Project

This new edge world is surrounded by online shopping and transactions. To support online transactions, the government encourages organizations to make transactions feasible. On top of that, financial companies like Paytm, BharatPe, GooglePe, and so on, are providing coupons and rewards for every individual transaction.

Here, the problems come into the picture where most coupons are unused because they may not be necessary for that individual. So, to stop the coupons' expiration, we are making a platform to trade coupons. This means people can buy and sell coupons before it expires. Trading coupons that are not helpful for some people can be beneficial for another person. With the help of this system, unused coupons can be used by necessary people and both get the benefits of money. This would be the main aim of our project.

It is one of the best examples of affiliate marketing with different platforms, organizations, and companies to promote their business along with brandings and advertisements.

1.2 Project Scope

- One of the most extensive scopes for this web application would be that it would be user-friendly and easy to operate like any other online business like Flipkart, Amazon, and so on as we are traders like them.
- Develop a website for users to list and search for coupons from various online retailers and service providers.
- Allow users to create an account, list vouchers for sale, and search for coupons with the same single account per user.
- Implement a secure payment system for users to buy or trade vouchers and coupons.
- Provide a user dashboard for each user to manage their listings, orders, and account settings.
- Only online applicable coupons are available on our platform.

1.3 Project Objective

- To create a platform for individuals to share and exchange vouchers and coupons from various online retailers and service providers.
- The ultimate goal of the website is to provide a solution for individuals to save money on their online purchases by sharing and trading vouchers and coupons with one another.

1.4 Project Modules

1. **Authentication**: Users can authenticate their account to our platform.
2. **Profile Verification & Update**: Verification of email and update of profile would be possible.
3. **Add Coupon**: Users can add coupons for selling.
4. **Search**: Users can search for specific coupons they need.
5. **Inquiry Coupon**: Users can inquire for a specific coupon which are not available in our platform.
6. **Update and Delete the Coupon**: Users can update and delete the coupons as per their convenience.
7. **Transaction**: Transactions may take place at point of purchase.

1.5 Project Basic Requirements

1.5.1 Hardware Requirements

- Chrome and any browser is capable of reaching our platform as it is a web application.

1.5.2 Software Requirements

- Front-end: ReactJs, Mantine, Typescript
- Back-end: NodeJs, ExpressJs, MongoDB, JWT
- Others: Domain name, Hosting, server, and cloud storage

1.5.3 Software Requirements for Clients

- Desktop or smartphone that has a safe browser with any version or OS.

Chapter 2: Literature Review

2.1 Introduction

Coupons have been a popular marketing tool for decades, providing customers with discounts on products or services. In recent years, coupon trading has emerged as a way for consumers to maximize their savings by exchanging coupons they don't need for ones they do. This literature review will explore the history of coupons and coupon trading, the benefits and drawbacks of coupon trading, and the future of coupon trading.

Coupons were first introduced in the late 1800s as a way for manufacturers to attract customers and encourage them to try new products. By the early 1900s, coupons had become a popular marketing tool, and many retailers began offering them to customers as a way to increase sales. In the 1960s, the use of coupons exploded with the introduction of the first barcode scanners, which made it easier for retailers to track coupon usage.

Coupon trading emerged as a way for consumers to maximize their savings by exchanging coupons they don't need for ones they do. The practice became more popular with the rise of online coupon trading websites, which allowed users to connect with other coupon traders across the country. Coupon trading has become a lucrative business for some, with some individuals earning thousands of dollars per year by trading coupons.

The benefits of coupon trading are clear. By exchanging unwanted coupons for ones they need, consumers can save money on products they would have purchased anyway. Additionally, coupon trading allows individuals to connect with others who share similar interests, fostering a sense of community among coupon traders. For those who are passionate about couponing, coupon trading can be a fun and rewarding hobby.

However, there are also drawbacks to coupon trading. Some retailers and manufacturers have cracked down on coupon trading, viewing it as a form of fraud or abuse of their marketing programs. Additionally, some coupon traders engage in unethical practices, such as selling counterfeit coupons or using coupons in a way that violates the terms and conditions set by the manufacturer. This can lead to legal trouble for both the trader and the retailer.

The future of coupon trading is uncertain. While the practice has become more popular in recent years, there is concern that retailers and manufacturers will continue to crack down on coupon trading in an effort to protect their marketing programs. Additionally, the rise of digital coupons and loyalty programs may make traditional coupon trading less relevant in the years to come.

In conclusion, coupon trading has become a popular way for consumers to save money and connect with others who share similar interests. While there are benefits to coupon trading, such as increased savings and a sense of community, there are also potential drawbacks, including legal trouble and ethical concerns. The future of coupon trading is uncertain, but it will likely continue to be a popular practice for those who are passionate about couponing.

Recent studies have explored the motivations behind coupon trading and the characteristics of coupon traders. A 2019 study by Lin and Hu found that the primary motivation for coupon trading is to obtain coupons for products that consumers regularly purchase. The study also found that coupon traders tend to be younger, female, and have higher levels of education and income than non-traders.

Another study by He and Cai in 2020 found that coupon trading is more prevalent among consumers who are price-sensitive and who perceive a high level of risk in purchasing a product. These consumers are more likely to engage in coupon trading as a way to mitigate risk and save money.

The rise of social media has also played a role in the growth of coupon trading. Many coupon traders use social media platforms such as Facebook and Instagram to connect with other traders and share coupons. Some businesses have even taken advantage of this trend by offering exclusive coupons and promotions to their social media followers.

While coupon trading has faced criticism from some retailers and manufacturers, others have embraced it as a way to increase brand loyalty and reach a wider audience. Some companies have even launched their own coupon trading programs, allowing customers to exchange unwanted coupons for ones they need.

Overall, coupon trading is a dynamic and evolving practice that continues to grow in popularity. As technology and consumer behavior continue to change, it will be interesting to see how coupon trading adapts and evolves to meet the needs of consumers and retailers alike.

The typical flow for a coupon trader might look something like this:

Research: The coupon trader researches the market to find coupons that are currently available and in demand. This may involve looking at coupon websites, browsing through social media, or even contacting manufacturers directly.

Acquisition: Once the trader has identified coupons they want to trade, they will acquire them through various means. This might involve buying them from other traders, trading with friends or family, or even finding them in stores or online.

Posting: The trader will then post their coupons on various platforms, such as coupon trading websites or social media groups. They will include information about the coupons, such as the expiration date, value, and any restrictions.

Negotiation: Interested parties will then contact the trader to negotiate a trade. The trader may have specific coupons they are looking for, or may be willing to trade for any coupons that are of equal or greater value.

Trade: Once a deal has been agreed upon, the trader and the other party will exchange coupons. This may involve mailing physical coupons or providing digital codes.

Redemption: The trader will then redeem the coupons they have acquired for products or services they want. They may use the products themselves or sell them to make a profit.

It's worth noting that coupon trading can be a complex and competitive market, and traders may need to be persistent and patient in order to find the best deals. It's also important to read and understand the terms and conditions of each coupon to ensure that they can be redeemed as intended.

2.2 Similar Applications

1. **Rakuten:**

   Rakuten Group, Inc. is a Japanese technology conglomerate based in Tokyo, founded by Hiroshi Mikitani in 1997.

   - Rakuten is where you can get Cash Back for shopping at over 3,500 stores. Becoming a member is free! Stores pay Rakuten a commission for sending you their way, and Rakuten shares the commission with you as Cash Back. Get paid every three months, plus earn a cash bonus when you join and shop.
   - Rakuten India enables global businesses in the areas of e-commerce, fintech, advertising, mobile, content, and entertainment with deep expertise in the areas of data science and engineering, machine learning, artificial intelligence, cloud, security, distributed systems, and more.
   - It is very large scale and works in various fields of business, and also it is listed on the stock market.

- The main motto of this platform is to save money for users from shopping via cashbacks as we talk about coupons.

Advantage: It has a very large community. Along with that, it provides various cashbacks to users for purchasing. On top of that, it is a fintech company and connects hundreds of services.

Disadvantage: It works as affiliate marketing and works on purchasing power of use. It is connected with too many services so users cannot get clarity to maintain their motto. As compared to our service, we are giving a platform to buy and sell unused coupons, and due to that it would be projected to grow at a larger scale.

2. **Ibotta**:
    - Ibotta is an American mobile technology company based in Denver, Colorado that provides cash back rebates to users for shopping at stores or purchasing products from companies that pay Ibotta a fee.
    - Ibotta offers real cash back on hundreds of everyday essentials at your favorite grocery retailers. No coupons, just cash. Choose from thousands of your favorite retailers and add offers to Your list by tapping the + in the app. For some retailers, you can even link your store loyalty account to Ibotta.
    - Ibotta is a free cash-back app that offers cash-back rewards when shopping in-store and online. The app features 300-plus retailers.

Advantage: It is very large compared to start-ups and works on offline retailer stores.

Disadvantage: Despite having a large scale, it just recently launched in India. Along with that, it only works on offline retailer stores as people are transforming their buying habits from offline to online. For that, we are providing coupons at a low cost so that every person who buys and sells coupons could be benefitted.

3. **CouponDunia:**
    - CouponDunia is an affiliate marketing company - This means that when you shop via us on our partner stores, we get paid a "commission" by the store. We give more than 50% of this commission to you as cashback. In short - The store pays & thanks us for getting a customer and we pay & thank you for choosing us.

Advantage: It works as a platform to promote businesses via affiliate marketing so there are businesses that can make money. coupons they provide are general coupons that are easily available.

Disadvantage: These types of websites are just promoting e-commerce websites to attract their product by selling prices high and at the same time giving discounts from these types of websites. Here, just e-commerce giants and affiliate marketers make money by creating hype about discount coupons.

Summary:

- There are no such applications in the market that provide a platform for the user to sell their unused coupons and make a profit.
- You can also find similar other companies which are providing coupons but no one is giving users the to sell their exciting coupons which they own.
- All the available existing players are affiliate marketers. filing the pockets of businesses and their own.
- No benefit to customers as it is the biggest priority of any business in the end.
- So, Coupon Trader provides a platform only for users. There are no in-between commissions and other hidden chargers.
- Our motto is to solve a big problem that is created by e-commerce giants to increase business.

Chapter 3: Analysis, Design Methodology, and Implementation Strategy

3.1 Project Feasibility Study

A project feasibility study is an analysis of the potential of a proposed project to determine if it is viable and worth pursuing. The following is a general outline of a project feasibility study for a Coupon Trading application that allows users to trade coupons:

1. **Economic feasibility**: An economic feasibility analysis should be carried out to determine if the proposed trading of coupons is financially viable. The costs of developing and maintaining the web application should be considered, as well as the potential revenue that could be generated from the trade of coupons.

2. **Operational feasibility**: The proposed project is operationally feasible as it can easily integrate existing systems and processes. The web application will be easy to use and maintain, and it will provide a wide range of options where users can add their unused coupons to make money from it. On the other hand, people who need this type of coupon also can benefit from the unused coupons of others.

3. **Security**: To enter the particular account, one's must-have a user id and password. Without these entities, the user can not access his/her account.

4. **Reliability**: The system is completed and updated from time to time and reduces the system failures as the new updates go on board.

5. **Availability**: Users can access this platform 24*7 as this is a C2C platform where customers can directly buy and sell coupons to another customer.

6. **Maintainability**: the system would be maintainable in such a manner that if any new requirement occurs then it should be easily incorporated into an individual module.

7. **Portability**: The user can access this platform anytime and on any device. So, it is easily accessible to the customer.

3.3 Detailed Module Description

3.3.1 Authentication

- This module provides sign-in and log-in facilities and authentication with JWT Tokens.
- In sign-in users have to pass some personal details to the system to create a new user account into the system.
- Using those credentials, users can log-in to the system later on, which is very easy.

3.3.2 Profile Verification & Update

- Through this module, verification of the user will be done and the user can update profile details.
- For profile verification, the system sends a one-time password to the registered email address. The user has to enter this OTP into the system to verify their email address and profile.
- Users can change their personal details like name, address, avatar, mobile no, and many more.

3.3.3 Add Coupon

- Using this module users can add new products to the system.
- To add a new product user has to give all product details like product name, details, category, and age of the product.

3.3.4 Search

- In this module, search and filter features are available.
- In search, the system provides different kinds of filters for easy search of products on the basis of category for the user.

