



Daffodil
International
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Grocery Delivery Application (Go Mart)

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A Project submitted in partial fulfillment of the requirement for the degree of

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APPROVAL

This report is titled as **“Go Mart”** submitted by Md Sazzad Hossain, ID No. 171-35-1898 to the Department of Software Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirement for the degree of B.Sc in Software Engineering and approval as to its style and contents.

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Without each of them, the output of this project report would not be possible.

DECLARATION

We hereby declare that this project report has been done by us under the supervision of KAUSHIK SARKER, ASSOCIATE PROFESSOR & ASSOCIATE HEAD, Department of Software Engineering, Daffodil International University. We also declare that neither this report nor any part of this report has been submitted elsewhere for award of any degree.

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Chapter 1

Introduction

1.1 Introduction:

The Go Mart is a web store that can be navigated solely through the use of your voice. One of the most quickly expanding areas of business is online commerce. More and more businesses are creating websites designed to facilitate online commerce. Shopping online is so normal that it hardly merits mention.

A system administrator oversees and takes care of Go Mart. The administrator must handle all product management tasks. The product may be managed and shipped directly from the vendor. A user may join the site, log in, etc. after registering.

1.2 Purpose:

This application saves end user time. The site is quick and hands-free. The objective of this project is to develop a general-purpose internet store where individuals may buy groceries at home. This implementation study will focus on online groceries. An online store is a virtual store where customers may explore inventory and buy goods. The goods may go in a shopping basket. At checkout, the items in the cart will be presented as an order. More information are needed to complete the transaction. The consumer can complete by voice or the app. A consumer must often supply a billing address, postal address, delivery choice, and credit card information. After placing an order, the consumer gets an email.

1.3 Objectives:

The Go Mart we are going to build will provide solutions for the problems of application manual system.

Accessibility: This system may be accessed without difficulty at any time or from any location. This system just needs to connect to the internet in order to apply the Membership section, regardless of whether the person in question is an administrator or an ordinary user. Otherwise, connect to the internet and log in as the administrator user in order to register more users or users themselves..

Security: By restricting access to only authorized administrators and verified users, the system ensures the privacy of all stored data and information. Users of the system who possess both a working email address and password are considered to be valid users.

User Friendly: The suggested system is both background-friendly and user-friendly, making the inefficient functionalities easier to utilize. After logging in, the administrator is presented with a summary of the business's financial status, including sales, shipments, profits, losses, and other metrics.

Time Consuming: When compared to the time-consuming and error-prone manual approach, this one can quickly locate and input records.

Graphical User Interface: User satisfaction with the suggested system is high due to the pleasant graphical experience it offers.

Device Facility: The system has complete responsiveness. Full accountability for the system, ensuring that it has access to every possible resource (laptop, smart phone, tab).

1.4 Challenges:

A mechanism for verifying the integrity of an application's data is essential. Safety is a crucial concern that must be taken carefully. As the world of information technology expands, so does the fear of intrusion. When it comes to matters of security, however, we are decades behind. Technology has not yet reached this area. Because of this, we've been working hard to design this authentication application system for the Go Mart.

Chapter 2

Background Study

2.1 Introduction:

The Go Mart is an application that is built on top of the Mern Stack. With this application, you may buy any goods at any location just by using your voice. This is the internet market place where you may purchase the thing that best suits your requirements. This is an overview of Go Mart; there are many featured items that are not included right now. The Go Mart will be coming out with all of its featured stores, such as Chaldal, very soon. The convenience and increased dependability that come with modern online living for customers are two benefits that have resulted from the widespread adoption of online buying.

2.2 Related Works:

Here are just a few examples of the many different kinds of online shops you may find in Bangladesh.

1. Chaldal.com - By combining human expertise with cutting-edge digital tools, this website will provide cutting-edge Online Solutions for a wide variety of consumer needs.
2. Shwapno.com - The Bangladeshi company Shwapno combines an online marketplace with a network of physical businesses to provide customers with healthy, wholesome options.

Reference: Chaldal.com, Shwapno.com

2.3 Comparative Studies:

In the near future, electronic commerce, especially when paired with mobile commerce, will likely emerge as a major trend in commercial activity all over the globe. Currently, the Asian and other countries is seeing a revolution in electronic commerce and mobile purchasing.

The internet has sparked a tidal wave of change. Recent shifts in communication habits have led to the rise of online customer service portals. In response, the internet is propelling the

development of cutting-edge channels that extend the reach and size of business into electronic commerce (e-commerce) and mobile commerce (m-commerce). Across a variety of markets, the internet has improved the ability of manufacturers, retailers, wholesalers, and suppliers to communicate and do business. Scepter's customers benefit from 24/7 availability and a broader selection of goods and services than ever before. There's no doubt that both e5 Daffodil International University trade and m-commerce are in their infancy in an Asian country, but each has enormous development potential within the region as a whole.

2.4 Scope of the Problem:

E-commerce websites have a variety of challenges, the most common of which is the requirement for customers to have a working internet connection in order to see products and place orders using an electronic device of some kind, such as a computer or a mobile phone.

It can occasionally cause problems with things like location tracking and the delivery of products.

Keeping up with the websites' maintenance might be challenging.

2.5 Challenges:

The process of constructing a system presented its creators with a number of challenges and roadblocks, which they had to overcome as they worked on it. In the course of the process of creating this system, I have come across a few obstacles and complexities here and there.

Among the challenges I've faced are the following types of problems:

1. Professionalism: Despite the fact that I am a developer, I do not have a great lot of experience in the sector. As a consequence of this, the entirety of our job does not always and completely consist of acting in a professional manner. In spite of this, our work is considered to be satisfactory according to the grade solution table.

2. Technology Stack: In order to construct the front-end and back-end of the "Go Mart" project, I use a wide array of different technology stacks. Among these are Javascript frameworks such as ReactJs, Node.js Express, and others.

As a relatively new software development firm, we face obstacles brought forth by these factors. These are the fundamental technologies that allow our entire system to function properly.

3. The process of designing the user interface and user experience was challenging. Because I am the new developer for this sort of project, I really appreciate the opportunity to participate in this design challenge because it helps us to become more creative and inventive.

4. Deploy: If you're just starting out as a programmer, putting a project onto a server or hosts (such a VPS or shared hosting) might be a challenge for you. Despite this, I have used the apache2 web server to successfully install it into a number of different VPS hosts.

Chapter 3

Software Requirement Analysis

3.1 Requirement Analysis:

User wants for the app may be better met using a technique called requirement analysis. The software's requirements are determined through a process known as requirement analysis, which takes into account the concerns and demands of various clients. For a successful requirement analysis, it is essential that the application.

The function of the system are discussed below.

User registration system provide facility to get registered of any user in the system. User login system allow registered user to login to system. This users are:

- ✓ Admin
- ✓ Consumer / Customer
- ✓ Vendor
- ✓ Delivery Man
- ✓ Support

3.2 Features of the system:

- There are two distinct registration procedures, one for administrators and one for customers.
- Management of several user roles
- Create a Vendor Account and Get Approved by the System Administrator - Maintain a Vendor Profile
- Information gathered by the admin department and the billing process
- Customers' Delivery Details
- Customer Voice-Activated Ordering System
- A consolidated order view for both staff and clients

- Management of Orders
- Presented the Item to the Delivery Person for Delivery

3.2.1 Stakeholders:

→ Admin:

The administrator is a system stakeholder with the most control over system resources.

The admin has all the credentials necessary to serve as the primary controller for the organization or administrator of this system.

→ Vendors:

The vendor is just another user in the system; he can manage his product within the system, but the administrator has the last word over who can see what.

→ Delivery man:

The product is picked up from the vendor and delivered to the customer by the delivery man.

→ Support:

User inquiries submitted via live chat are received and answered in real time.

→ Customer:

The consumer is the system's primary user, thus the product details page must display relevant information for them, such as the product's name, price, and quantity, when they click the corresponding button.

The consumer must be able to view the Item, price, quantity, and total price when they click the "Add to cart" button.

3.2.2 Funcional Requirements:

These are the most essential capabilities that the system should have to satisfy the needs of its end users. Prerequisites for functional software capture the desired operation of the system. Whether it's a computation, data manipulation, business process, user-relationship, or some other specialized capability, the appropriate provision is what determines what function a procedure is likely to accomplish. All of these features are required for the contract's fulfillment and must be implemented into the system.

Here are the application functional requirements of the project below:

3.2.2.1 Admin Registration:

FRQ1	Admin Registration
Description	Administrators had to create an account in the database before they could access the system.
Stack Holders	System Admin

3.2.2.2 Vendor Registration:

FRQ2	Vendor Registration
Description	Vendor users should be needed registered for login to access the app.
Stack Holders	Vendor

3.2.2.3 Authentication:

FRQ3	Authentication
Description	Authentication should be another criterion for using

	this application every time.
Stack Holders	Admin, Vendor, Delivery man, Support, Customer

3.2.2.4 Register/Create Store:

FRQ4	Register/ Create Store
Description	Admin / Vendor need to create a store in order to list the product
Stack Holders	Vendor, System Admin

3.2.2.5 Accept Store:

FRQ5	Accept Store
Description	Admin Needs to accept the store before it goes live
Stack Holders	System Admin

3.2.2.6 Add Product:

FRQ6	Add Product
Description	Need to add the product in the already created store.
Stack Holders	Vendor, system admin

3.2.2.7 Add Category:

FRQ7	Add Category
Description	In order to create product system need to have a certain category
Stack Holders	System Admin

3.2.2.8 Approve Product:

FRQ8	Approve Product
Description	Admin needs to approve the product before the product goes live
Stack Holders	System Admin

3.2.2.9 Manage cart:

FRQ9	Manage cart
Description	Customer can add products into cart list.
Stack Holders	Customer.

3.2.2.10 Manage order:

FRQ10	Manage order
Description	Customer can create and cancel order. Admin can view and confirm order.
Stack Holders	Customer & Admin.

3.2.2.11 Stock Management:

FRQ11	Stock Management
Description	Admin can manage increase and decrease products quantity. When customer confirms order then automatically decreased products stock.
Stack Holders	Customer & Admin.

3.2.2.12 Payment:

FRQ12	Payment
Description	Customer needs to pay in the payment gateway
Stack Holders	Payment

3.2.3 Non Functional Requirement:

The quality of a software system is defined by its non-functional needs. Security, dependability, performance, maintainability, scalability, and usability are only few of the properties of a system that are defined here.

They guarantee the system's overall relevance.

3.2.3.1 Performance

Data retrieval from the server must meet strict time and latency targets. Product lists, vendor lists, and information about available products should all be provided as quickly as possible upon page

load or during a search.

NFR1	Loading Data
Description	A page must load with paginated data to render them fast after loading.
Stack Holders	Admin, Vendor, Customer

NFR2	Faster Search Result
Description	During a search by a user, results must show within a second, and they should be accurate as possible.
Stack Holders	Admin, Vendor, Customer

3.2.3.2 Capacity

The system must be capable of handling all types of user data.

NFR1	The capability of handling user data
Description	The system must handle user data of many types, relational or non-relational data.
Stack Holders	Admin, Vendor, Customer

3.2.3.3 Reliability

Reliability means the probability that the system will operate without failure.

NFR1	Distributing flawless functionality
------	-------------------------------------

Description	The application must be reliable to perform any task when the system user interacts with them.
Stack Holders	Admin, Vendor, Customer

3.2.3.4 Security

NFR1	System Security
Description	The security of every user must be determined while implementing the application. Data must be protected from outside attacks like CSRF, XSS, SQL injection, etc. All the data should be secured and encrypted with minimum needs to protect it from the outside environment and internal attacks.
Stack Holders	N/A

3.2.3.5 Maintainability

One of the essential parts of a system is a post-support system for the end-users.

NFR1	Maintain system data
Description	Users can read their data and modify them or delete them on their necessity
Stack Holders	Customer, vendor

3.2.3.6 Availability

The main target of developing any system solution is to make it user-friendly and uncomplicated.

NFR1	System availability
------	---------------------

Description	The system must be available 24 hours a day without fetching any problem.
Stack Holders	Admin, Vendor, Customer

3.2.3.7 Feasibility Study

Before committing to a project, it is wise to conduct preliminary research in the form of a feasibility study. The goal of this task is to determine whether or not the solution that is thought to fit the requirements can really be implemented in the program. Information such as the availability of application resources, cost estimates for software creation, advantages of the software to the organization after its development and deployment into hosts, and cost to be invested on its maintenance are determined over the course of the feasibility study.

3.2.3.8 Financial Feasibility

Because it is a web application, there will be a cost involved with hosting it. Because the system only transfers a small amount of multimedia data, we only need to deploy a back-end server that can deal with a small number of media files, so we only need to calculate a cost that is minimal. Despite this, the front-end will adhere to the principles of freeware software, which means that there won't be any fees associated with deploying it. The potential user will be required to pay a nominal fee in order to access the system in order to do bug repair and maintenance duties. In addition to the costs that are involved, there will be several advantages for those who utilize it. These advantages make it abundantly evident that the project can be carried out with the resources at hand.

3.2.3.9 Technical Feasibility

This project is a full-fledged application that runs on both the web and mobile devices. The React-JS Library, Node JS JWT, Post Man, and MongoDB are the primary technologies and tools that are involved with this project. Each technology may be obtained at no cost, and the necessary technical abilities can be found in an easily accessible format. The timetable for the product's development and the leading edge of putting these technologies into use are coordinated. It is evident from this technology that the project can be accomplished with the available resources.

3.2.3.10 Legal Feasibility

In order to encourage and facilitate the growth of its domestic e-commerce industry, Bangladesh has enacted a variety of supportive policies, strategies, and action plans. Vision 2021, also known as "Digital Bangladesh," is still an important policy drive for Bangladesh that focuses on utilizing ICT-led growth to promote socioeconomic development. It seeks to establish digital government services that are of assistance to the disadvantaged and connect citizens by providing equal access to the internet.

Chapter 4

SYSTEM ANALYSIS, DESIGN & SPECIFICATION

4.1. Development Model :

This is a long-term project that will be developed using the Agile methodology. Unlike more rigid frameworks, the agile technique is designed to adapt to shifting requirements. A minor part of this system can be modified without major alterations to the timetable. All phases of development were tested to assure a fully functional system. The Agile Development Method allows for unit testing of the system as it is being built. In addition, we can construct a system that is quickly updated, tested often for effectiveness, yields

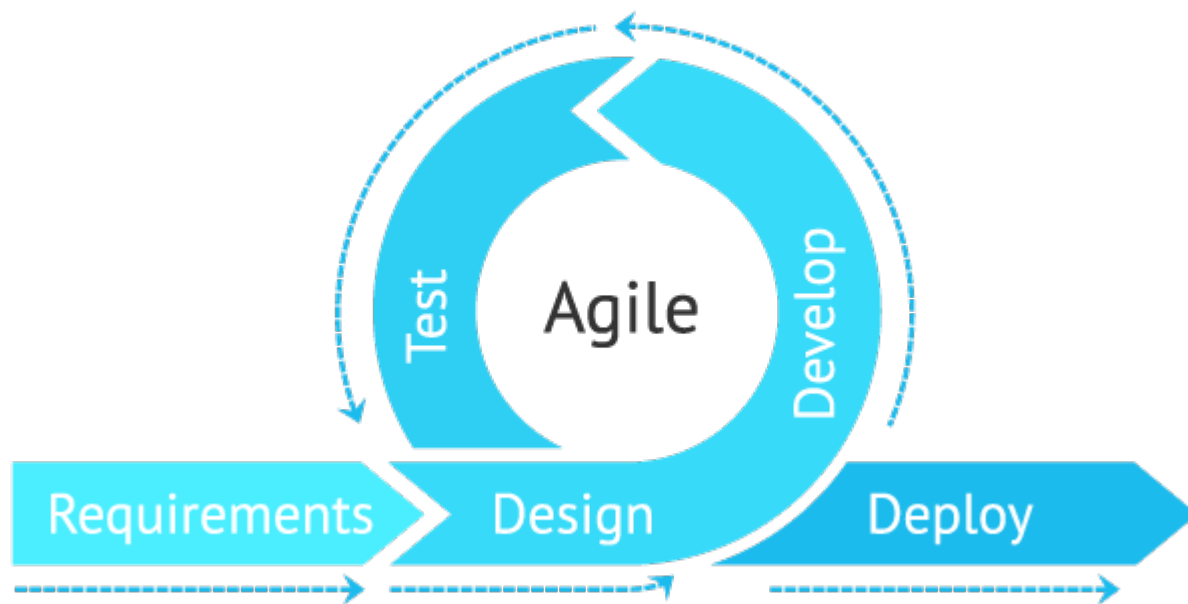


Figure: 4.1: Agile Method

4.2. Use Case Diagram :

The Use Case Model is a method that combines written and visual representations of use cases to better convey the meaning of those cases. A system's full functionality may be mapped out in a use case model by outlining the many external factors that affect the system.

See below for a related Use Case Diagram.

Actors - It has 5 Actors

- a. Customer
- b. Vendor
- c. Delivery Man
- d. Support
- e. Admin

4.3. Use Case Modeling and Description

The system must accommodate the features depicted in the following use case graphic. So, let's begin with the system administrator:

4.3.1. System Admin

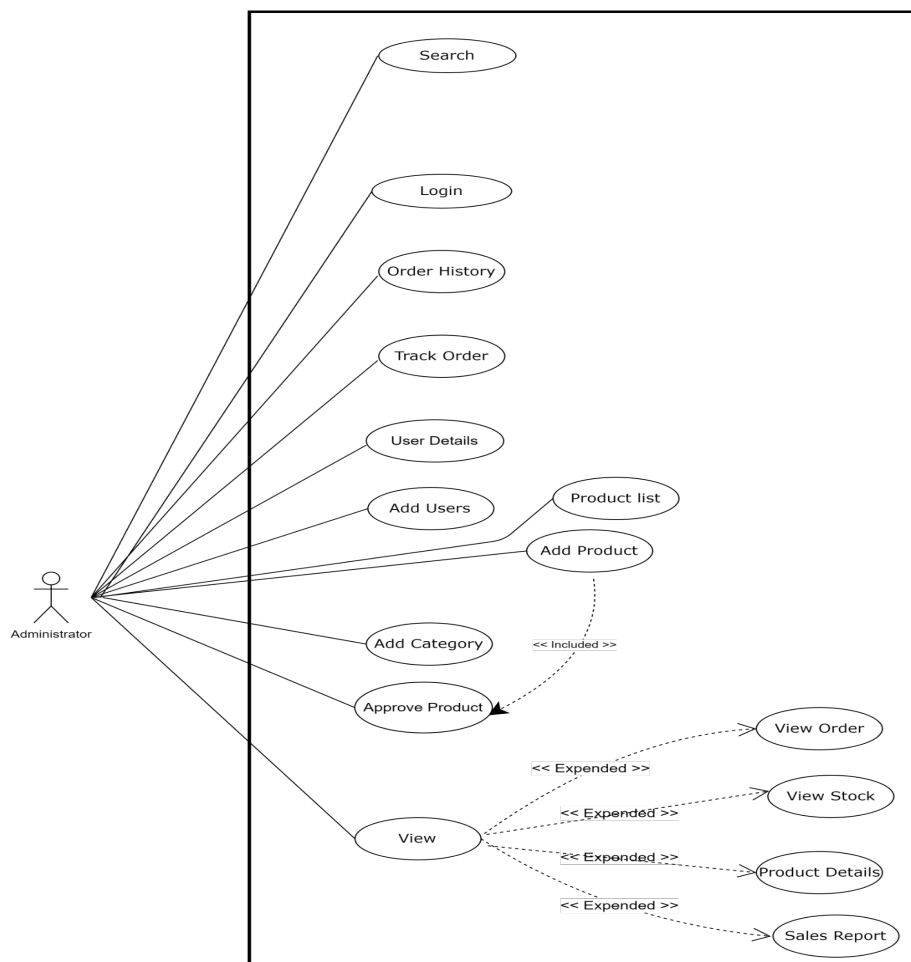


Figure: 4.3.1 System Admin

4.3.1.1 Use Case Description: System Admin

4.3.1.1.1 Login

Criteria	Description
Use Case Name	Login
Actor	System Admin
Pre-Condition	Visit website with URL
Flow of Events	1. System Admin fills up input fields by his email and password. 2. System Admin clicks on the “Login” button.
Exit Condition	System Admin successfully login
Alternate Flow	1. Invalid email or password. 2. Email format is not valid. 3. Passwords must be at least six characters.

4.3.1.1.2 User Details

Criteria	Description
Use Case Name	User Details
Actor	System Admin
Pre-Condition	User must be authenticated as system admin and must visit the URL
Flow of Events	1. System admin clicks on users and get full list of user.
Exit Condition	System Admin successfully get a view of total users list
Alternate Flow	1. No User Information available in the system

4.3.1.1.3 Add User

Criteria	Description
Use Case Name	Add User
Actor	System Admin
Pre-Condition	User must be authenticated as system admin and must visit the URL
Flow of Events	1. The add button is selected by the system administrator. 2. The administrator of the system completes all of the fields. 3. Clicks on the save button
Exit Condition	System Admin successfully add a user
Alternate Flow	1. Password length Mismatch 2. Do not fill out the required field. 3. Internet connection not available

4.3.1.1.4. Product List

Criteria	Description
Use Case Name	Product list
Actor	System Admin
Pre-Condition	User must be authenticated as system admin and must visit the URL
Flow of Events	1. List of Product shown 2. The administrator of the system completes all of the fields.
Exit Condition	System Admin successfully get a total view of product along with store

	name
Alternate Flow	1. No Product Available

4.3.1.1.5 Product Add

Criteria	Description
Use Case Name	Product Add
Actor	System Admin
Pre-Condition	User must be authenticated as system admin and must visit the URL
Flow of Events	1. List of Product shown 2. The administrator clicks on the add product button . 3. The administrator of the system completes all of the fields. 4. Clicks on save button
Exit Condition	System Admin successfully added the product.
Alternate Flow	1. No Store Available 2. Do not fill out the required field. 3. Internet connection not available

4.3.1.1.6 Product Add

Criteria	Description
Use Case Name	Product Add
Actor	System Admin
Pre-Condition	1. User must be authenticated as system admin and must visit the URL

	2. Category must be available 3. Store name must be available
Flow of Events	1. List of Product shown 2. The administrator clicks on the add product button . 3. The administrator of the system completes all of the fields. 4. Clicks on save button
Exit Condition	System Admin successfully added the product.
Alternate Flow	1. No Store Available 2. Category Not available 3. Do not fill out the required field. 4. Internet connection not available

4.3.1.1.7. Category list

Criteria	Description
Use Case Name	Category List
Actor	System Admin
Pre-Condition	User must be authenticated as system admin and must visit the URL
Flow of Events	1. List of Added Category shown
Exit Condition	System Admin successfully view the categories.
Alternate Flow	1. No Category Available. 2. Internet connection not available

4.3.1.1.8 Add Category

Criteria	Description
Use Case Name	Add Category
Actor	System Admin
Pre-Condition	User must be authenticated as system admin and must visit the URL
Flow of Events	1. List of Category shown 2. The administrator clicks on the add Category button . 3. The administrator of the system completes all of the fields. 4. Clicks on save button
Exit Condition	System Admin successfully added the category.
Alternate Flow	1. Do not fill out the required field. 2. Internet connection not available

4.3.1.1.9 Approve Product

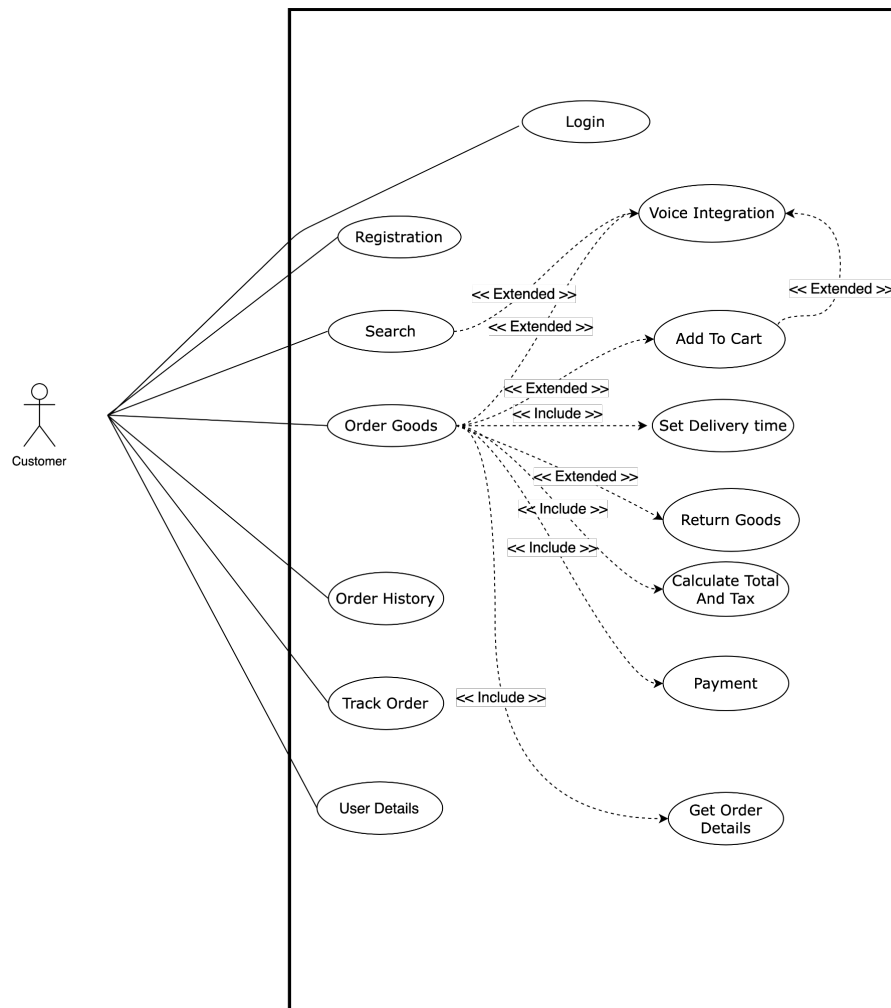
Criteria	Description
Use Case Name	Approve Product
Actor	System Admin
Pre-Condition	1. User must be authenticated as system admin and must visit the URL 2. Vendor Must Submit the product for approval
Flow of Events	1. Get a list of products 2. Filters out not approve products. 3. Clicks on product details

	4. Check the product 5. Click approve the product
Exit Condition	System Admin successfully approved the product.
Alternate Flow	1. Product details is not satisfactory for approval 2. Not Approval Comment isn't given 3. Internet connection not available

4.3.1.1.10 Track Order

Criteria	Description
Use Case Name	Track Order
Actor	System Admin
Pre-Condition	1. User must be authenticated as system admin and must visit the URL
Flow of Events	1. Fill up all the necessary field with the order numbers 2. Order details is shown
Exit Condition	System Admin successfully get the order details
Alternate Flow	1. Order numbers is mismatched 2. Customer mobile number is mismatched

4.3.1.2 Customer



4.3.1.2.2 Login

Criteria	Description
Use Case Name	Login
Actor	Customer
Pre-Condition	Visit website with URL
Flow of Events	1. User fills up input fields by his email and password.

	2. User clicks on the “Login” button.
Exit Condition	User successfully login
Alternate Flow	1. Invalid email or password. 2. Email format is not valid. 3. Passwords must be at least six characters. 4. Not Yet Registered

4.3.1.2.2 Registration

Criteria	Description
Use Case Name	Registration
Actor	Customer
Pre-Condition	Visit website with URL
Flow of Events	1. User fills up input fields by his username, email, phone number, area, password, and confirm password 2. User clicks on the “Register” button.
Exit Condition	User successfully registered
Alternate Flow	1. Invalid email or password. 2. Username already Exist 3. Passwords must be at least six characters. 4. Password and Confirm Password Not Matched 5. Email format is not valid.

4.3.1.2.3 Search

Criteria	Description
Use Case Name	Search
Actor	Customer
Pre-Condition	1. Visit Product List with url
Flow of Events	1. User search for the item
Exit Condition	User successfully get the searched item
Alternate Flow	1. Searched Product not found

4.3.1.2.4 Order Goods

Criteria	Description
Use Case Name	Order Goods
Actor	Customer
Pre-Condition	1. Visit Product List 2. Search for the product 3. Item available in stock 4. Add Item To the cart 5. Set Deilvery Time 6. Payment
Flow of Events	1. User search for the item 2. User Click on the product details or Click add to cart button 3. User fill up their shipping address

	4. User clicks on Order button 5. User Redirect to payment gateway
Exit Condition	User successfully placed the order
Alternate Flow	1. Product not in the sotck. 2. Searched Product not found 3. User doesn't fill up the shipping address. 4. User doesn't complete the payment

4.3.1.2.5 Track Order

Criteria	Description
Use Case Name	Track Order
Actor	Customer
Pre-Condition	1. User must be authenticated as system admin and must visit the URL
Flow of Events	1. Fill up all the necessary field with the order numbers 2. Order details is shown
Exit Condition	user successfully get the order details
Alternate Flow	1. Order numbers is mismatched 2. The searcher does not place the order.

4.3.1.2.6 User Details

Criteria	Description
Use Case Name	User Details

Actor	Customer
Pre-Condition	1. User must be authenticated as system admin and must visit the URL
Flow of Events	1. User gets the user details
Exit Condition	User successfully gets the user details
Alternate Flow	1. user is not logged in 2. Internet connection is not available

4.3.1.2.7 Order History

Criteria	Description
Use Case Name	Order History
Actor	Customer
Pre-Condition	1. Visit the URL
Flow of Events	1. User gets all the order history
Exit Condition	User successfully get the orders
Alternate Flow	1. No Order is placed yet

4.3.1.3 Vendor

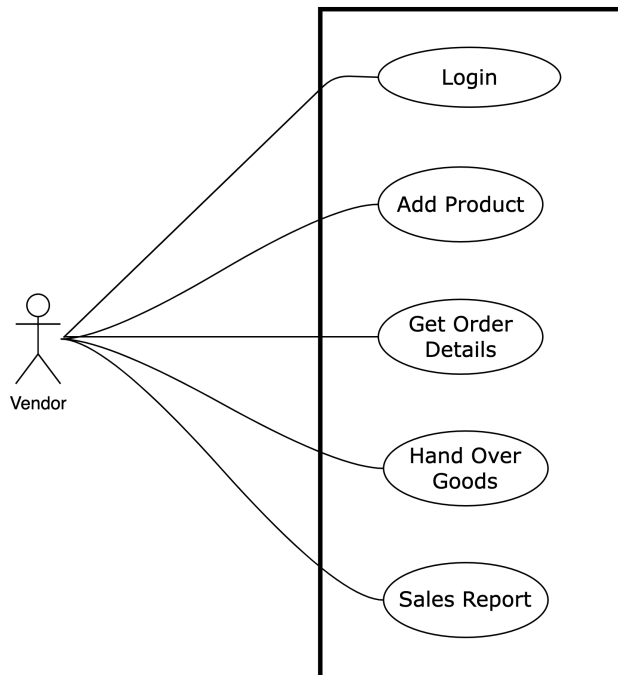


Figure: 4.3.1.3.1 - Vendor Use Case Diagram

4.3.1.3.1 Login

Criteria	Description
Use Case Name	Login
Actor	Vendor
Pre-Condition	1. User must be authenticated as vendor and must visit the URL
Flow of Events	1. User fills up input fields by his email and password. 2. User clicks on the “Login” button.
Exit Condition	User successfully login
Alternate Flow	1. Invalid email or password. 2. Email format is not valid.