3.3.5 Inquiry Coupon

- Users can request new Coupons here.
- If a user wants a Coupon for a particular purchase, which is not available in the system then the user can put a query request on the query page.
- These query requests are publicly visible to all the users on the query page.

3.3.6 Update and Delete the Coupon

- Here, the user can update their coupons and delete them.
- So, it can be flexible for users to commit to our service platform.

3.3.7 Transaction

- Users can Directly purchase their Coupons and receive payments via UPI. So, it will be straightforward for users to adopt the new platform environment.

3.4 Project SRS

3.4.1 Class Diagram

- **Visibility**: Use visibility markers to signify who can access the information contained within the class.

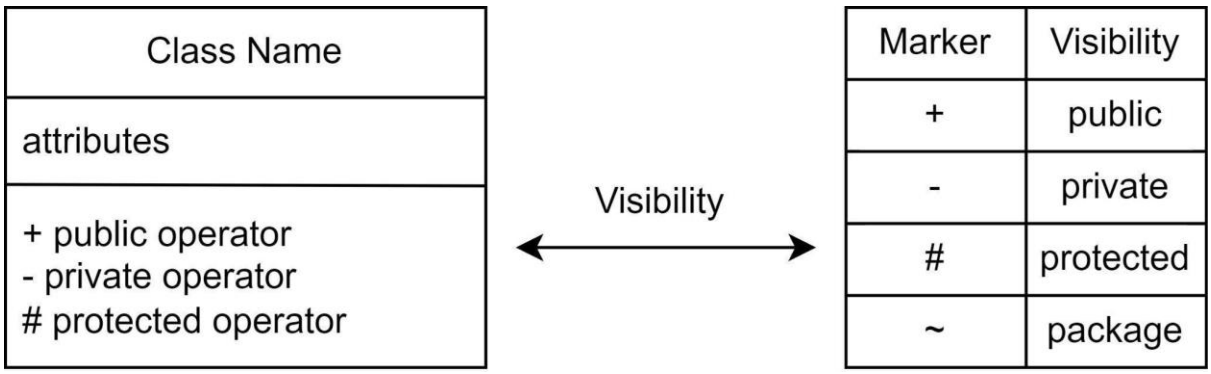


Figure 1 Class Diagram Visibility

- **Associations**: It Represents static relationships between classes.

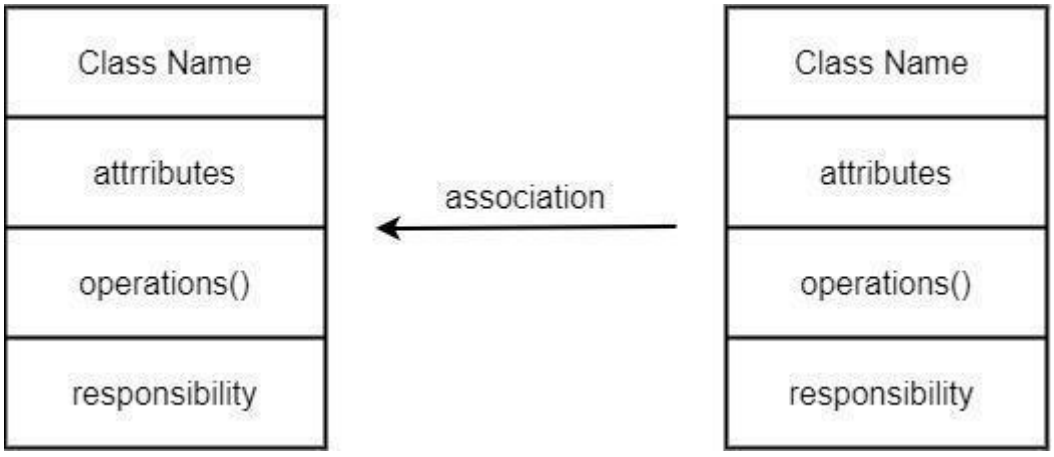


Figure 2 Class Diagram Association

- **Active Class**: It initiates and controls the flow of activities, while passive classes store data and serve other classes.

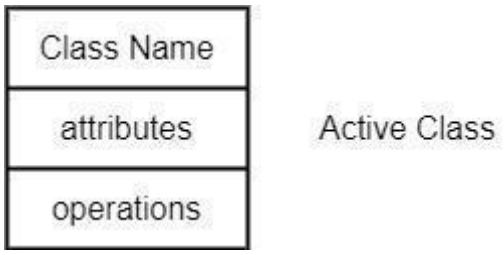


Figure 3 Active Class in Class Diagram

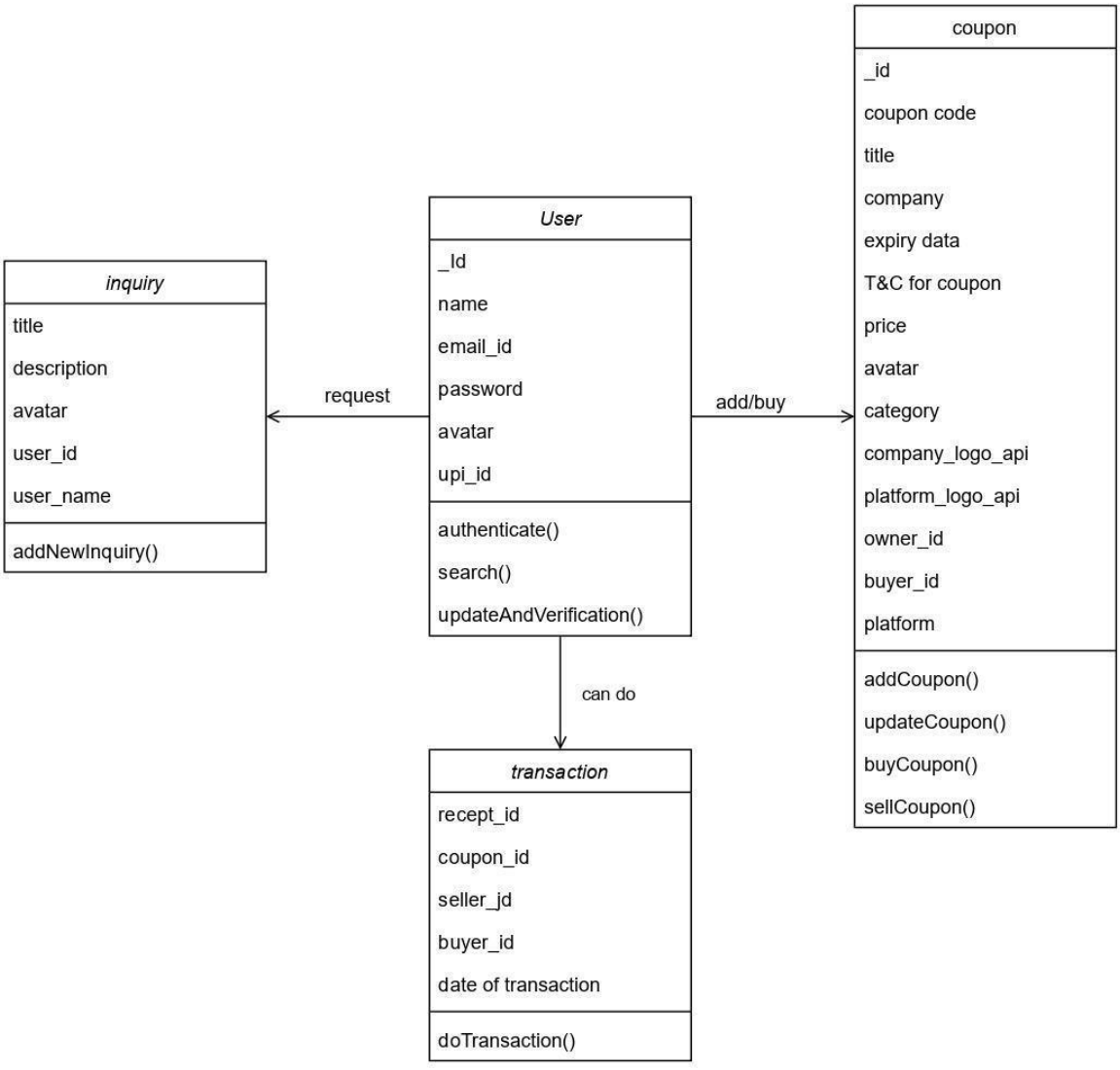


Figure 4 Class Diagram

3.4.2 Activity Diagram

We use an Activity Diagram to illustrate the flow of control in a system and refer to the steps involved in the execution of a use case. We modal sequential and concurrent activities using activity diagrams. So, we depict workflows visually using activity diagrams. An activity diagram focuses on the condition of flow and the sequence in which it happens. We describe or depict what causes a particular event using activity diagrams. UML models three types of diagrams namely, structure diagrams, interaction diagrams, and behavior diagrams. An activity diagram is a Behavioral Diagram.

Symbols used in Activity Diagram:

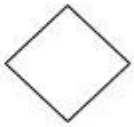
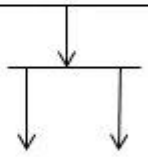
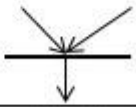
Sr. No	Name	Symbol
1.	Start Node	
2.	Action State	
3.	Control Flow	
4.	Decision Node	
5.	Fork	
6.	Join	
7.	End State	

Figure 5 Activity Diagram Symbols

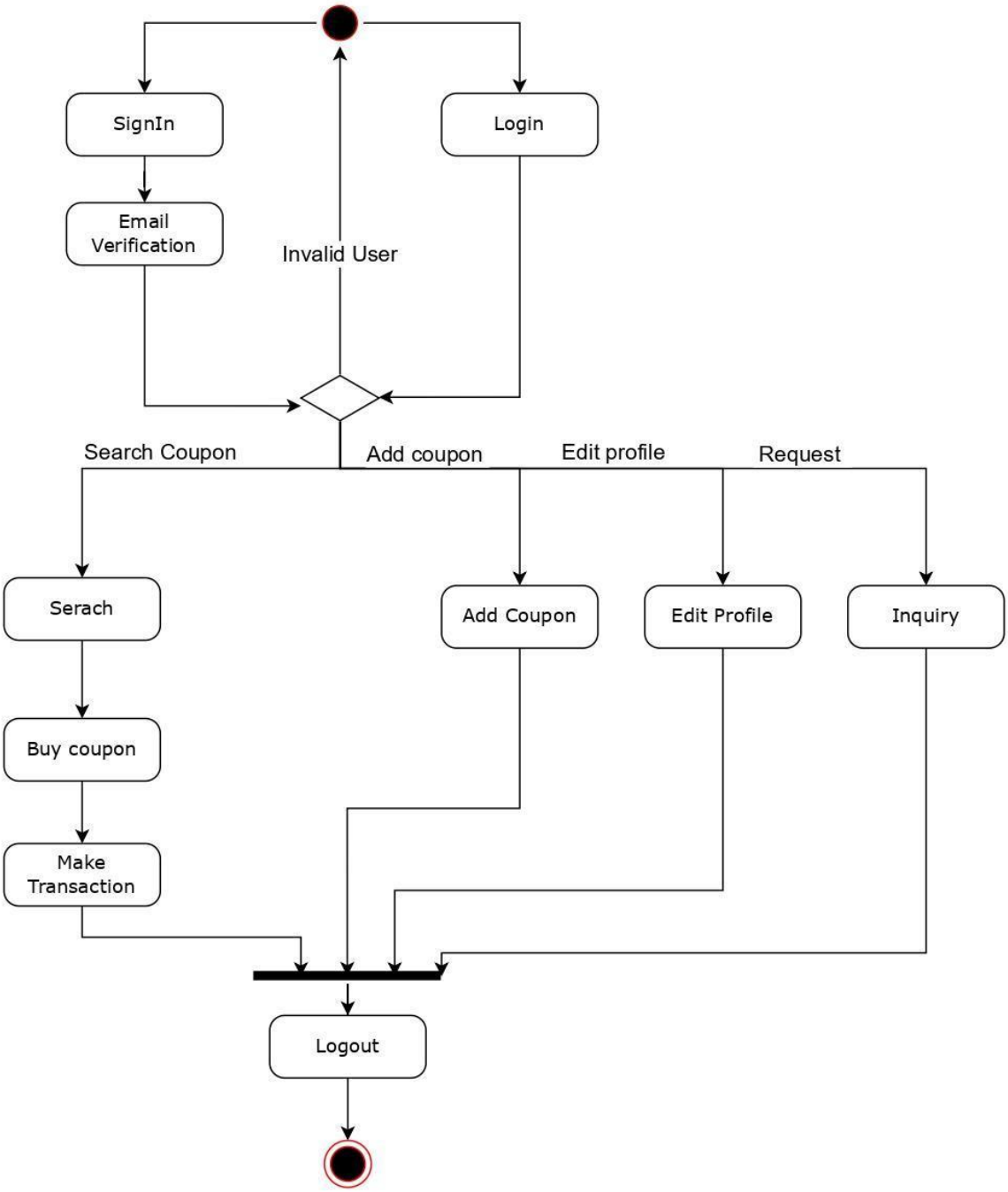


Figure 6 Activity Diagram

3.4.3 Use-case Diagram

Use-case diagrams are a common way to communicate the major functions of a software system. A use case diagram at its simplest is a representation of a user's interaction with the system that shows the relationship between the user and the different use cases in which the user is involved. A use case diagram can identify the different types of users of a system and the different use cases and will often be accompanied by other types of diagrams as well.

Use cases are nothing but system functionalities written in an organized manner. Now another thing that is relevant to the use cases is the actors. Actors can be defined as something that interacts with the system.

So in brief, the purposes of use case diagrams can be as follows:

- Used to gather requirements of a system.
- Used to get an outside view of a system.
- Identify external and internal factors influencing the system.
- Show the interaction among the requirements actors.

Symbols used in Use-case Diagram:

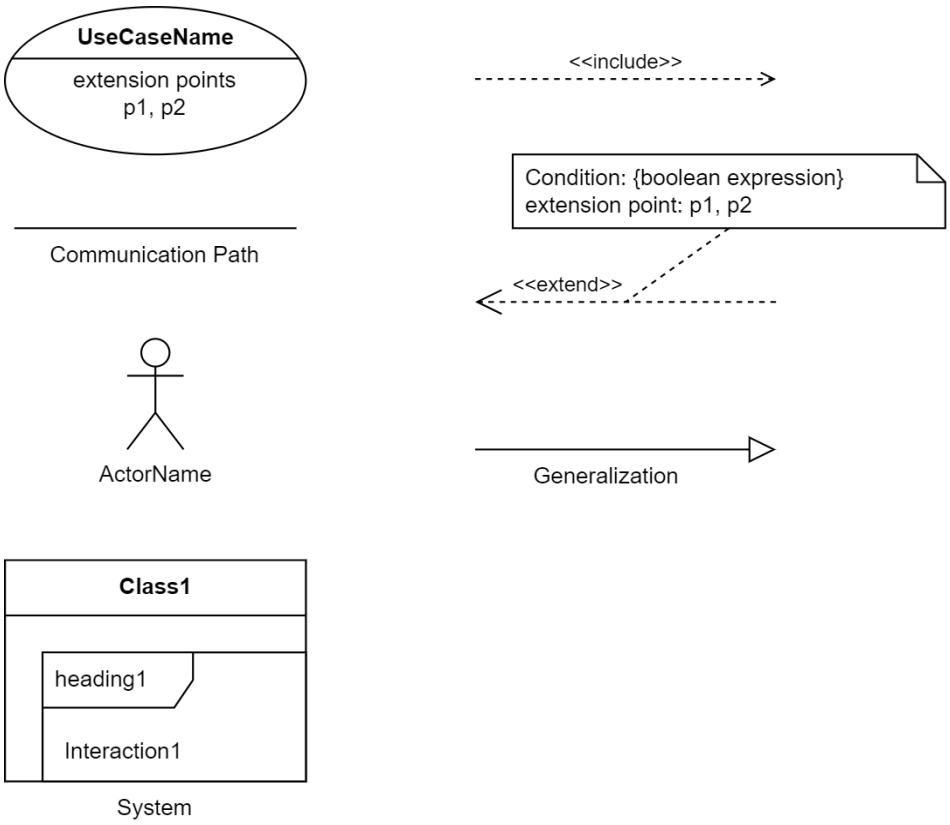


Figure 7 Use-case Diagram symbols

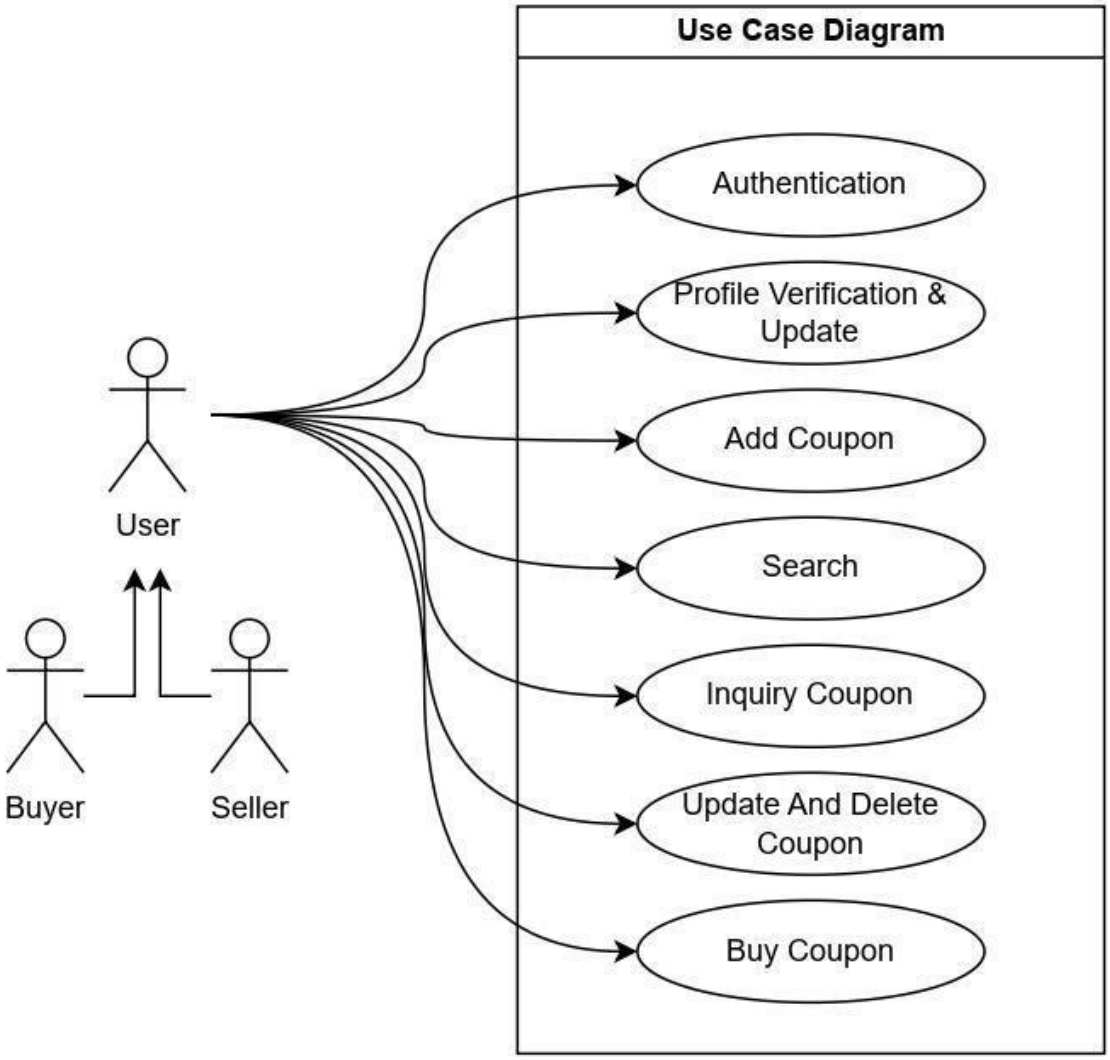


Figure 8 Use-case Diagram

3.4.4 Sequence Diagram

A sequence diagram represents the behavioural aspects of a system. A sequence diagram shows the interactions between the objects using passing messages from one object to another concerning time in a system.

A sequence diagram contains the objects of a system and their lifeline bar and the messages passing between them. Objects appear at the top portion of the sequence diagram. The object is shown in a rectangle box. The name of the object precedes a colon ':' and the class name, from which the object is instantiated. The whole string is underlined and appears in a rectangle box. A downward vertical line from the object box is shown as the lifeline of the object. A rectangle bar on the lifeline indicates that it is active now. Messages are shown as an arrow from the lifeline of the sender object to the lifeline of the receiver object and labelled with the message name.

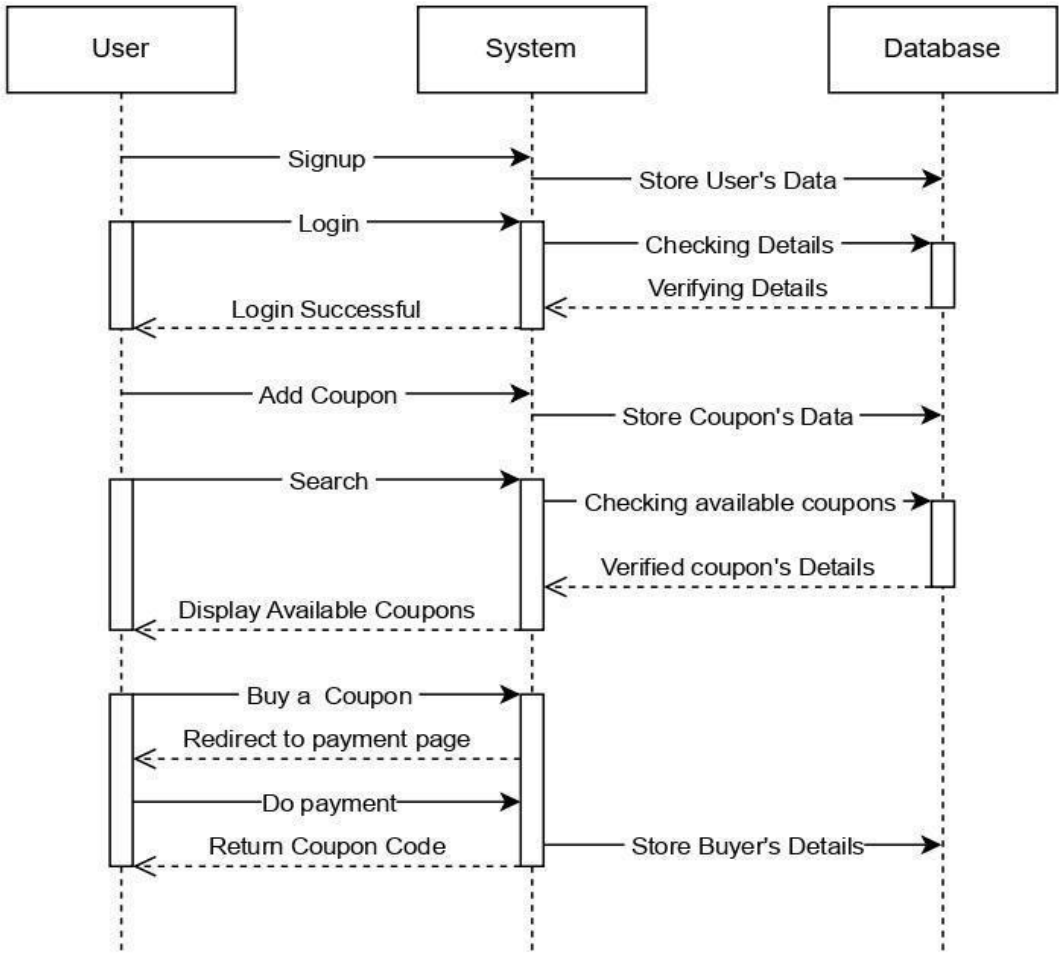


Figure 9 Sequence Diagram

3.4.5 ER-Diagram

An entity relationship diagram (ERD), also known as an entity-relationship model, is a graphical representation that depicts relationships among people, objects, places, concepts, or events within an information technology (IT) system. An ERD uses data modelling techniques that can help define business processes and serve as the foundation for a relational database.