	3. Passwords must be at least six characters. 4. Admin not approved this vendor 5. Admin Not added this vendor
--	--

4.3.1.3.2 Add Product

Criteria	Description
Use Case Name	Product Add
Actor	Vendor
Pre-Condition	1. User must be authenticated as system vendor and must visit the URL 2. Category must be available
Flow of Events	1. List of Product shown 2. The vendor clicks on the add product button . 3. The vendor of the system completes all of the fields. 4. Clicks on save button
Exit Condition	Vendor successfully added the product.
Alternate Flow	1. Category Not available 2. Do not fill out the required field. 3. Internet connection not available

4.3.1.3.3 Order Details

Criteria	Description
Use Case Name	Order Details
Actor	Vendor

Pre-Condition	1. User must be authenticated as system admin and must visit the URL
Flow of Events	1. User gets all the order details in his store
Exit Condition	User successfully get the orders of his store
Alternate Flow	1. No Order is placed yet for his store

4.3.1.3.4 Hand Over Goods

Criteria	Description
Use Case Name	Hand Over Goods
Actor	Vendor
Pre-Condition	1. User must be authenticated as system vendor and must visit the URL 2. Vendor gets order details with shipping address
Flow of Events	1. Vendor Packed the product 2. Request placed for pickup
Exit Condition	Successfully Hand over the products to the delivery man
Alternate Flow	1. No Delivery man available

4.3.1.3.5 Sales Report

Criteria	Description
Use Case Name	Sales Report
Actor	Vendor

Pre-Condition	1. User must be authenticated as system vendor and must visit the URL 2. Item is available
Flow of Events	1. Vendor get's the item 2. Vendor Clicks on Sales report for this item
Exit Condition	Successfully get the sales report for items
Alternate Flow	1. Item not found 2. No Internet connection available

4.3.1.4 Delivery Man

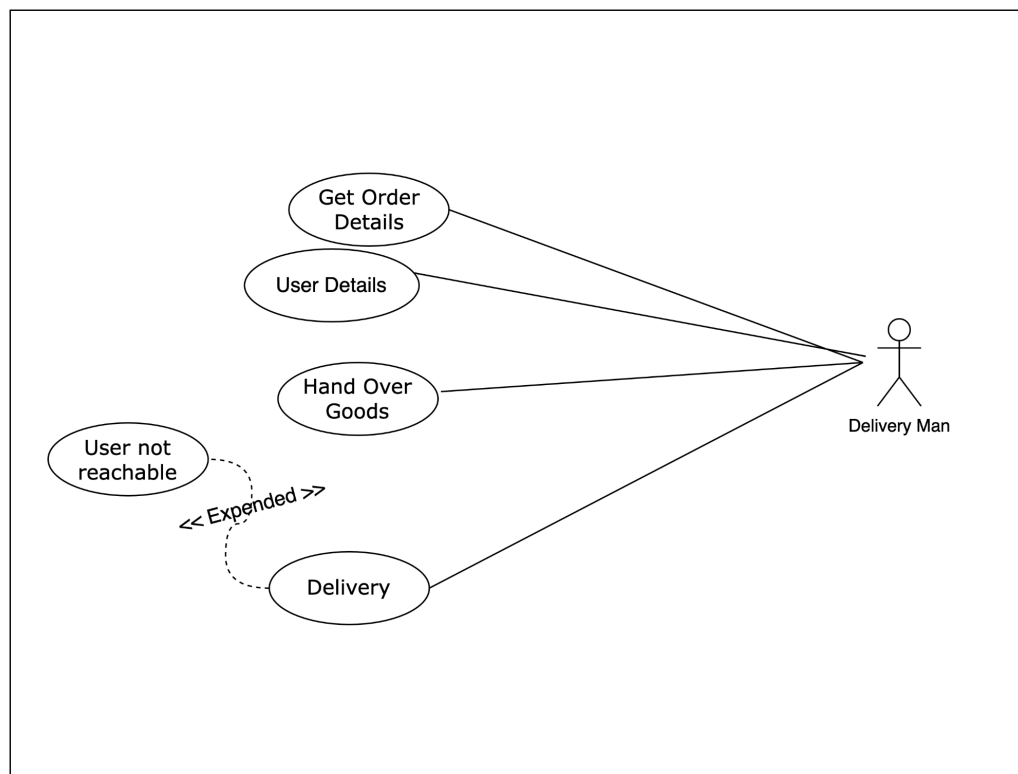


Figure: 4.3.1.5 - Use Case Digram of Delivery Man

4.3.1.4.1 Delivery

Criteria	Description
Use Case Name	Delivery
Actor	Delivery Man
Pre-Condition	1. User must be authenticated as system registered delivery man and must visit the URL to get order list 2. Delivery man gets order details
Flow of Events	1. Delivery man get all the delivery list in dashboard 2. Deliver the product
Exit Condition	Successfully Hand over the products to the reciever
Alternate Flow	1. Receiver Not Available 2. No Order List Found

4.3.1.4.2 User Details

Criteria	Description
Use Case Name	User Details
Actor	Delievery Man
Pre-Condition	1. User must be authenticated as system admin and must visit the URL
Flow of Events	1. User gets the user details
Exit Condition	User successfully gets the user details
Alternate Flow	1. user is not logged in 2. Internet connection is not available

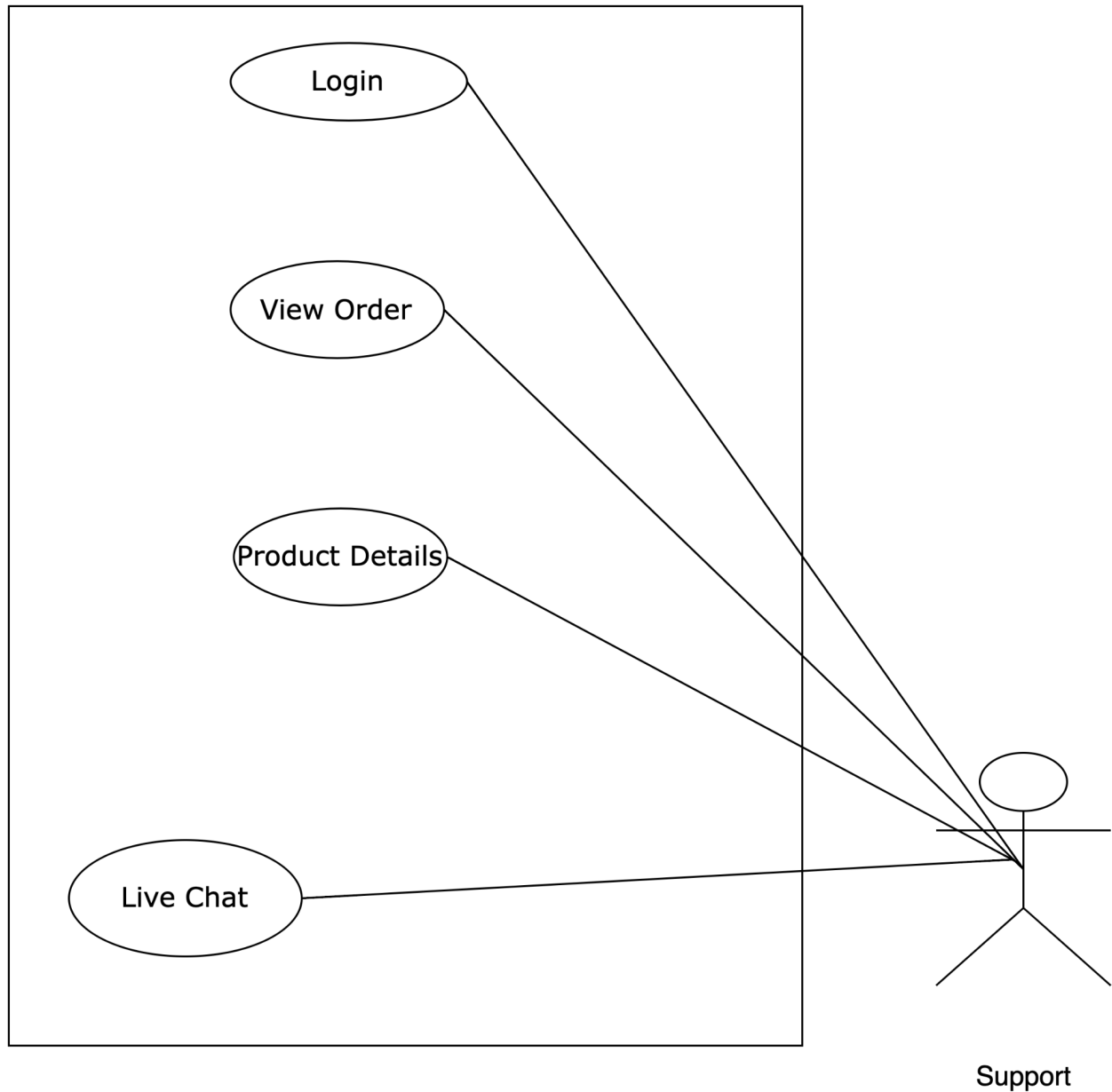
4.3.1.4.3 Order Details

Criteria	Description
Use Case Name	Order Details
Actor	Delievery Man
Pre-Condition	1. User must be authenticated as system admin and must visit the URL
Flow of Events	1. Delivery man gets order details with receiver details
Exit Condition	User successfully gets the Order details
Alternate Flow	1. user is not logged in 2. No Orders found

4.3.1.4.4 Hand Over Goods

Criteria	Description
Use Case Name	Hand Over Goods
Actor	Delievery Man
Pre-Condition	1. Get the order receiver details
Flow of Events	1. Delivery man gets order details and delivery the products
Exit Condition	User successfully delivered the order
Alternate Flow	1. user not reachable

4.3.1.5 Support



4.3.1.5.1 Hand Over Goods

Criteria	Description
Use Case Name	Hand Over Goods
Actor	Delievery Man

Pre-Condition	1. Get the order receiver details
Flow of Events	1. Delivery man gets order details and delivery the products
Exit Condition	User successfully delivered the order
Alternate Flow	1. user not reachable

4.3.1.5.2 Login

Criteria	Description
Use Case Name	Login
Actor	Support
Pre-Condition	1. User must be authenticated as support and must visit the URL
Flow of Events	1. User fills up input fields by his email and password. 2. User clicks on the “Login” button.
Exit Condition	User successfully login
Alternate Flow	1. Invalid email or password. 2. Email format is not valid. 3. Passwords must be at least six characters. 4. Admin not approved user as support 5. Admin Not added this support user

4.3.1.5.3 View Order

Criteria	Description
Use Case Name	View Order

Actor	Support
Pre-Condition	1. User must be authenticated as support and must visit the URL
Flow of Events	1. User get all the order list
Exit Condition	User successfully get the order list
Alternate Flow	1. No Order Found

4.3.1.5.4 Product Details

Criteria	Description
Use Case Name	Product Details
Actor	Support
Pre-Condition	1. User must be authenticated as support and must visit the URL
Flow of Events	1. User get all the product list 2. Search the product with product id 3. Gets the product details
Exit Condition	User successfully get the product details
Alternate Flow	1. No Product Found for the product id

4.3.1.5.5 Live Chat

Criteria	Description
Use Case Name	Live Chat

Actor	Support
Pre-Condition	1. User must be authenticated as support and must visit the URL 2. Customer knock through the live chat
Flow of Events	1. Support got the message 2. Responded with message
Exit Condition	Customer gets the reply message
Alternate Flow	1. Unable to connect with socket

4.4. Activity Diagram

Activity diagrams illustrate stepwise movements and actions workflows supporting preference, iteration, and coexistence. The architectural design represents the structure of data and program components instructed to build a computer-based system. It considers the architectural technique that the procedure will take, the configuration and possessions of the elements that comprise the system, and the interrelationships that occur among all architectural fragments of a system.