Symbols used in ER-Diagram:

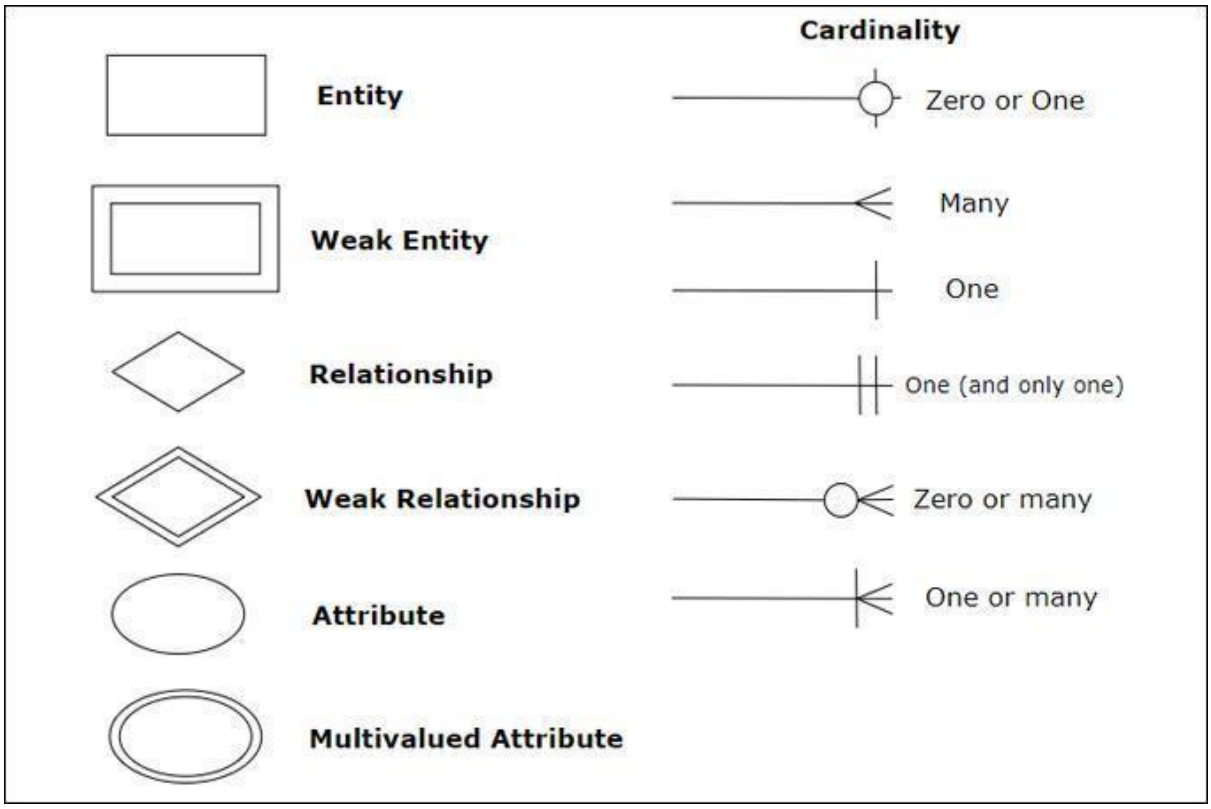


Figure 10 Symbols of ER-Diagram

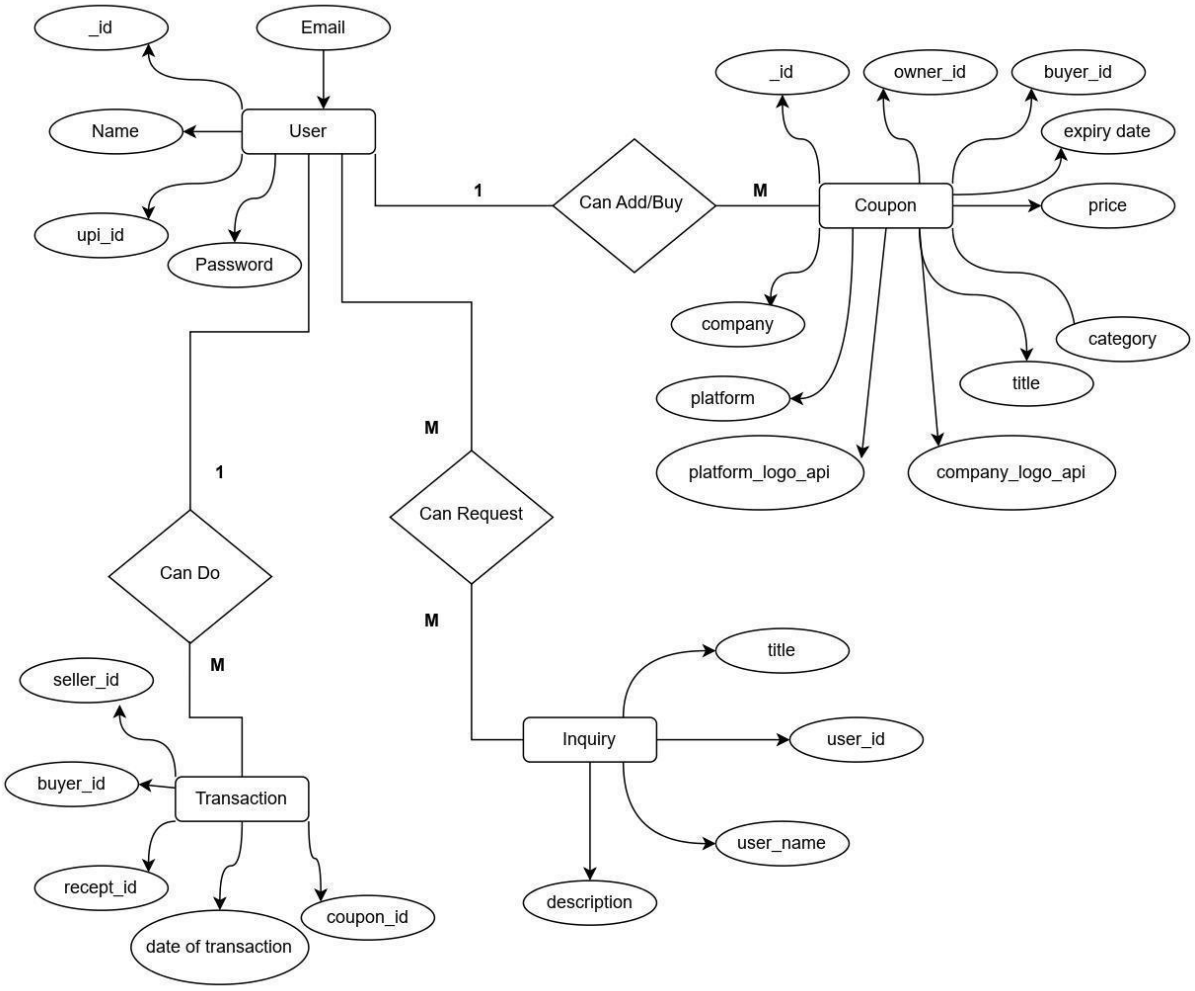


Figure 11 ER-Diagram

3.4.6 DFD Diagram

A data-flow diagram is a way of representing a flow of data through a process or a system. The DFD also provides information about the outputs and inputs of each entity and the process itself. A data-flow diagram has no control flow, there are no decision rules and no loops.

Figure 12 Level-0 DFD Diagram

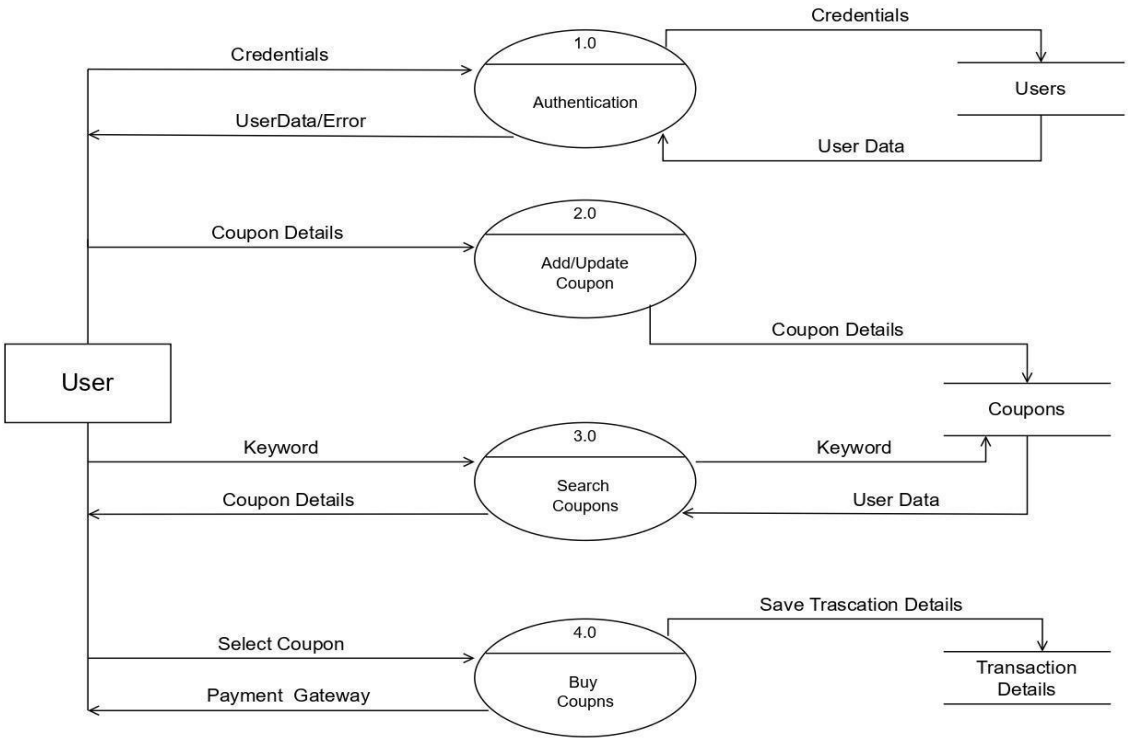


Figure 13 Level-1 DFD Diagram

3.5 Data Dictionary

Table Name: User

Description: To store User's details

Primary Key: _id

Sr no	Name	Datatype	Constraint	Description
1	_id	string(100)	Primary Key, Not Null	To store unique id no
2	Name	string(200)	Not Null	To store user name
3	Email	string(200)	Not Null, Unique	To store user email id
4	Password	string(200)	Not Null	To store user password
5	Upi_id	string(200)	Not Null	To store user's UPI id
6	emailVerified	boolean	Not Null	To check email is verified or not
7	Avatar	string(200)	Not Null	To store profile URL

Table 1 User Database

Table name: Coupons

Description: To store coupon's details

Primary Key: _id

Sr no	Name	Datatype	Constraint	Description
1	_id	string(100)	Primary Key, Not Null	To store unique id
2	Title	string(100)	Not Null	To store product title
3	Terms&Con	string(200)	Not Null	To store product's description
4	Code	string(100)	Not Null	To store code of coupon
5	Expiry_date	string(100)	Not Null	To store coupon's expiry date
6	Price	string(100)	Not Null	To store coupon's price
7	Company	string(100)	Not Null	To store which company's coupon is it
8	Platform	string(100)	Not Null	To store coupon is applied on which platform
9	Seller_id	string(100)	Not Null, Unique	To store seller's user id
10	Buyer_id	string(100)	Not Null, Unique	To store buyer's user id
11	Category	string(100)	Not Null	To store coupon's category
12	Company_logo	string(200)	Not Null	To store company's logo
13	Platform_logo	string(200)	Not Null	To store platform's logo
14	Coupon_verification	Boolean	Not Null	To check coupon is valid or not

Table 2 Product Database

Table Name: Inquiry

Description: To store new inquiry

Primary Key: _id

Sr no	Name	Datatype	Constraint	Description
1	_id	number(100)	Primary Key, Not Null	To store unique id
2	UsersId	string(100)	Not Null	To store users id
3	User_name	string(100)	Not Null	To store user's name
4	Title	string(100)	Not Null	To store coupon's title
5	Desc	string(100)	Not Null	To store coupon's Description
6	Avatar	string(100)	Not Null	To store user profile picture

Table 3 Inquiry Database

Table Name: Transaction

Description: To store transaction

Primary Key: _id

Sr no	Name	Datatype	Constraint	Description
1	_id	number(100)	Primary Key, Not Null	To store unique id
2	Recept_id	string(100)	Not Null	To store transaction id
3	Coupon_id	string(100)	Not Null	To keep coupon id
4	Seller_id	string(100)	Not Null	To store seller's user id
5	Buyer_id	string(100)	Not Null	To store buyer's user id
6	Data_of_transactoion	string(100)	Not Null	To store date of transaction

Table 4 Transaction Database

3.6 Timeline Chart

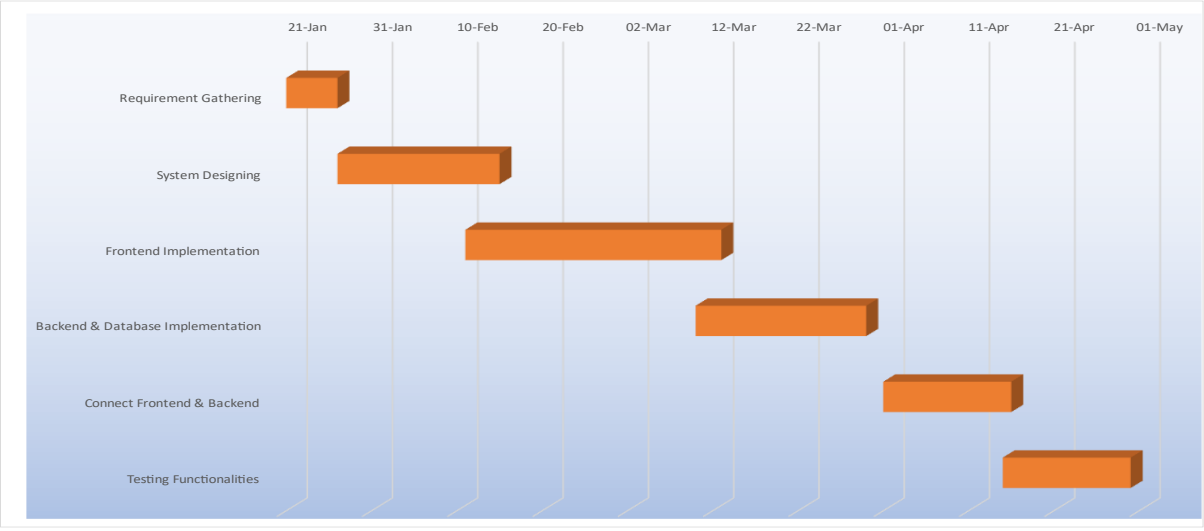


Figure 14 Project Timeline Chart

Chapter 4: Implementation and Testing

4.1 Software and Tools

Hardware Requirements:

Hardware that supports web apps (E.g., Mobile, Computer). Hardware must be there until it is hosted on cloud servers and ready to pitch. After that, anyone can use it through any smartphone or pc that has a web browser inside.

Software Requirements:

- Front-end:
    - **ReactJs:** It is an open-source Javascript framework and library developed by Facebook. It's used for building interactive user interfaces and web applications quickly and efficiently with significantly less code than you would with vanilla Javascript.
    - **Mantine:** Mantine is a React components library to provide a great user and developer experience. Similar to popular UI frameworks like Material UI, Mantine contains fundamental features like theming, styling, and reusable components included in the core package: @mantine/core.
    - **Typescript**: TypeScript is a free and open-source high-level programming language developed and maintained by Microsoft. It is a strict syntactical superset of JavaScript and adds optional static typing to the language. It is designed for the development of large applications and transpile to JavaScript.

- Back-end:
    - **NodeJs:** It is a single-thread, open-source, cross-platform runtime environment for building fast and scalable server-side and networking applications. It runs on a V8 Javascript engine, and it uses event-driven, non-blocking I/O architecture, which makes it efficient and suitable for real-time applications.

- **ExpressJs:** it is a node js web application framework that provides broad features for building web and mobile applications. it is used to build a single page, multipage, and hybrid application. it is a layer built on the top of the node js that helps manage servers and routes.
- **MongoDB:** It is an open-source NoSQL database management system. NoSQL is used as an alternative to traditional relational databases. NoSQL databases are quite useful for working with large sets of distributed data. MongoDB is a tool that can manage document-oriented information, and store or retrieve information.
- **JWT:** JSON Web Token is an open standard for securely transmitting information between parties as a JSON object. It is compact, readable, and digitally signed using a private key or a public key pair by the identity provider.

4.2 User Interface and Snapshots

Landing Page: This is the main home page of our platform.

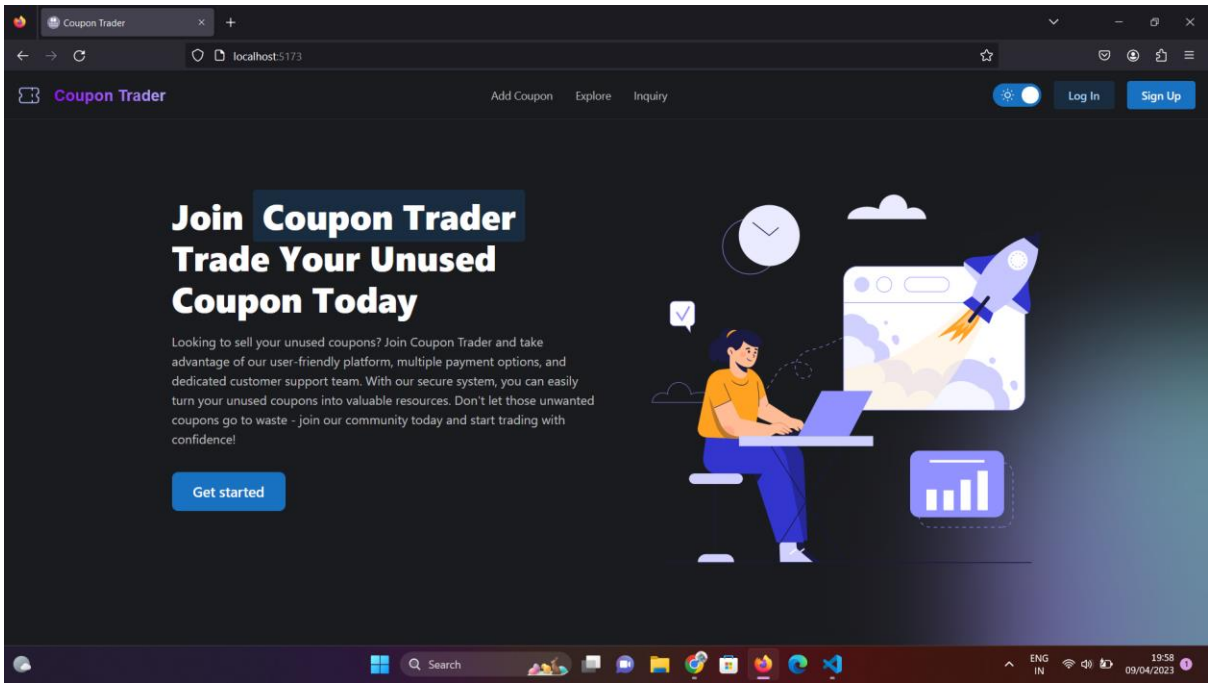


Figure 15 Landing Page

Theme Change: Our platform has two theme black and white.

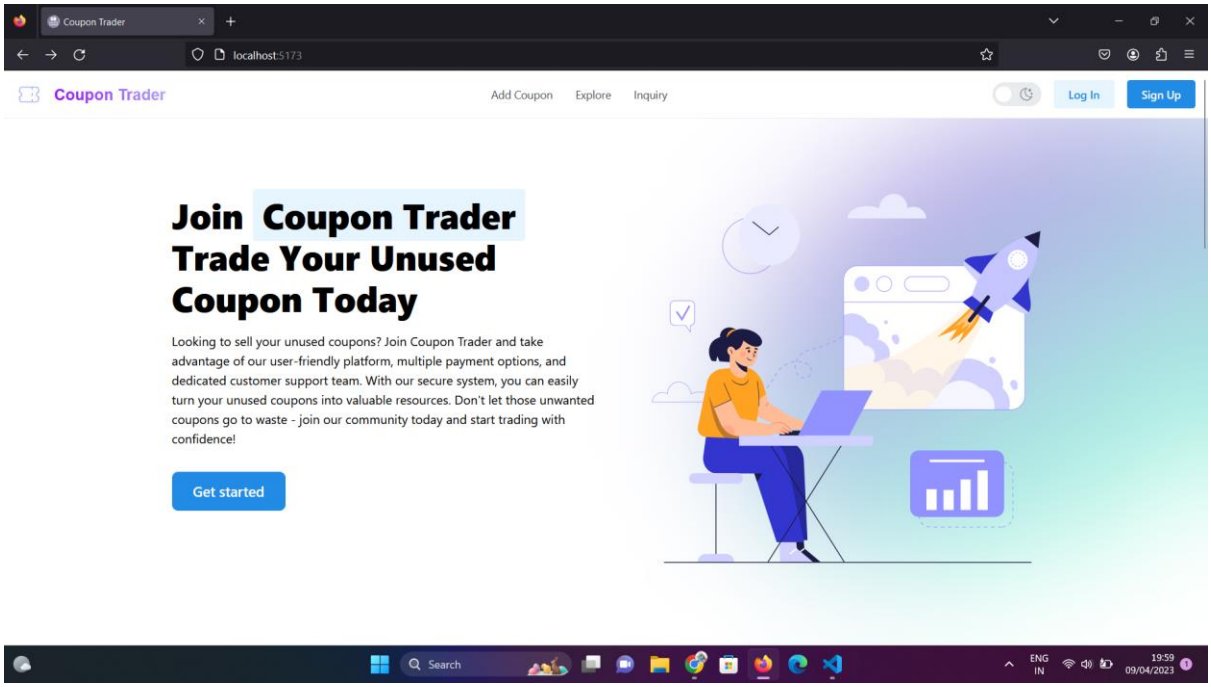


Figure 16 Landing Page with Theme Change

Features: This shows main frame features of our platform.

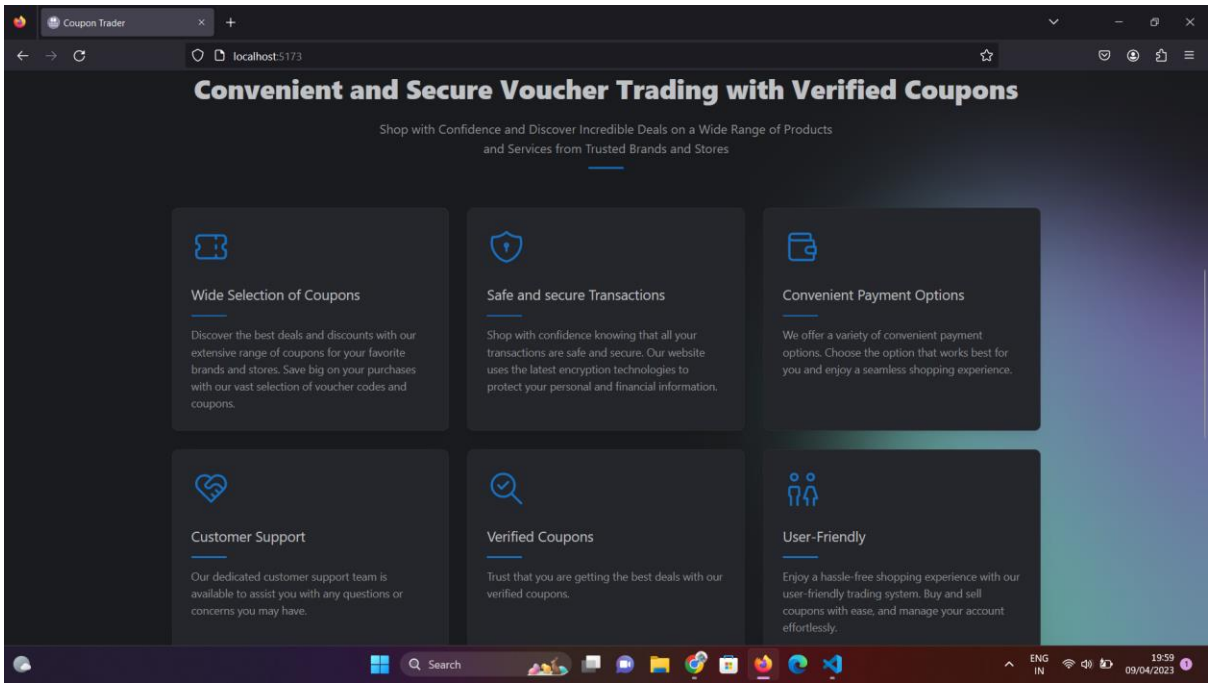


Figure 17 Features of Platform

FAQ: This shows the Frequently asked questions in our platform.