4.4.1 Login & Registration

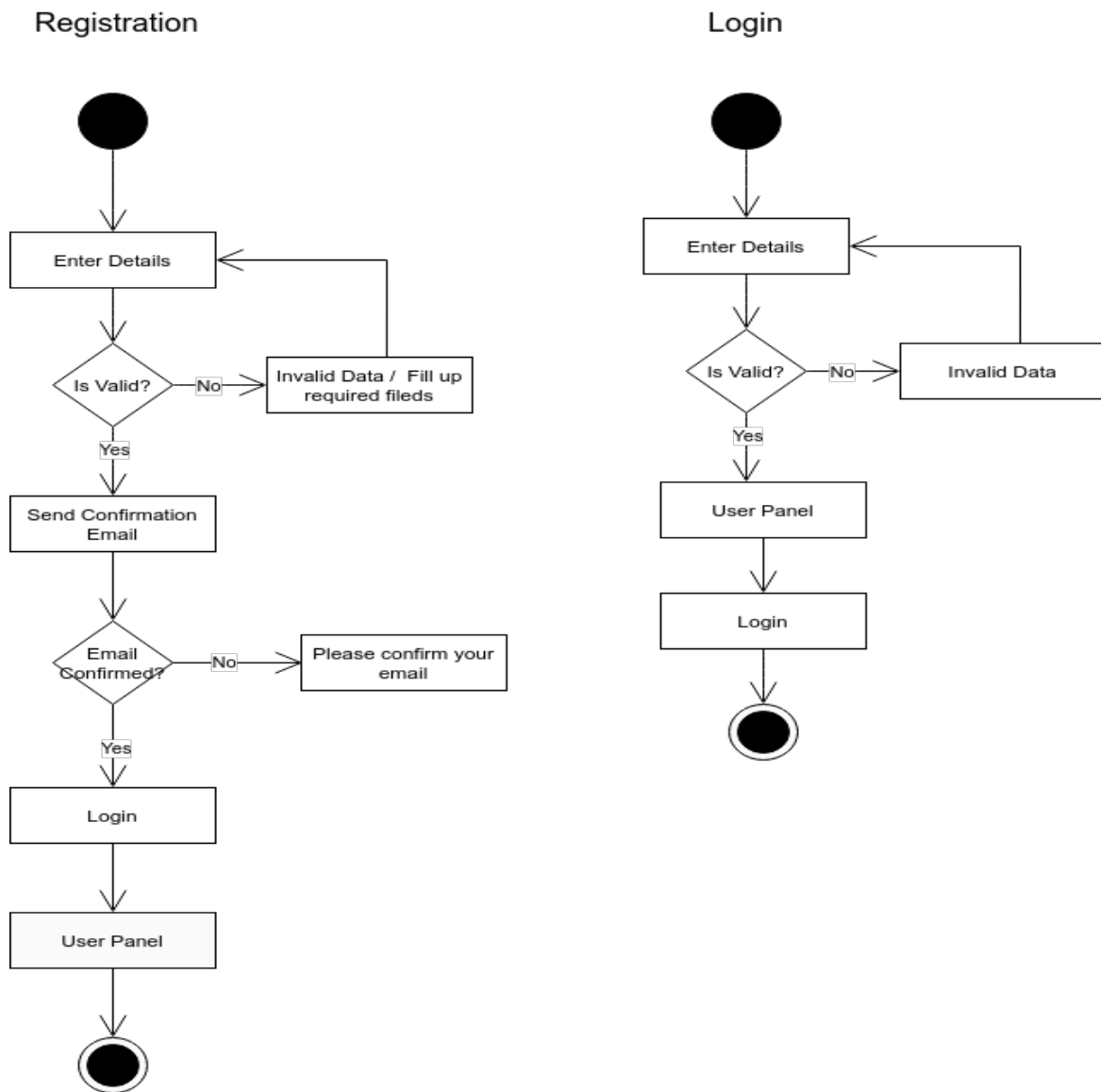


Figure: 4.4.1 - Login & Registration Activity Diagram

4.4.2 Order, Add To Cart & Payment

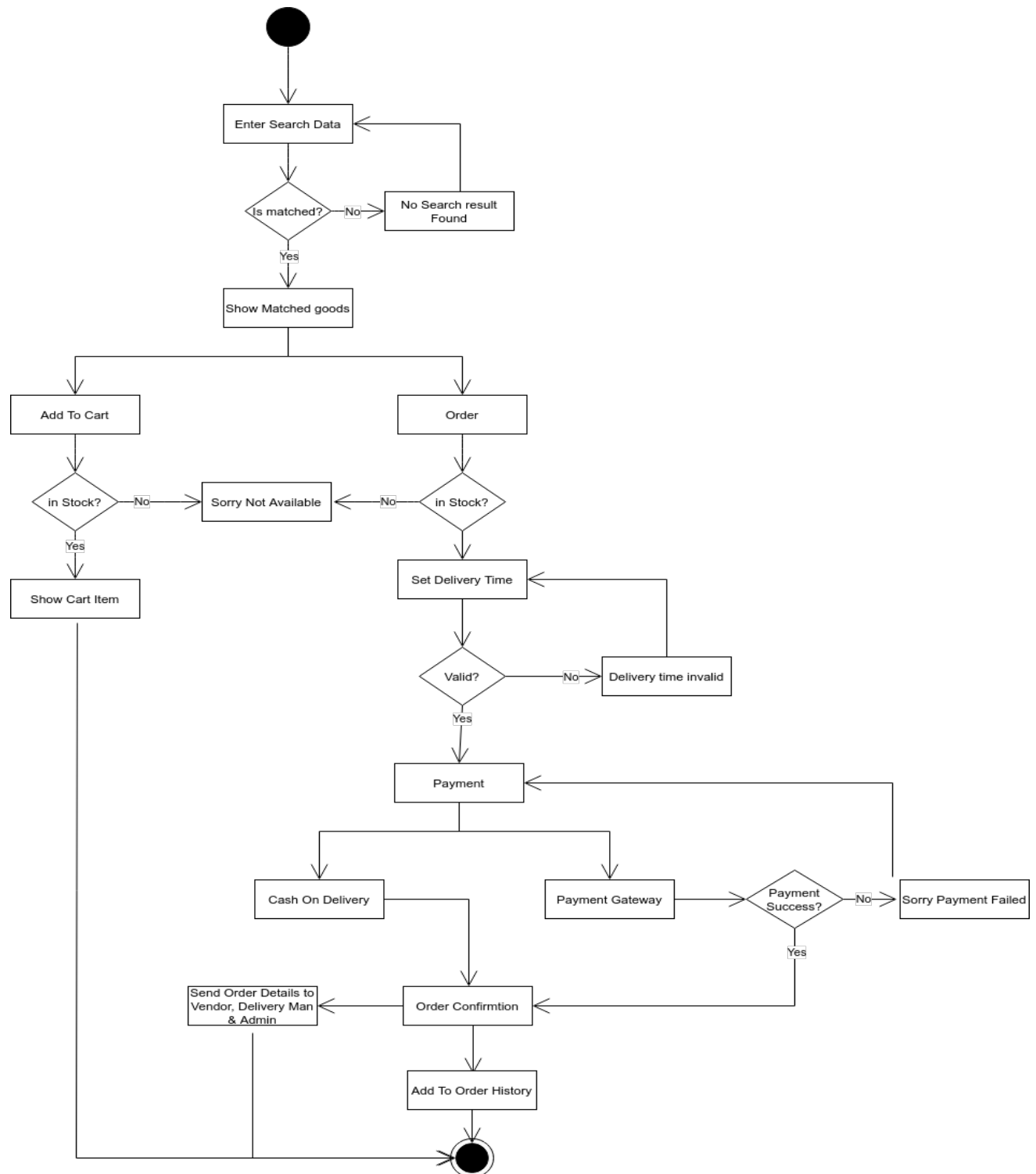


Figure: 4.4.2: Order, Add To Cart & Payment Activity Diagram

4.4.3 Search

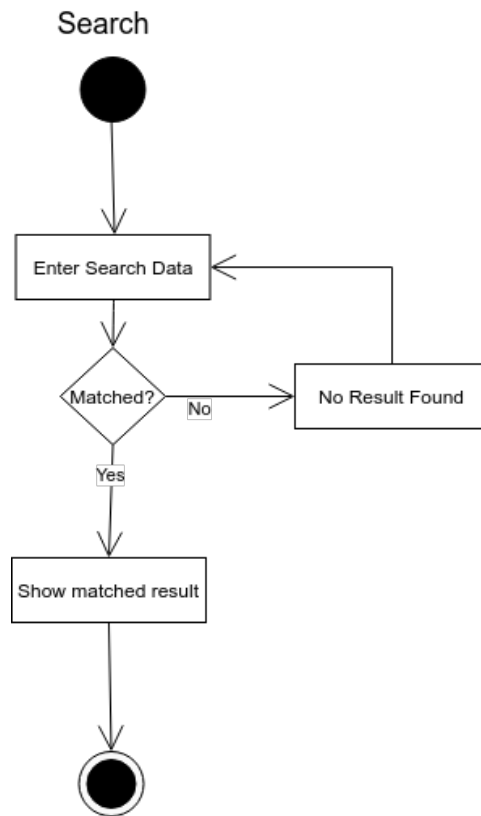


Figure: 4.4.3: Search Activity Diagram

4.4.4 Track Order

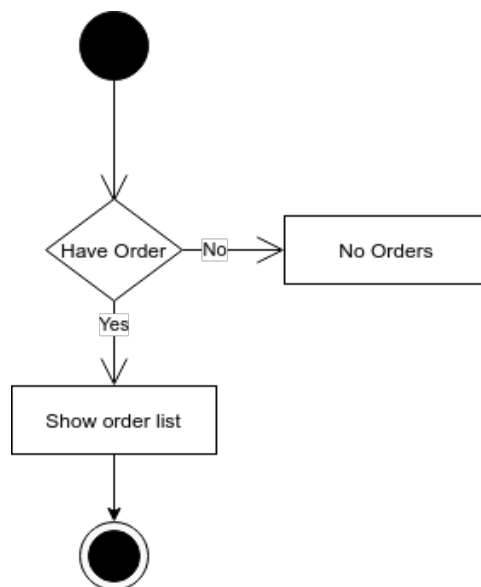


Figure: 4.4.4: Track Order Activity Diagram

4.4.5 Return

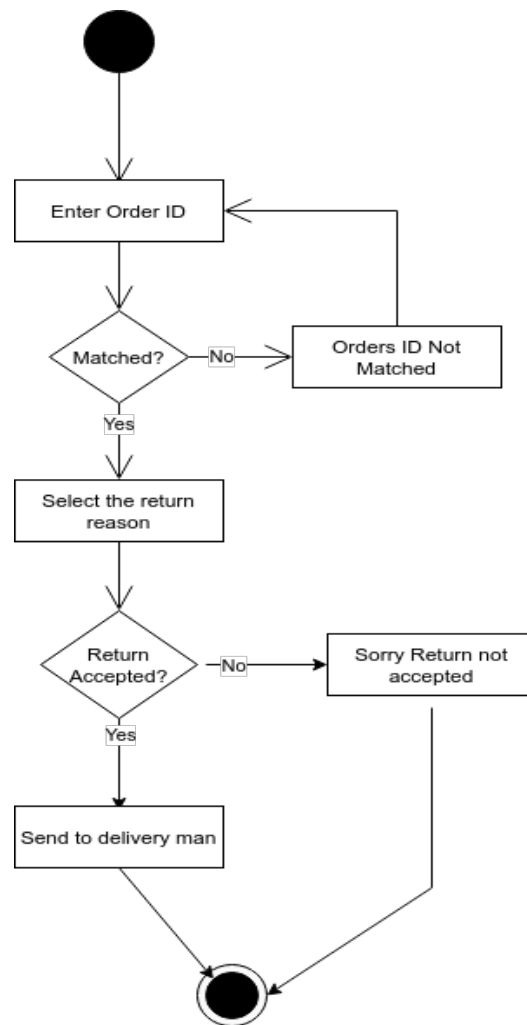


Figure: 4.4.5: Return Activity Diagram

4.4.6 User Details (Admin / Support)

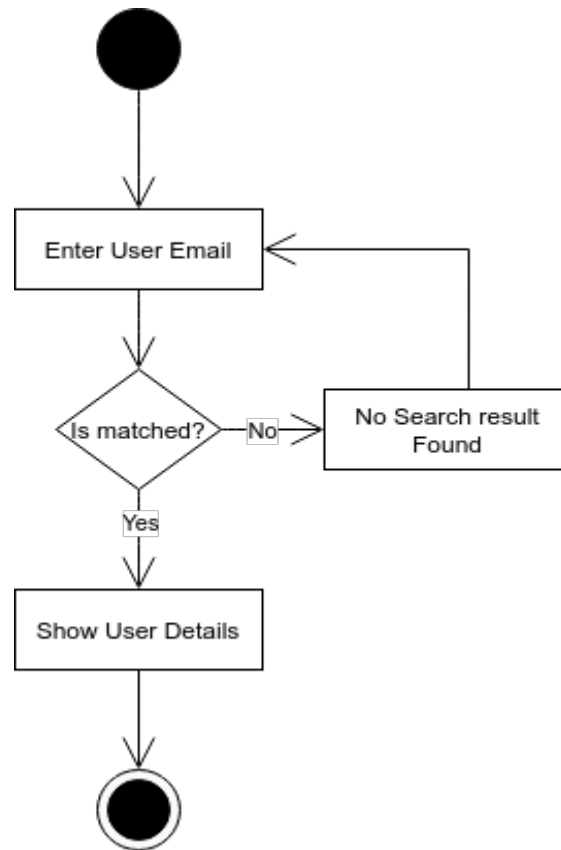


Figure: 4.4.6: Return Activity Diagram

4.4.7 Add User (Admin)

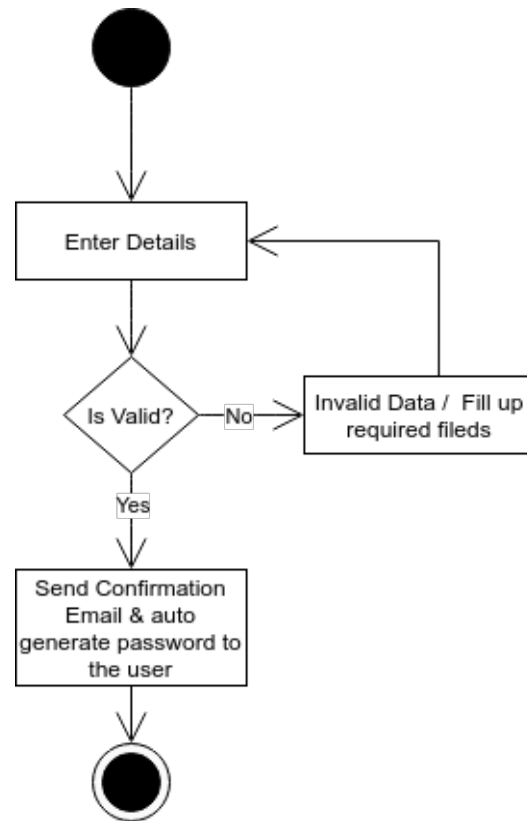


Figure: 4.4.5: Add User (Admin) Activity Diagram