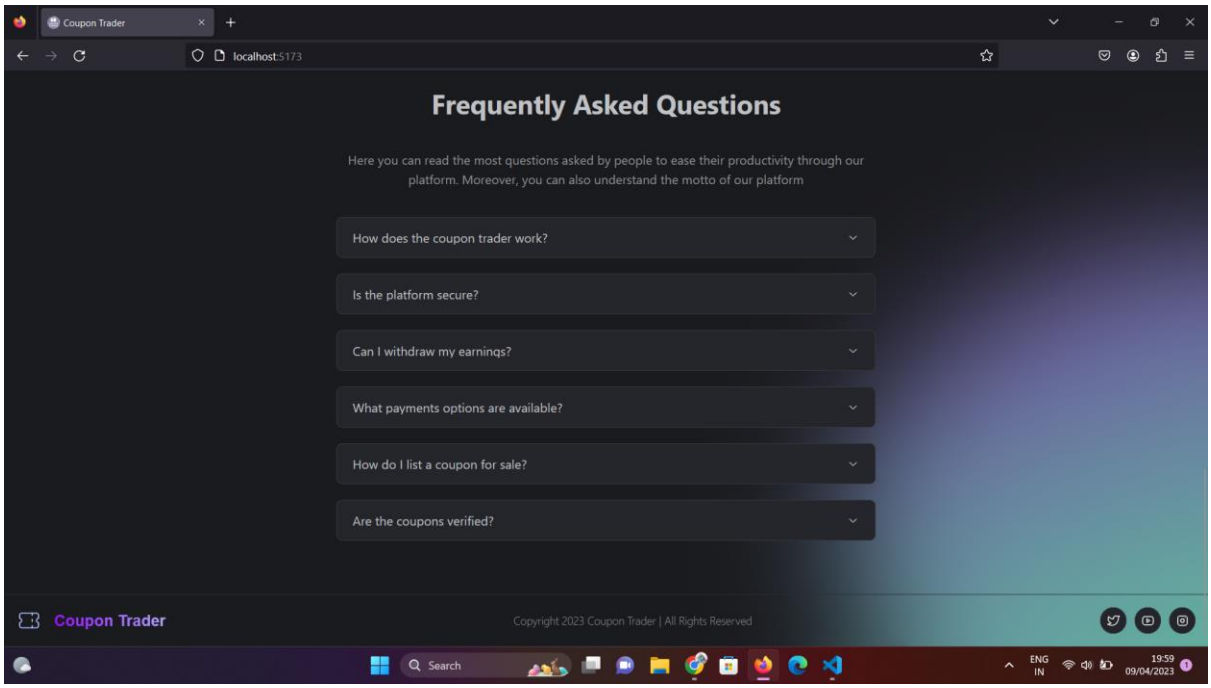


Figure 18 Frequently Asked Questions

SignUp: Users can register themselves from the signup page.

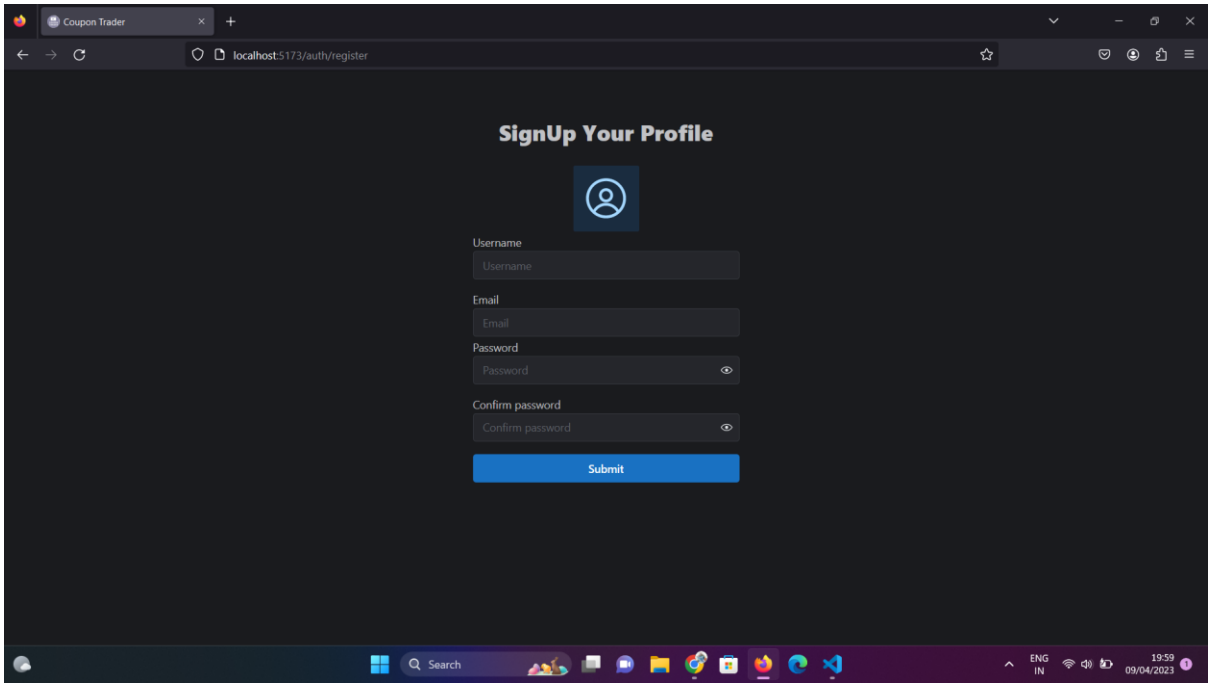


Figure 19 SignUp page

LogIn: User can enter to our platform using login credentials.

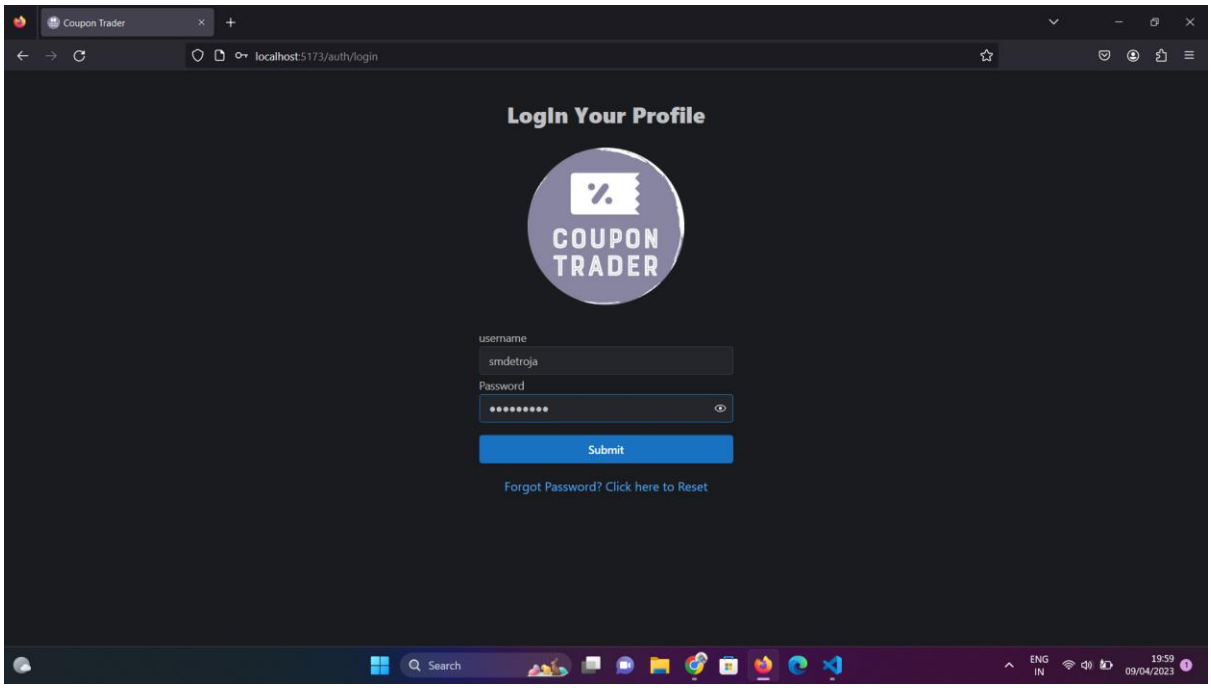


Figure 20 LogIn page

Email Verification Page: This page pop-ups when user login to our platform. Here, user gets an email with link of verification and after clicking that link, user will be verified.

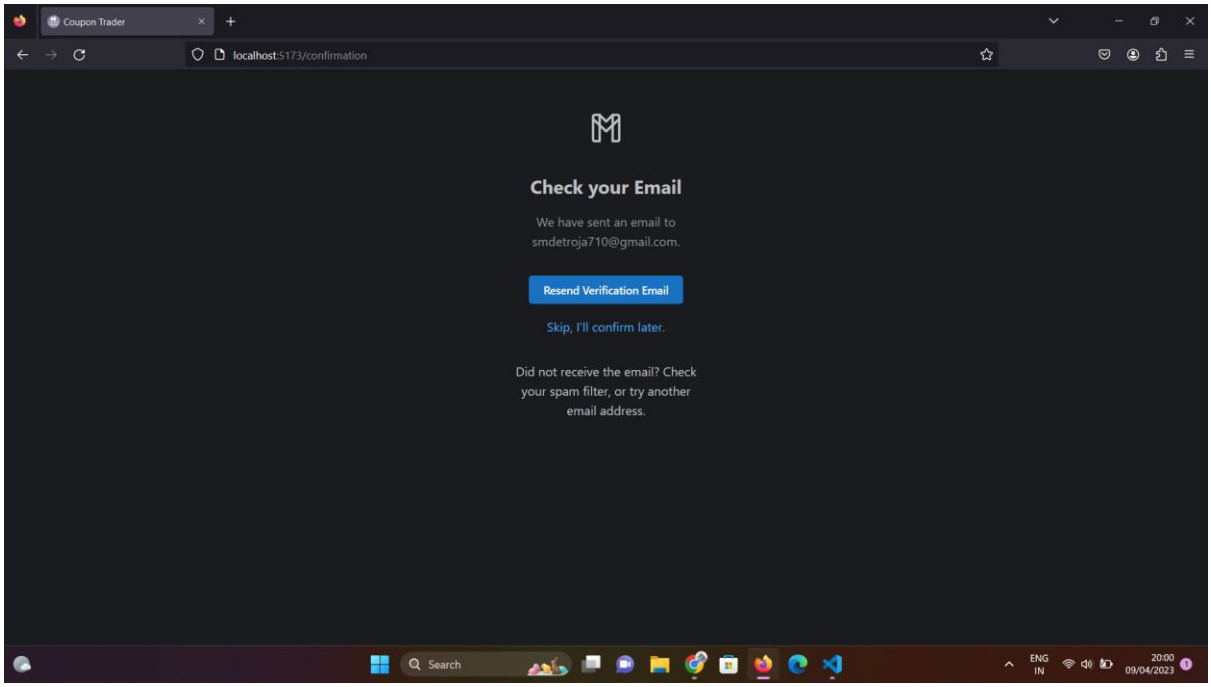


Figure 21 Email Verification

User Dashboard: Main user dashboard of user from where user can see its activities.