4.4.8 Add Category (Admin)

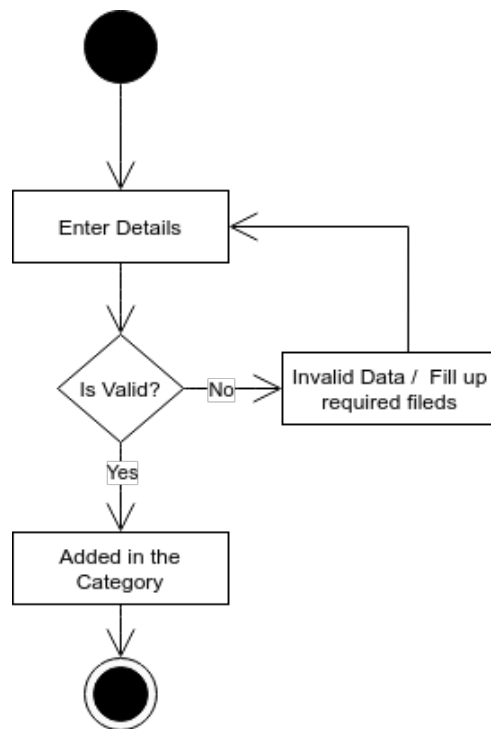


Figure: 4.4.8: Add Category (Admin) Activity Diagram

4.4.9 Add Product (Vendor)

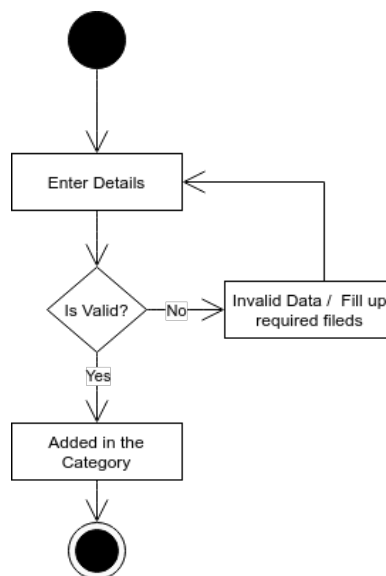


Figure: 4.4.9 Add Product (Vendor) Activity Diagram

4.4.10 View (Admin & Support)

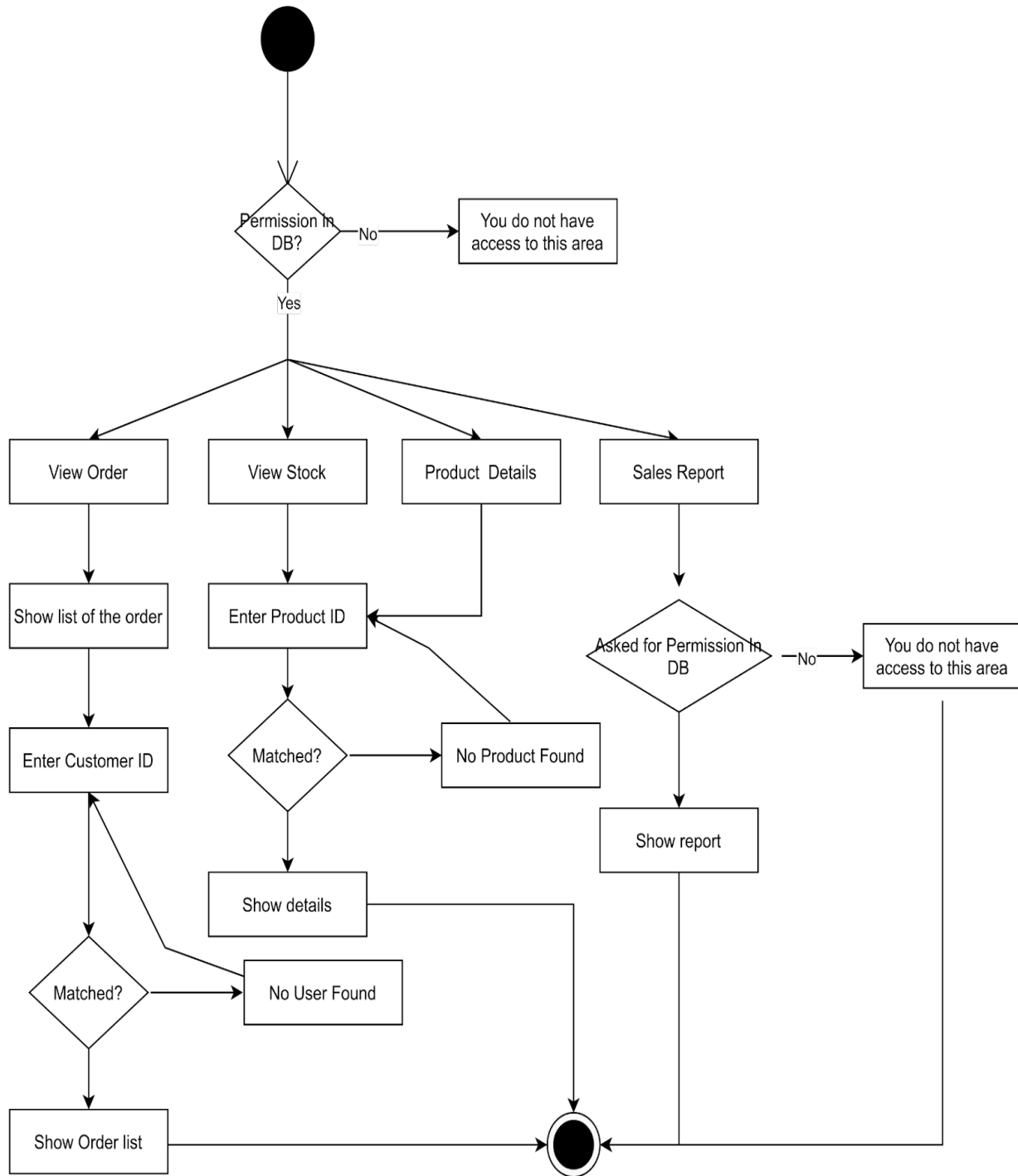


Figure: 4.4.10 View (Admin & Support) Activity Diagram

4.4.10 Delivery

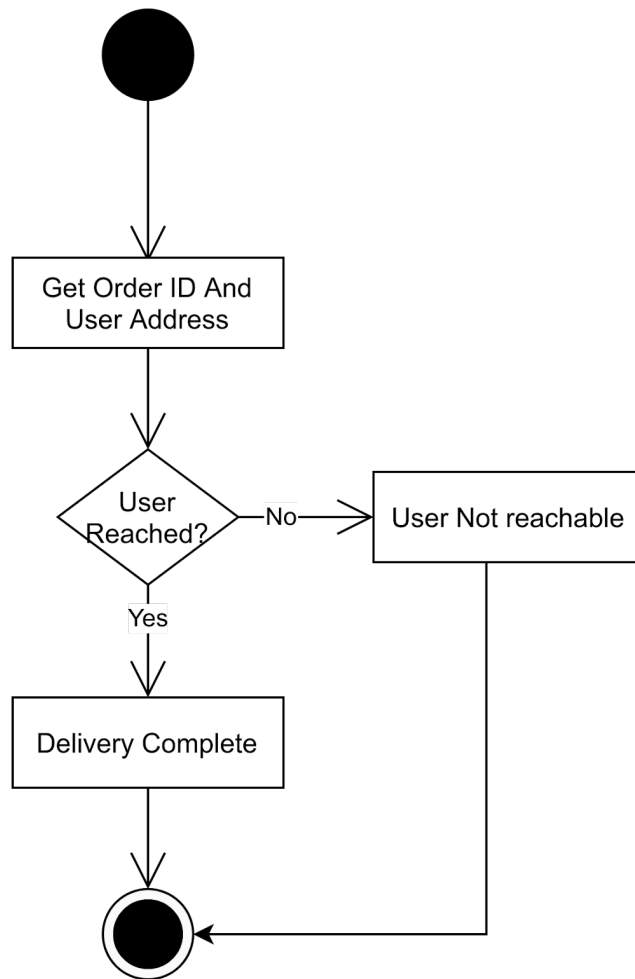


Figure: 4.4.10 Delivery Activity Diagram

4.5. Sequence Diagram

4.5.1 User Login

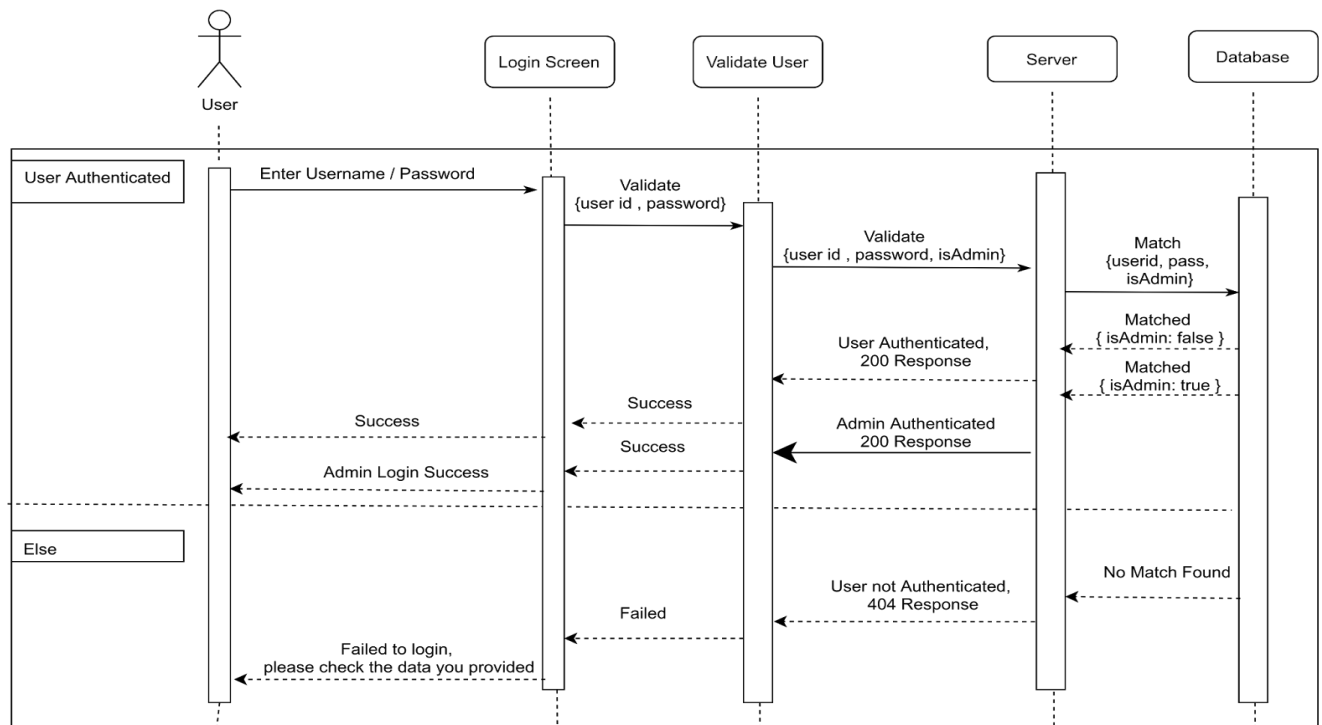


Figure: 4.5.1 User Login Sequence Diagram

4.5.2 User Registration

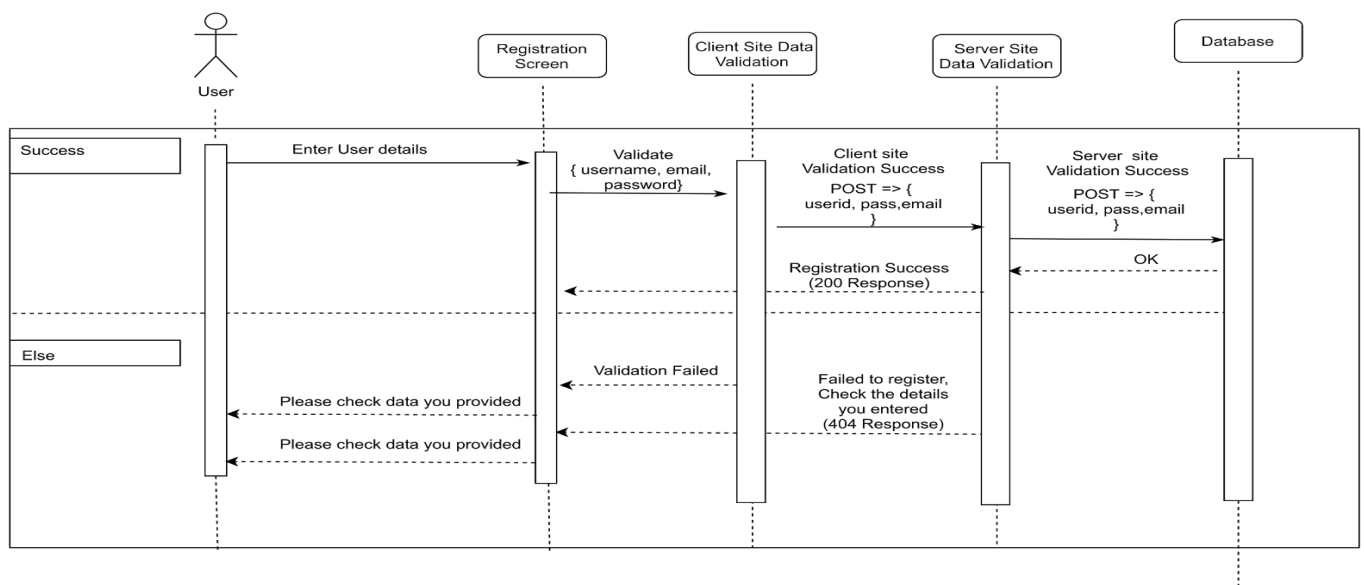


Figure: 4.5.1 User Registration Squance Diagram

4.5.3 Search

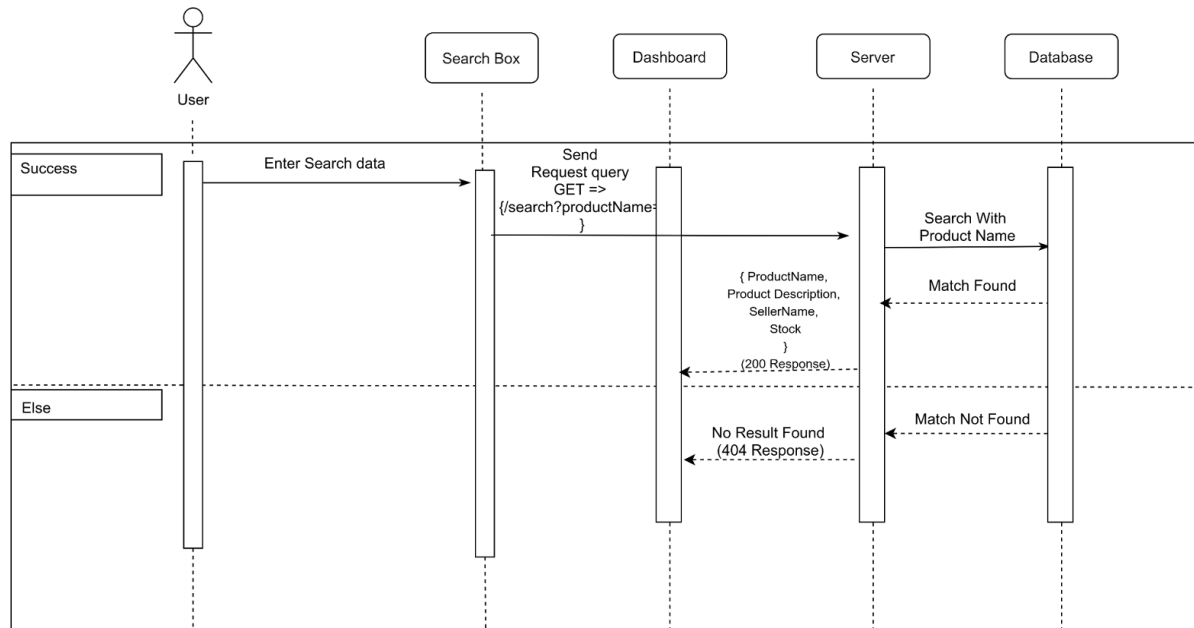


Figure: 4.5.3 Search Sequence Diagram

4.5.4 Order

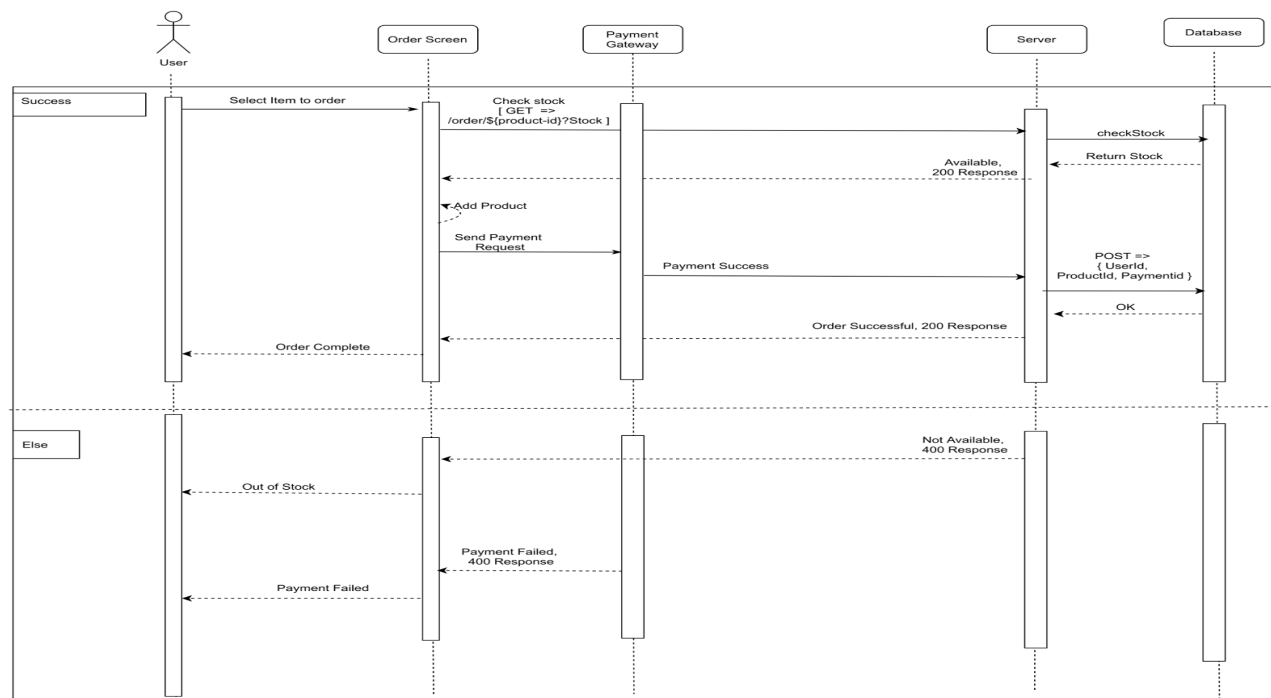


Figure: 4.5.4 Order Squance Diagram

4.5.5 Order History

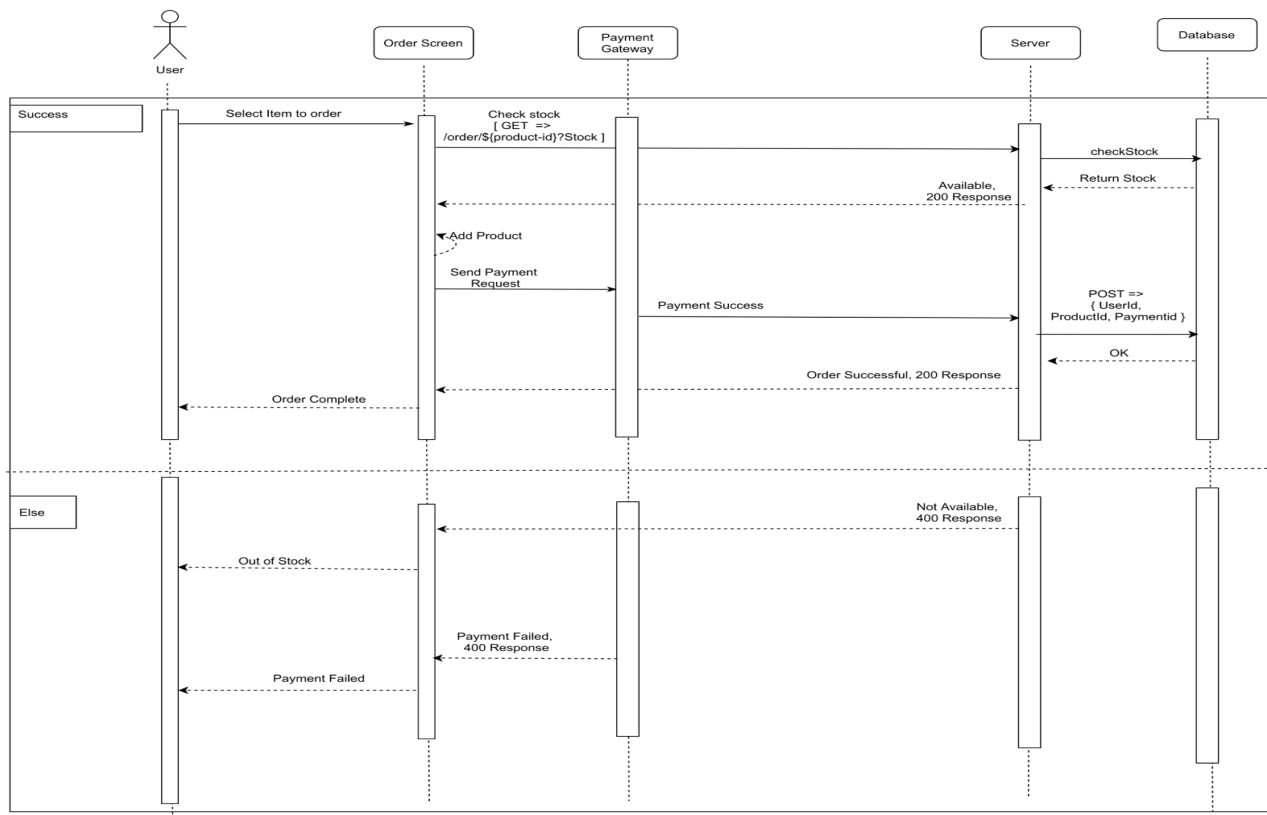


Figure: 4.5.5 Order History Squance Diagram

4.5.5 Track Order

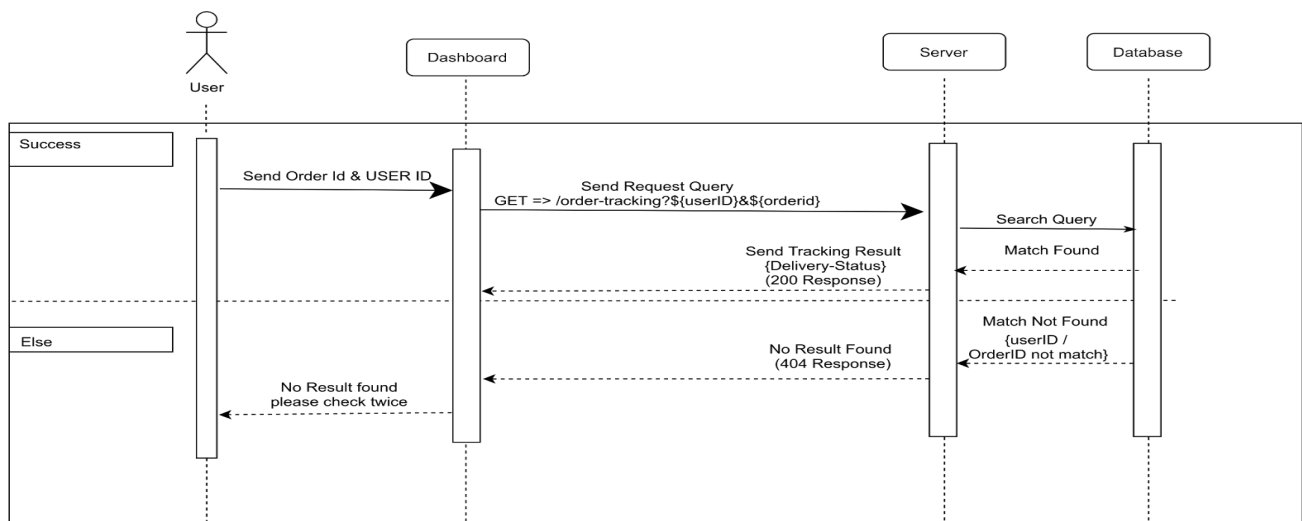


Figure: 4.5.5 Track Order

4.5.6 View Order

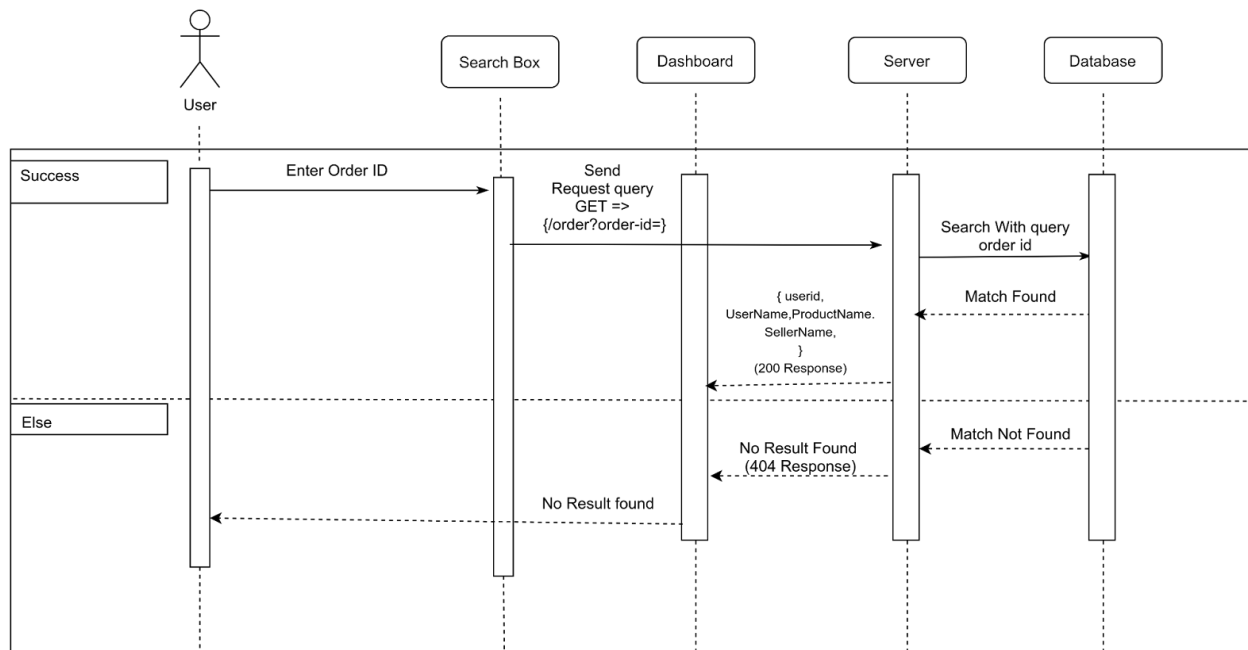


Figure: 4.5.6 View Order Squence Diagram

4.5.7. View Stock

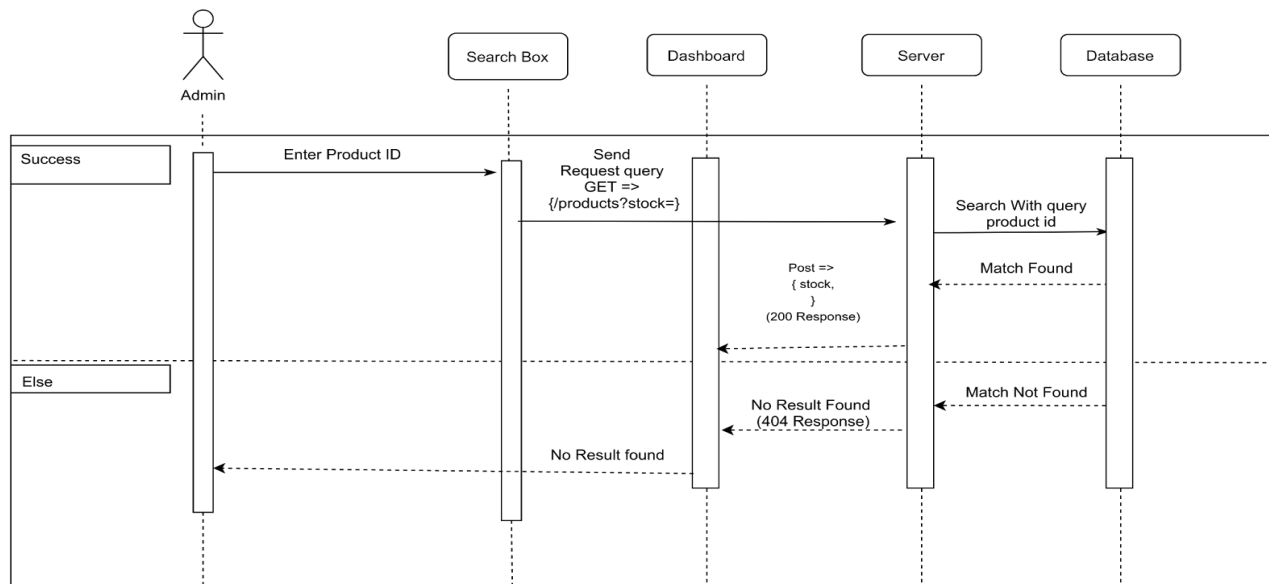


Figure: 4.5.7 View Order Squence Diagram

4.5.8. Sales Report

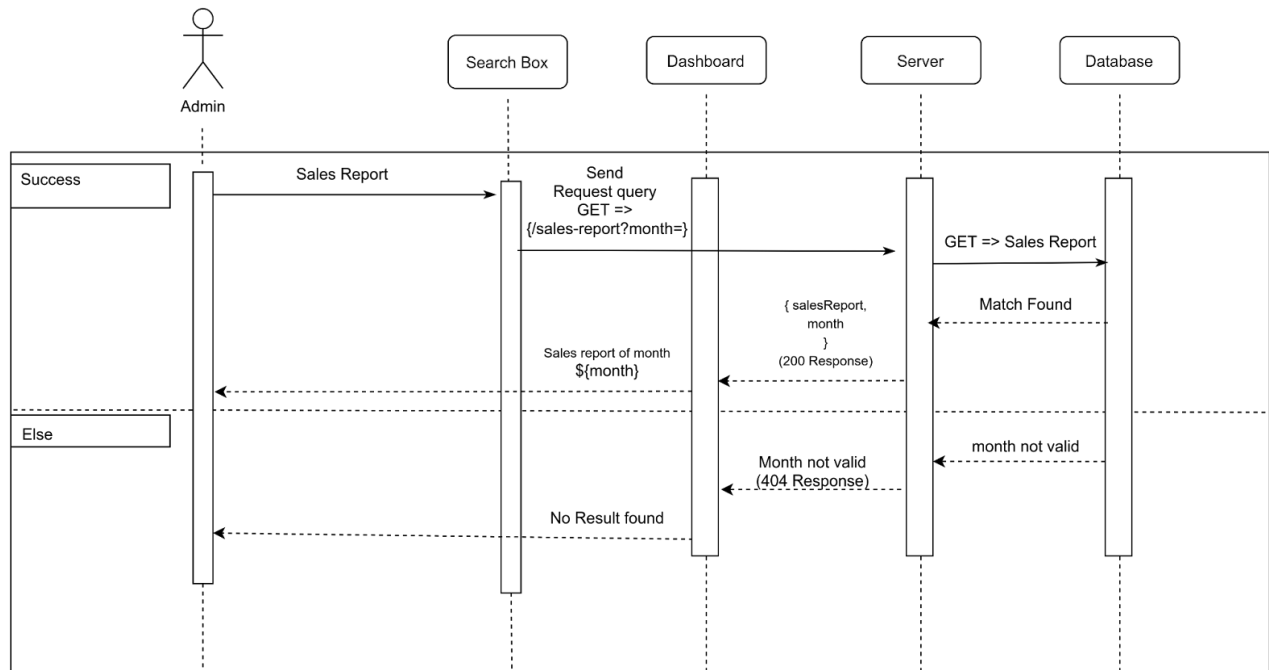


Figure: 4.5.8 View Order Squence Diagram

4.5.9. Live Chat

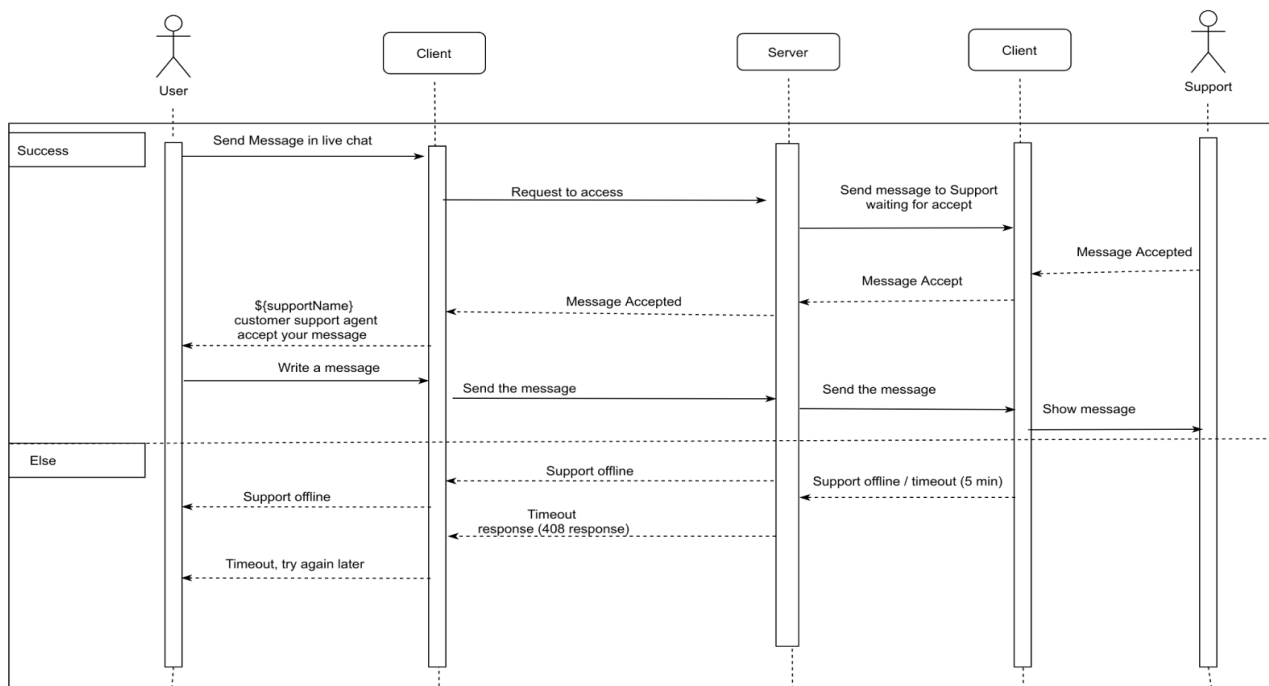


Figure: 4.5.9 View Order Squence Diagram

4.5.9. Voice Recognition

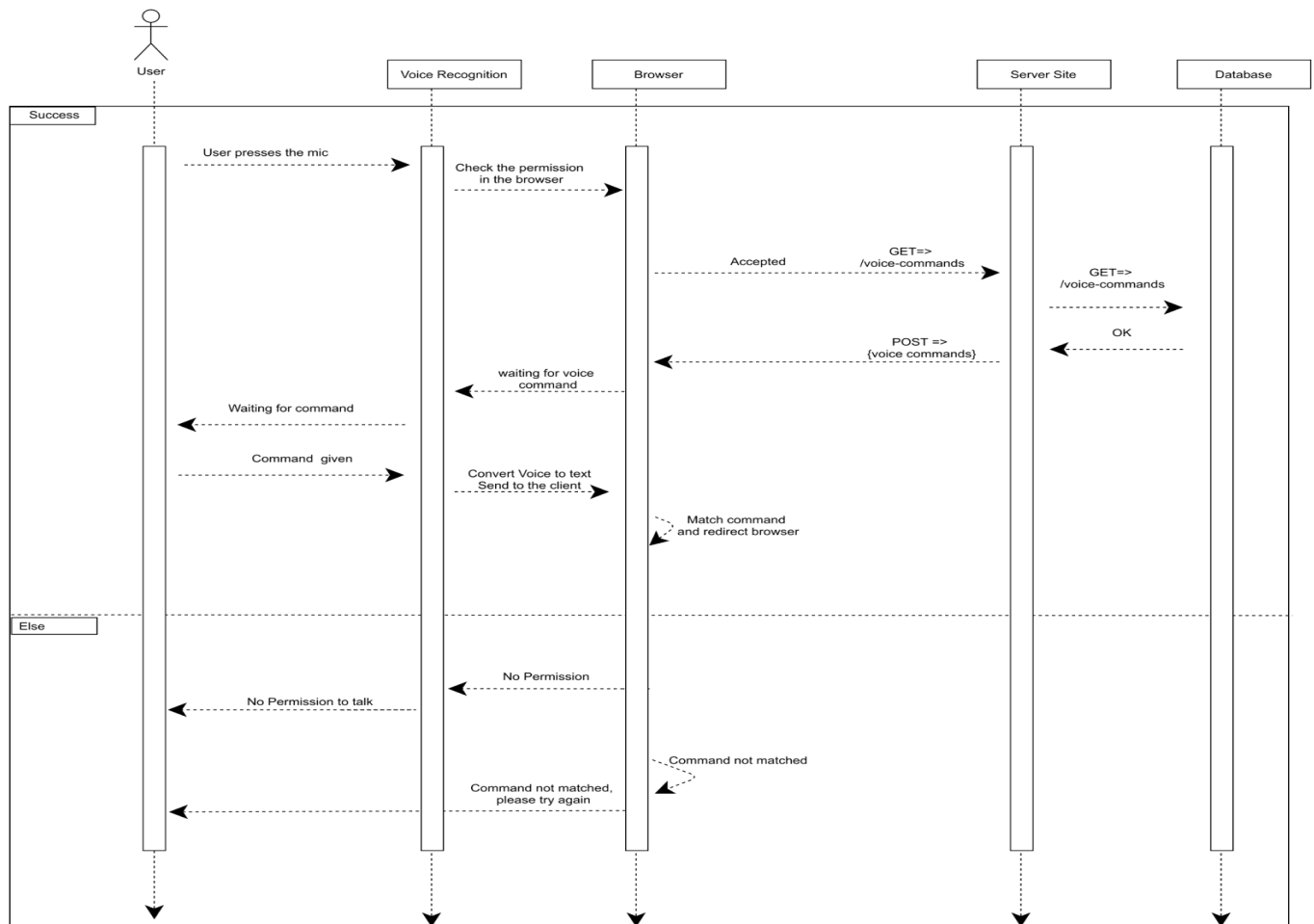