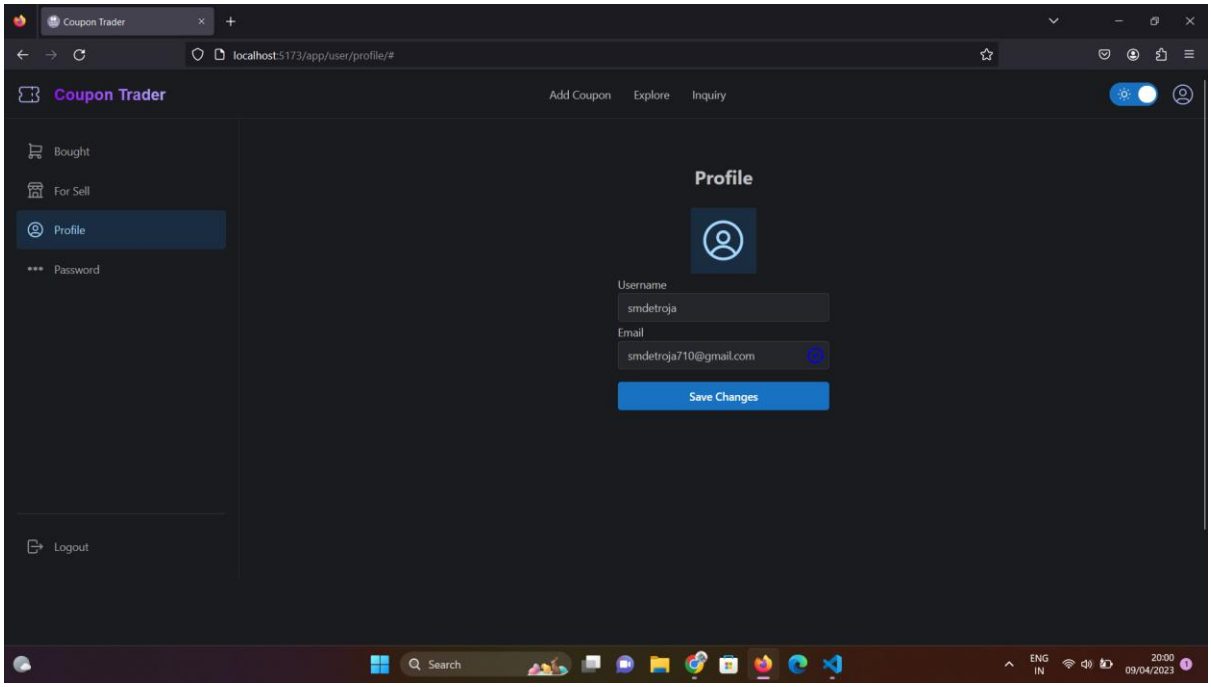


Figure 22 User Dashboard

Change Password: Users can change their password after login to their account.

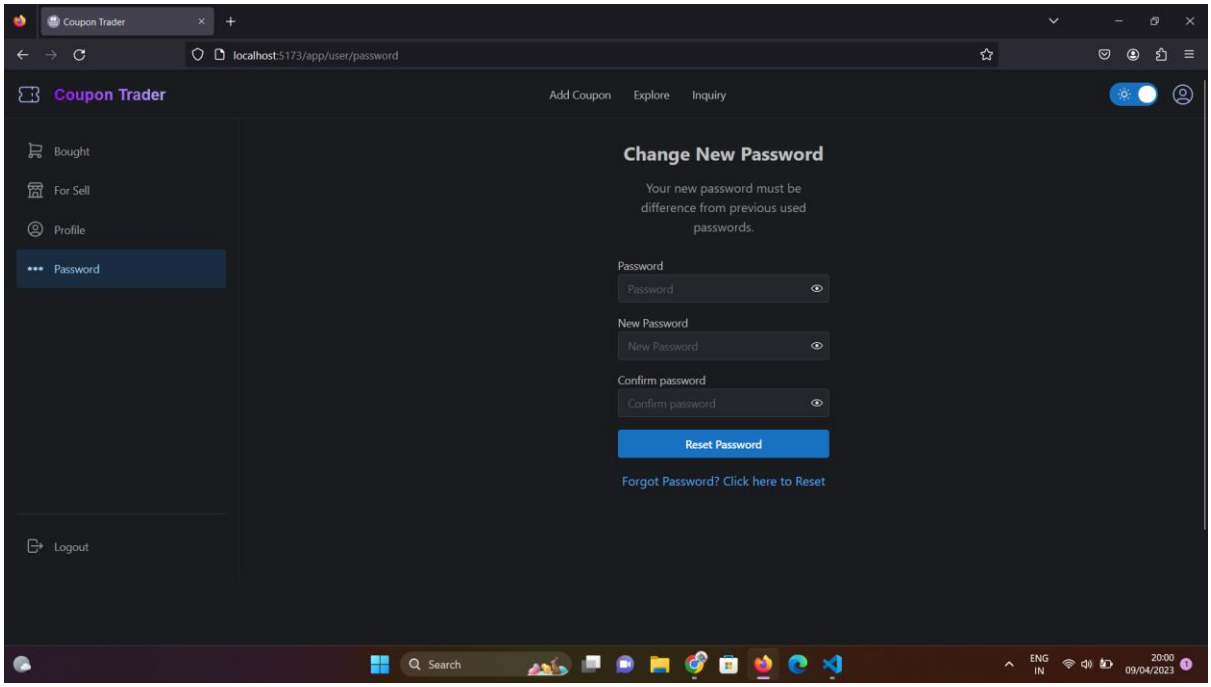


Figure 23 Change Password

Add Coupons: Users can add its coupons which they want to sell.

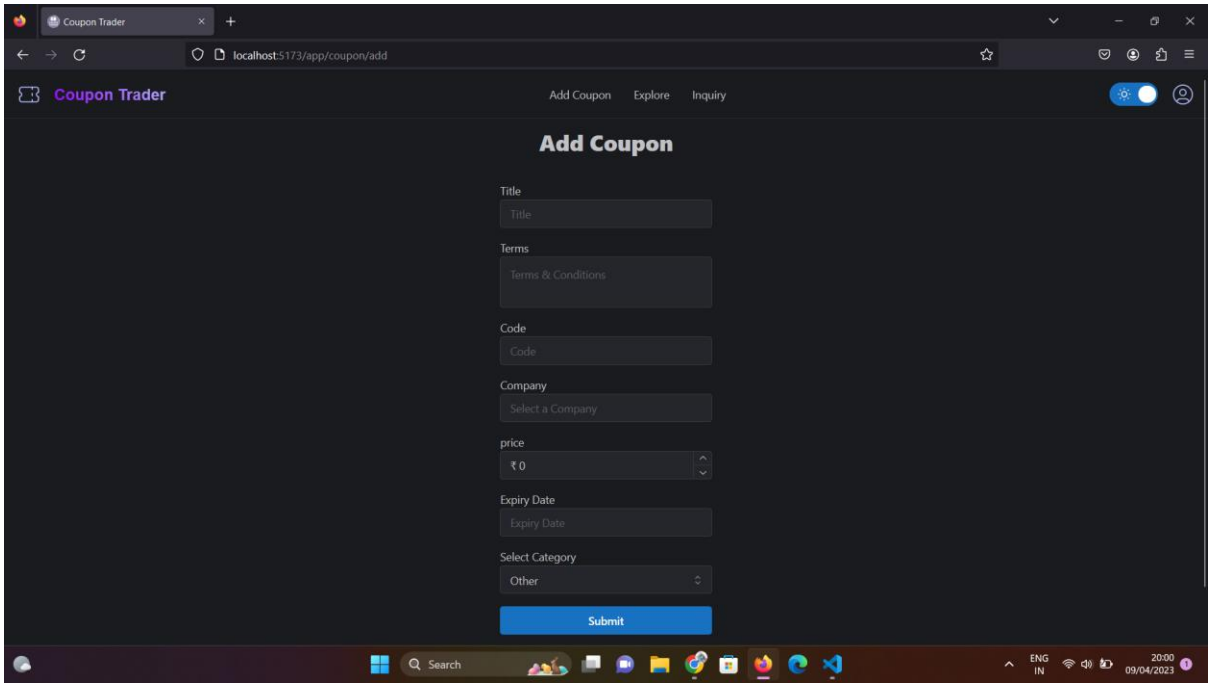


Figure 24 Add Coupons

Bought Coupons: Here users can see their bought coupons.

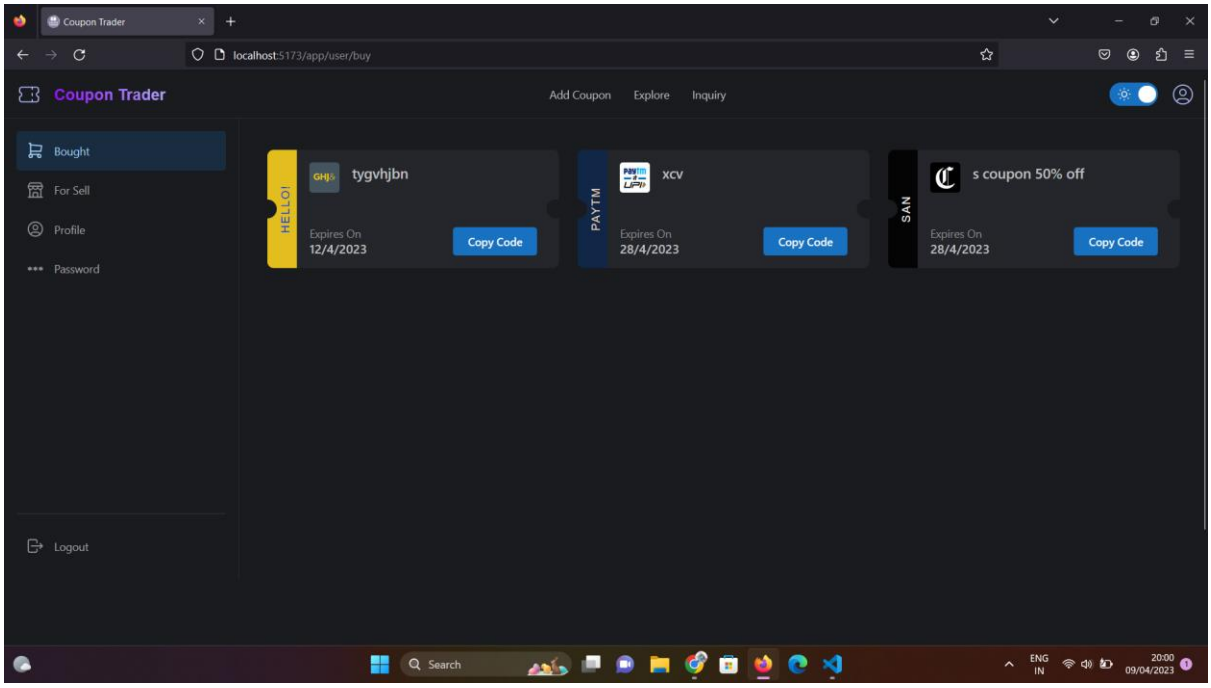


Figure 25 Bought Coupons

Coupons For Sell: Users can see their coupons available for selling.

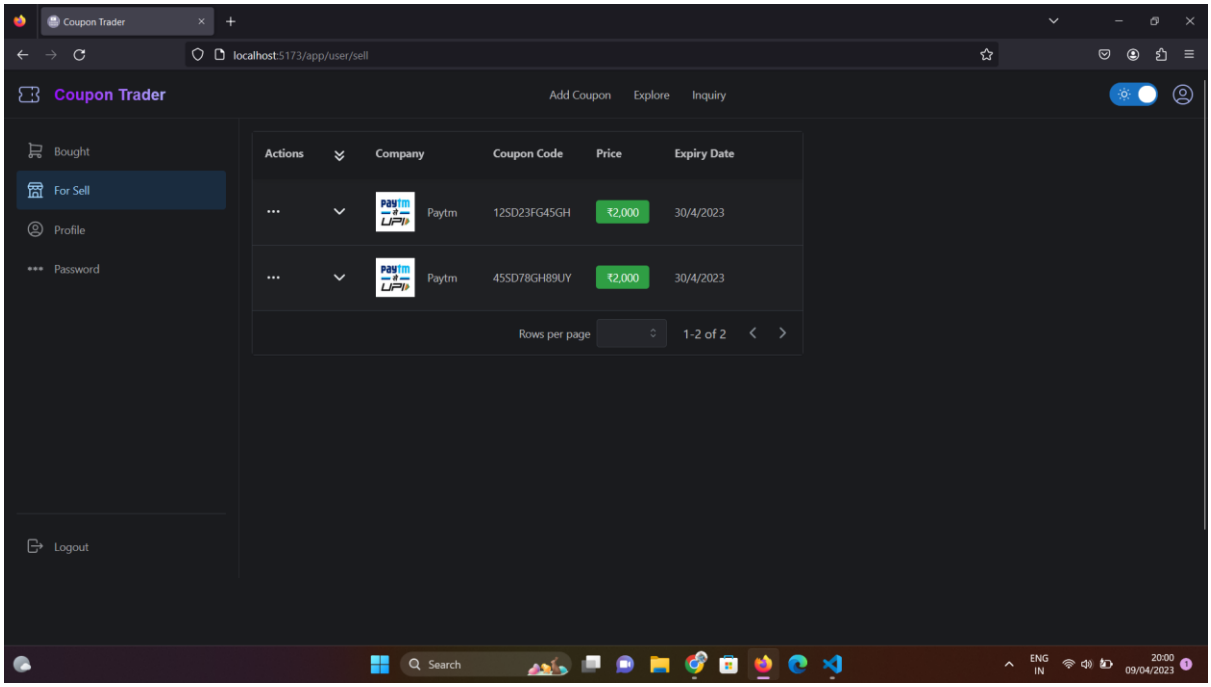


Figure 26 Coupons for Sell

Explore: This page shows all the coupons available for selling.