Figure: 4.5.9 Voice Recognition Squance Diagram

4.5.10 Add user

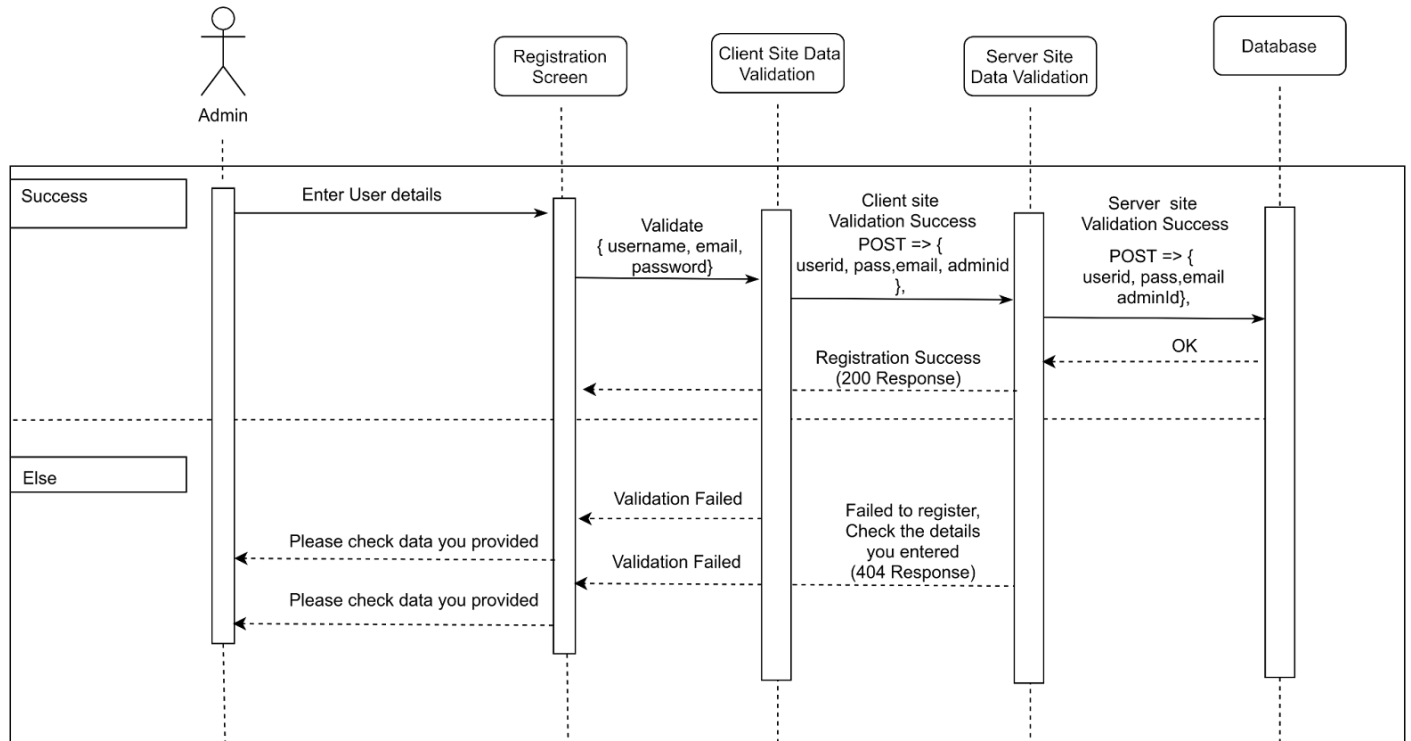


Figure: 4.5.10 Add User Sequence Diagram

4.5.11 User Details

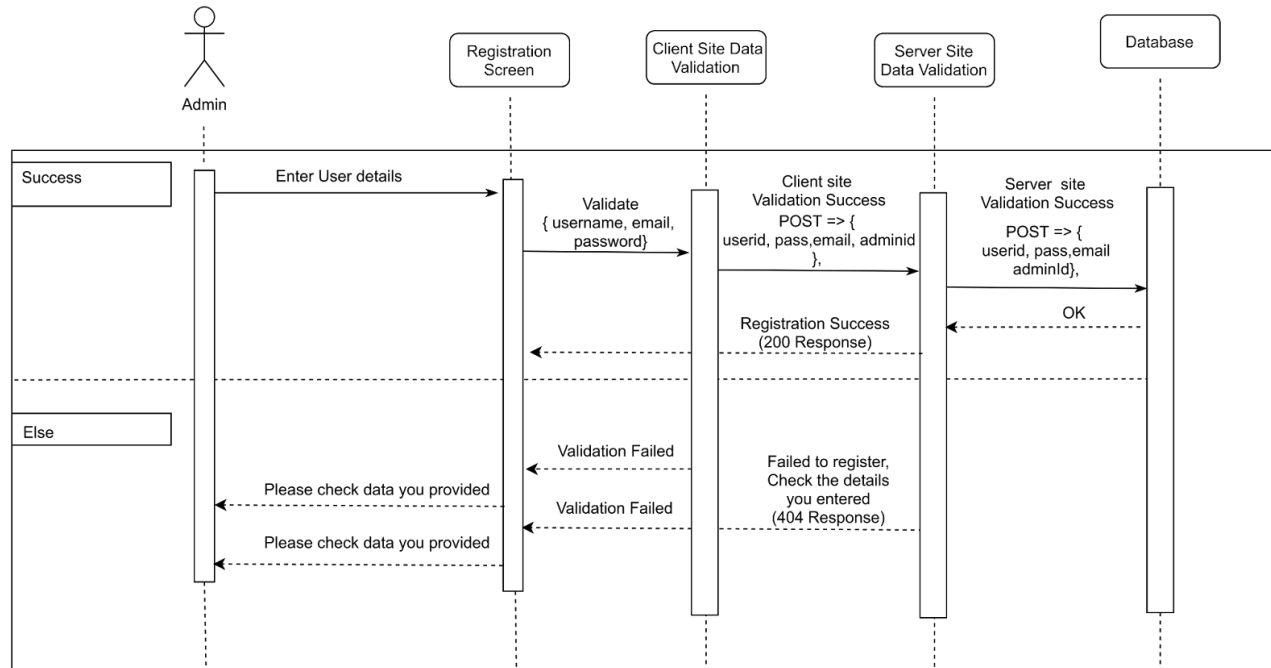


Figure: 4.5.11 User Details Squance Diagram

4.5.12 Add Product

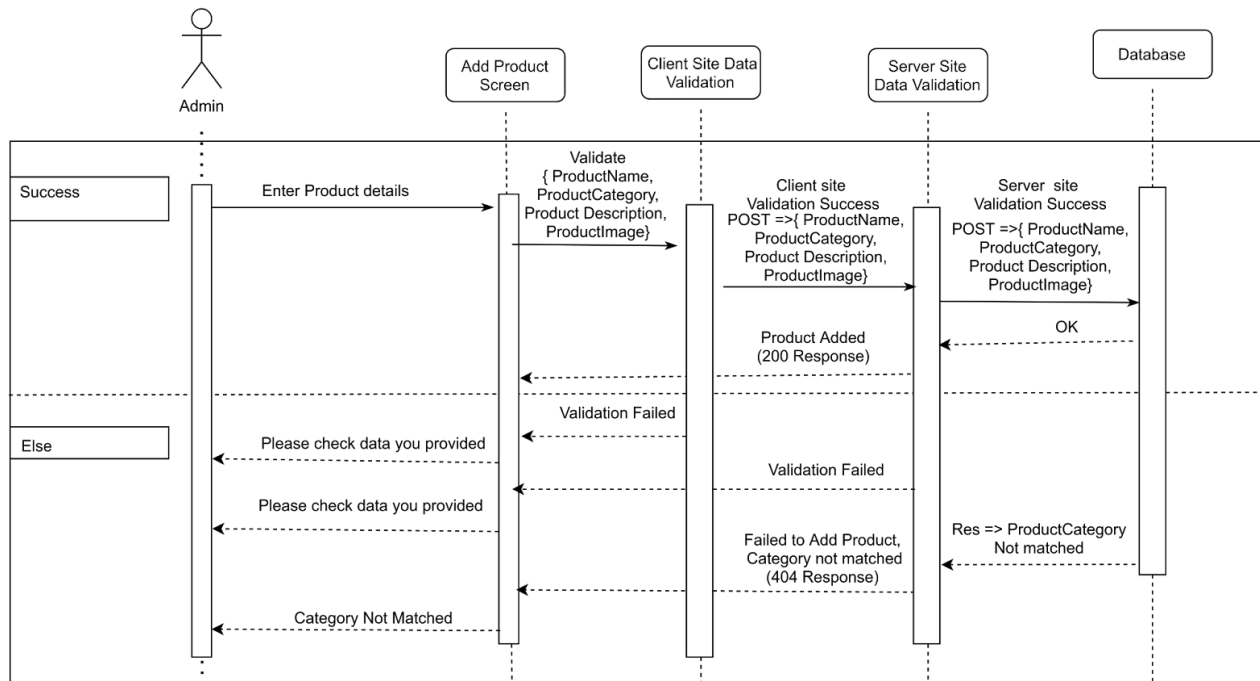


Figure: 4.5.12 Add Product Squence Diagram

4.5.13 Approve Product

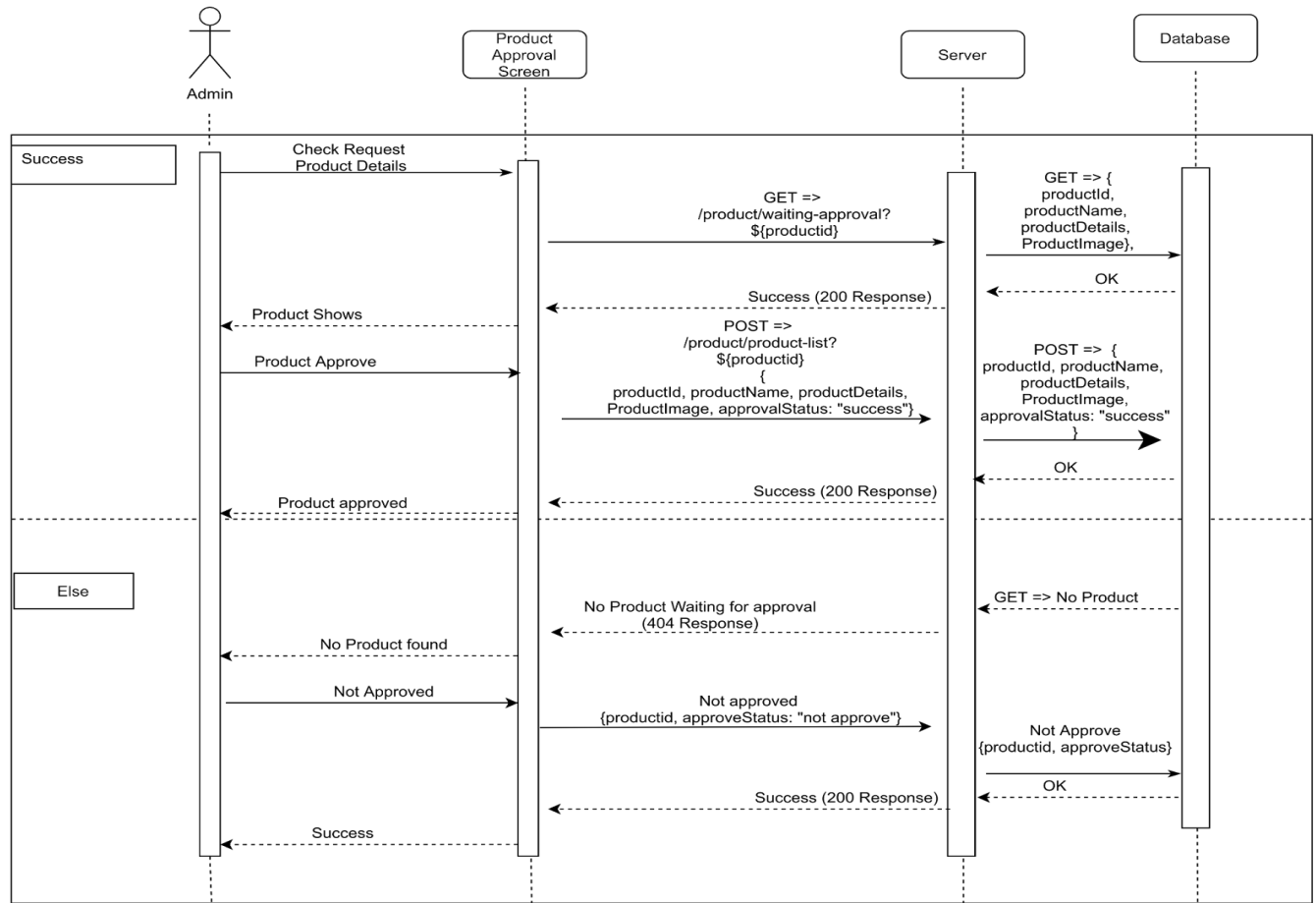


Figure: 4.5.13 Approve Product Sequence Diagram

4.6. Entity Relationship Diagram (ERD)

Entity-Relationship(ER) diagrams are typically used in computing to organize data in databases or information systems. They show entities and their relationships to one another graphically. An entity is an object or concept that has data associated with it that is stored in a database.