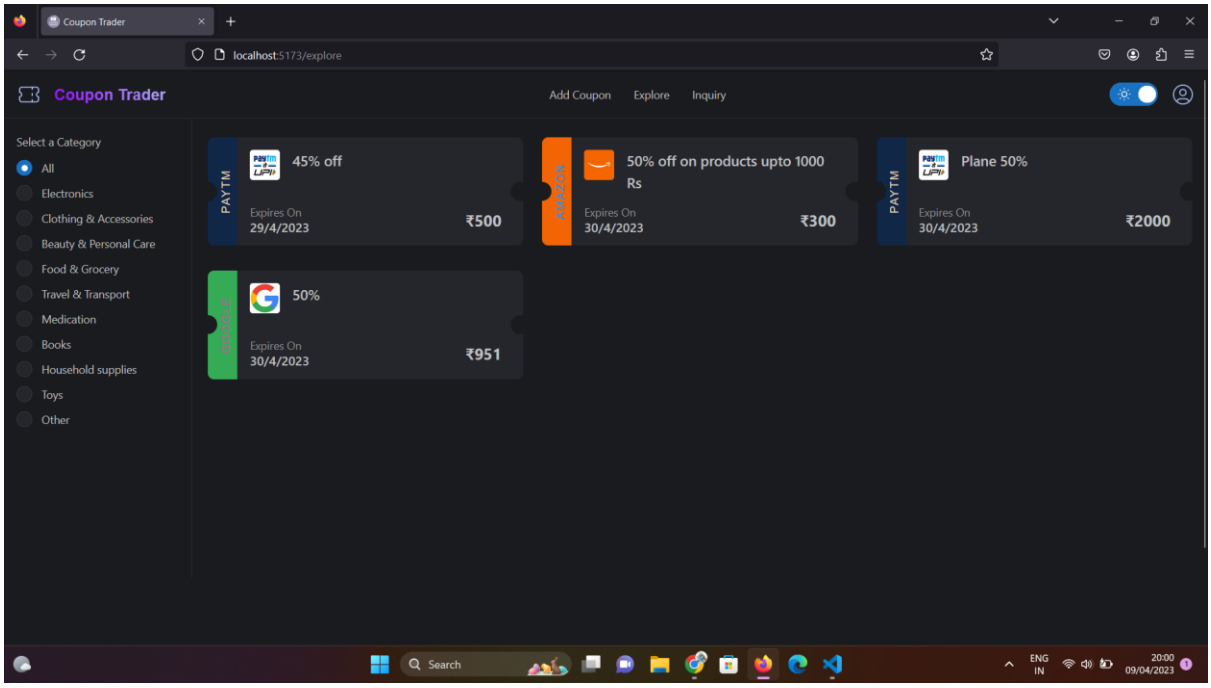


Figure 27 Explore Page

Coupon Details: This page would pop-up when the user clicks on a coupon showing in the explore page.

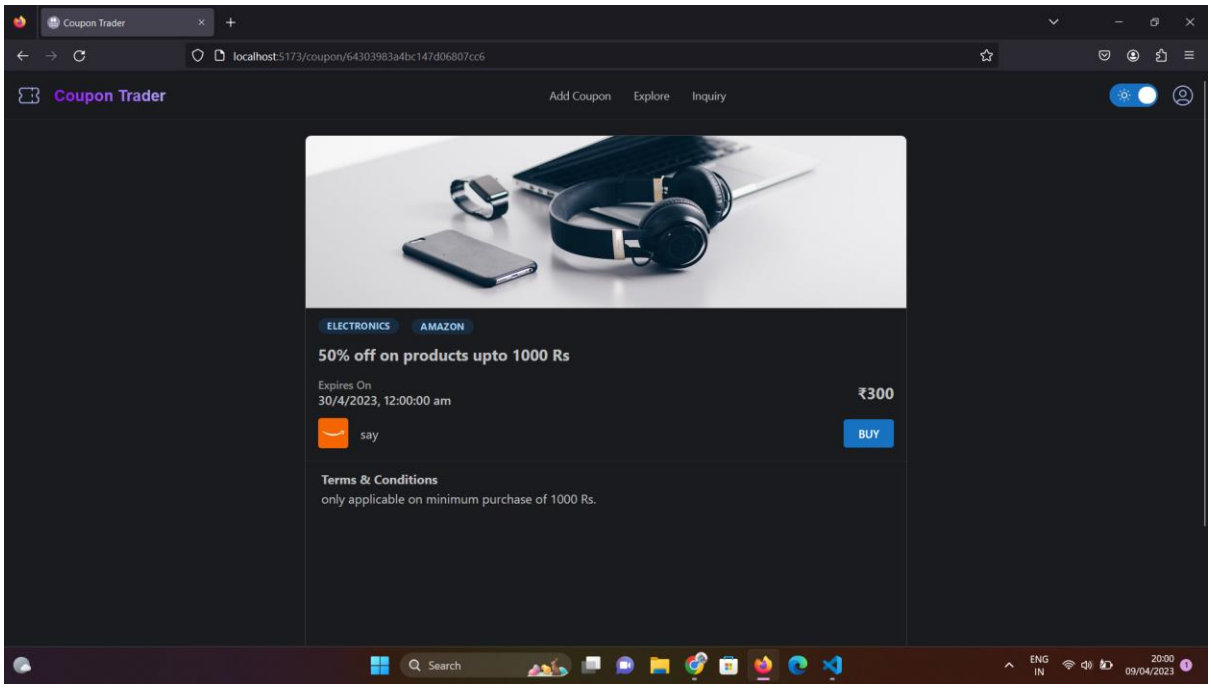


Figure 28 Coupon Details

Success Page: This page pop-ups when the user successfully done the payments.

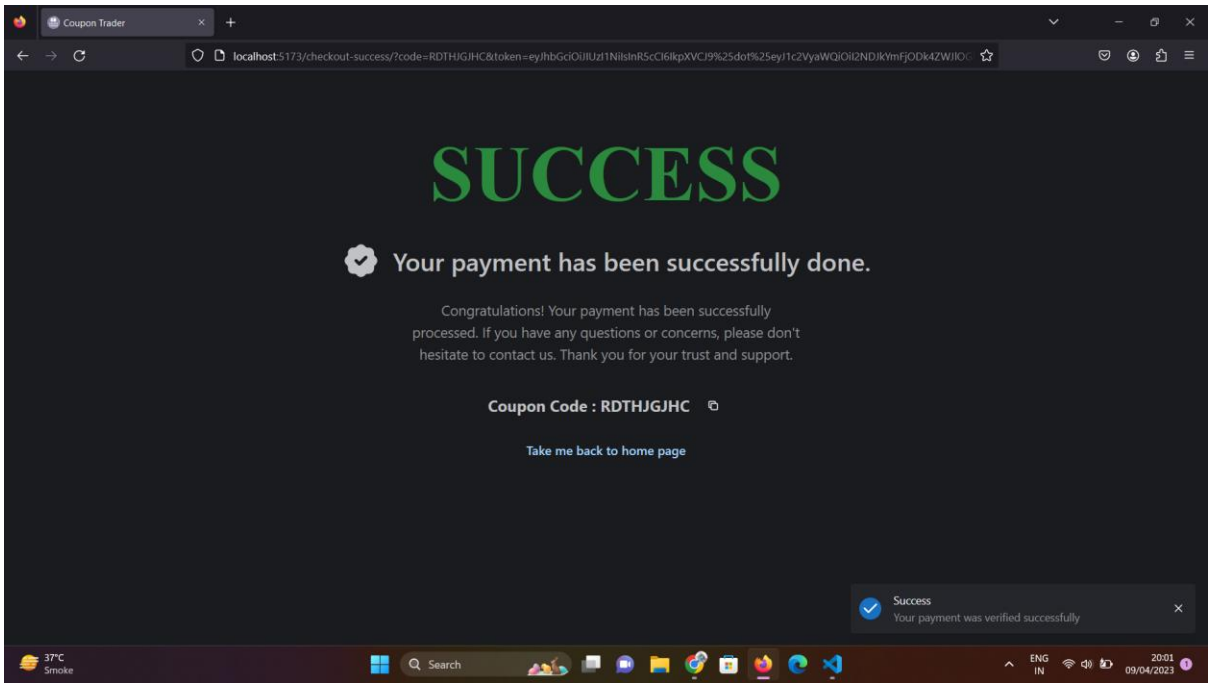


Figure 29 Payment Success Page

Chapter 5: Conclusion and Future Work

5.1 Conclusion

The Coupon Trader project aimed to build a full-stack website where users can sell and buy coupons from other services. The website included features such as user registration and login, a listing form for users to submit new coupons for sale, a search feature, a shopping cart, and checkout system, and a payment gateway integration.

The project was completed and launched on a hosting service. However, to maintain the website's performance and meet the user's needs, regular monitoring and maintenance will be necessary.

In conclusion, the Coupon Trader project has successfully met its objectives by providing a platform for users to buy and sell coupons from other services. The website is user-friendly, secure, and has a good revenue-generating capability. With regular monitoring and maintenance, it has the potential to grow and become a successful e-commerce platform.

5.2 Future work

Coupon Trader is very useful for the users because of the pandemic time all the e-commerce companies give gift cards and vouchers for purchasing their products and also, and we get cashback from payment apps like Google Pay, Amazon Pay, and so on. Now they have found the base of customers so now they give gift cards and vouchers that are often unusable for us. So here we provide a web application platform where users can sell their unused gift cards and vouchers and purchase useful gift cards and vouchers.

- We can also include a section for negotiation where users can negotiate on purchasing and selling vouchers and gift cards.
- We can also add another section for globally circulated vouchers from other websites using APIs (because sometimes they may work or may not).

- We would also develop an android app and launch it on the play store which will make our platform more dynamic and global.
- Upgrade the user interface for more attraction and availability for users.
- We can also implement a notification feature as people can get notified we sometimes upload a new voucher or gift card.

Chapter 6: References

1. *About | Node.js*. (n.d.). Node.js. https://nodejs.org/en/about
2. *Getting Started – React*. (n.d.). Getting Started – React. https://reactjs.org/docs/getting-started.html
3. *Mantine*. (n.d.). Mantine. https://mantine.dev/
4. *Documentation - TypeScript for JavaScript Programmers*. (n.d.). TypeScript: Documentation - TypeScript for JavaScript Programmers. https://www.typescriptlang.org/docs/handbook/typescript-in-5-minutes.html
5. *Installing Express*. (n.d.). Installing Express. https://expressjs.com/en/starter/installing.html
6. *What is MongoDB Atlas?* (n.d.). What Is MongoDB Atlas? — MongoDB Atlas. https://www.mongodb.com/docs/atlas/
7. A. (n.d.). *JWT.IO - JSON Web Tokens Introduction*. JSON Web Token Introduction - jwt.io. http://jwt.io/
8. E. (n.d.). *Earn Cash Back at stores you*. Rakuten. https://www.rakuten.com/
9. *Ibotta: Earn Cash Back & Save With In-App Offers*. (n.d.). Ibotta. https://home.ibotta.com
10. *CouponDunia*. (n.d.). CouponDunia. https://www.coupondunia.in/
11. *Software Requirement Specification (SRS) Format - GeeksforGeeks*. (2020, June 18). GeeksforGeeks. https://www.geeksforgeeks.org/software-requirement-specification-srs-format/