4.6.1 ERD

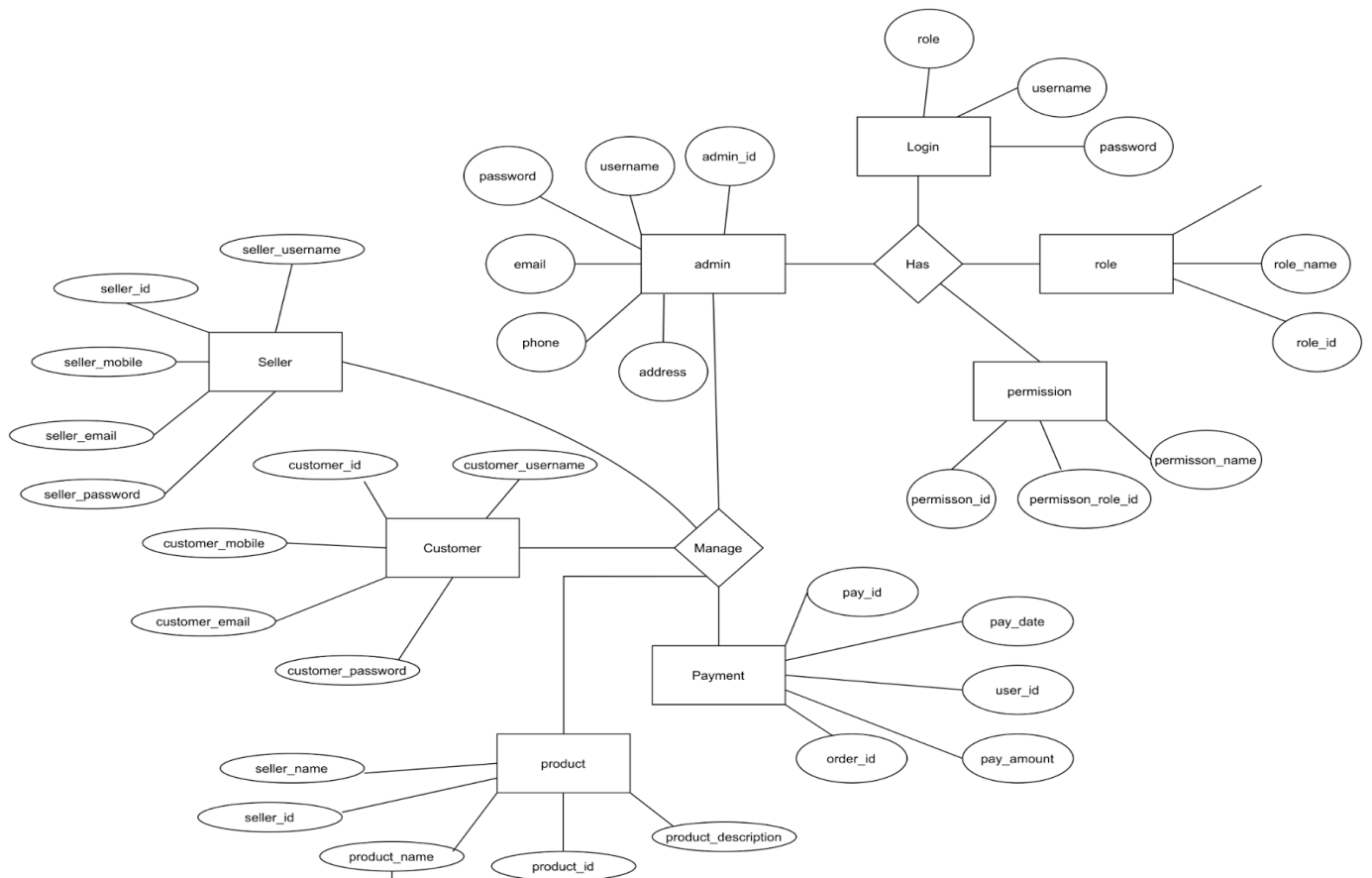


Figure: 4.6 ER Diagram

Chapter 5

Development and Implementation

5.1. Front and Design:

This hospital management system project fully integrates the user interface, user experience, and performance. The system's front end has been kept incredibly simple and slim for this reason. This hospital management project called for a single-page web application. A single-page app can store data effectively if it makes a request to the server and then modifies the other data. As a result, it can make use of this data even if users are not online. Local data can be updated with server data once the connection has been restored.

5.2. ReactJS:

User interfaces for single-page applications can be created with the help of React.js, an open-source JavaScript library. The view layer of web and mobile applications have been managed with it.

We can also build reusable user interface elements with React. React is a JavaScript library that can be used to create user interfaces in a declarative, efficient, and versatile manner. The letter "T" in "MVT" Element instances in React are simple, low-cost objects. The DOM is automatically updated to reflect the new React elements thanks to React DOM. This is because maintaining a DOM tree in JavaScript helps speed up its manipulation, and JavaScript is fast. Although react.js was originally conceived for use in the browser, it can also be used on the server with node.js.

5.3. NodeJS:

Ruby Event Machine and Python Twisted were used as design models for Node.js. In Node.js, the event model is enhanced. It showcases an event loop as a runtime construct rather than as a library. In all other systems, the event loop must be started with a blocking call. The majority of the time, blocking calls, like EventMachine::run, are used at the end of a script to start a server, while callbacks are typically used at the beginning to define behavior (). The "start the event loop" function from the C language does not exist in Node.js. Following the execution of the input script,

Node.js launches the event loop right away. Node.js ends the event loop when there are no more callbacks to handle. Like in browser JavaScript, the user is not made aware of the event loop.

Since streaming and low latency were priorities when Node.js was created, HTTP is regarded as a first-class citizen in the framework. Because of this, it is safe to use Node.js as the foundation for a web library or framework.

Node.js was created without threads, but it is still possible to take advantage of multicore systems. You can create child processes with our `child process.fork()` API that are easy to interact with.

5.4. Database Implementation (MongoDB)

A document-oriented, non-relational database called MongoDB is capable of storing data in a JSON-like format. The flexibility of MongoDB's data model allows it to support the storage of unstructured data. It also provides full indexing support, replication, and rich and user-friendly APIs.

5.5. Implementation Requirements

The system will be developed using the following technologies:

Web Development Technology:

Operating System: Ubuntu 20.04

Web Server: Nginx

Language Platform: JavaScript

Frontend Framework: ReactJs, Tailwind CSS

Backend Framework: Node JS, Express

Database Server: MongoDB

Hosting: Netlify, Heroku

IDE: Visual Studio

Code Tools: Github, Trello, Draw.io

5.6. Project Deliverable:

Deliverables are the end results of a project for the development of an application. Deliverables

can be new or improved products and services, better-quality services, advantages from risk mitigation, more flexible or effective staff, and policy compliances, among other things. Customers must receive the best products and services possible, regardless of whether they originate inside or outside the company.

5.7. Schedule and Planning:

The end goal of software project planning is to create a realistic plan for managing and tracking complex technical applications. Project planning's ultimate goal is to guarantee high-quality, on-time delivery of the final product within the specified budget.

Deliverables	Submission Date	Comment
Proposal	May 4, 2022	Submit On Time
System Analysis	September 4, 2022	Submit on time
Physical Design	November 4, 2022	90 percent completed
Documentation	November 27, 2022	

Table - 1: Schedule and Planning

5.8. Resource Allocation:

In the world of app development, we refer to planning how to use things like field research, surveys, prototypes, and team brainstorming as "application resource allocations." the process of allocating resources between competing projects or organizations.

The application plans are divided into two sections: the fundamentals of allocation decisions and the contingency plans. The first and most important allocations decision is deciding what to fund within the plans. how much funding should be provided and whether any funding should be provided at all. Funding is provided for some things but not for others.

Chapter 6

User Manual

In this chapter we are described the use of the Go Mart appplication software.

6.1. Login Page:

This is the very first page that users will interact with, and it is here that they will enter their credentials in order to gain access. That's where customers put in their email address and password so you can verify their identity.

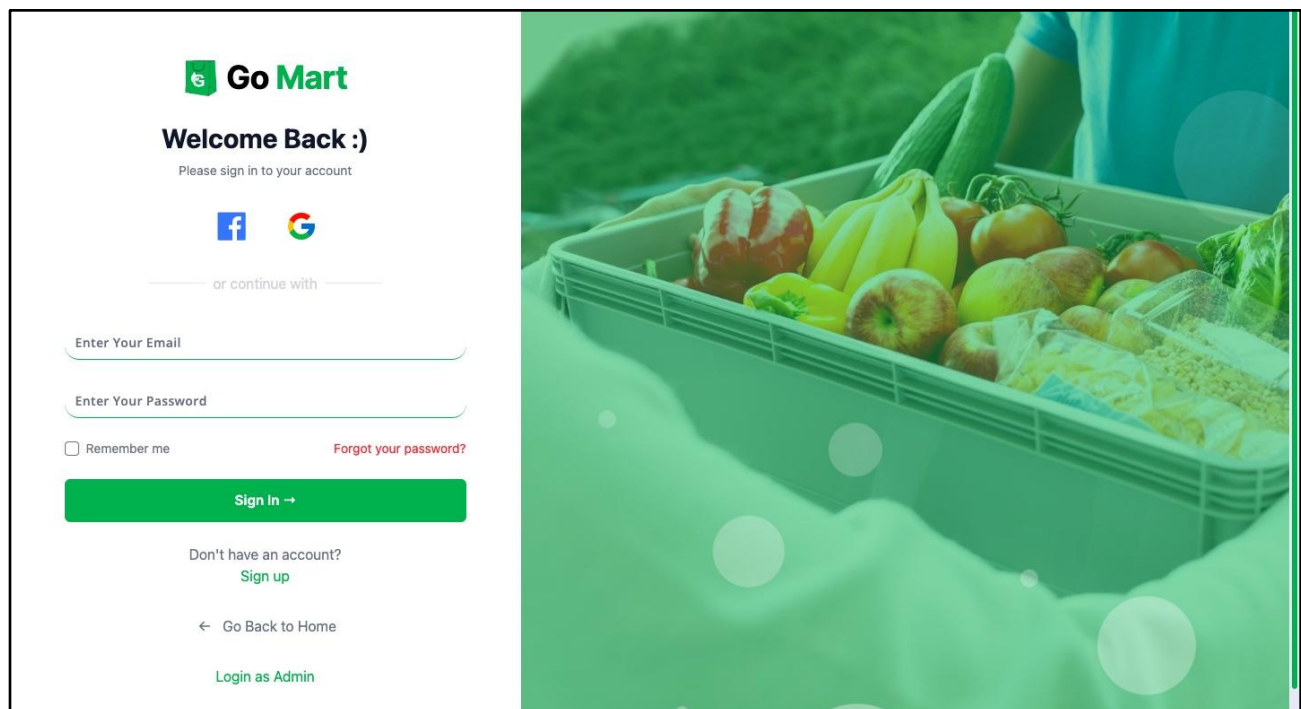


Figure: Login Page

6.2. Product List Page:

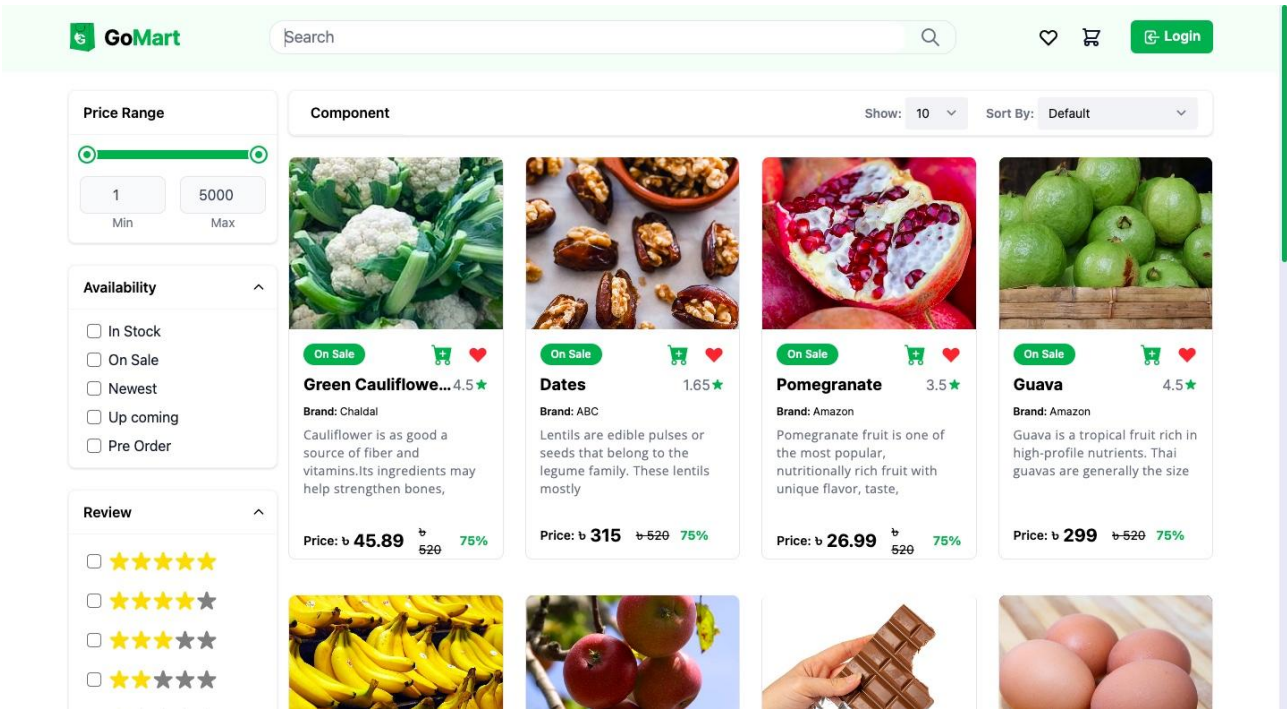


Figure- 06: Product List Page

6.3. Cart:

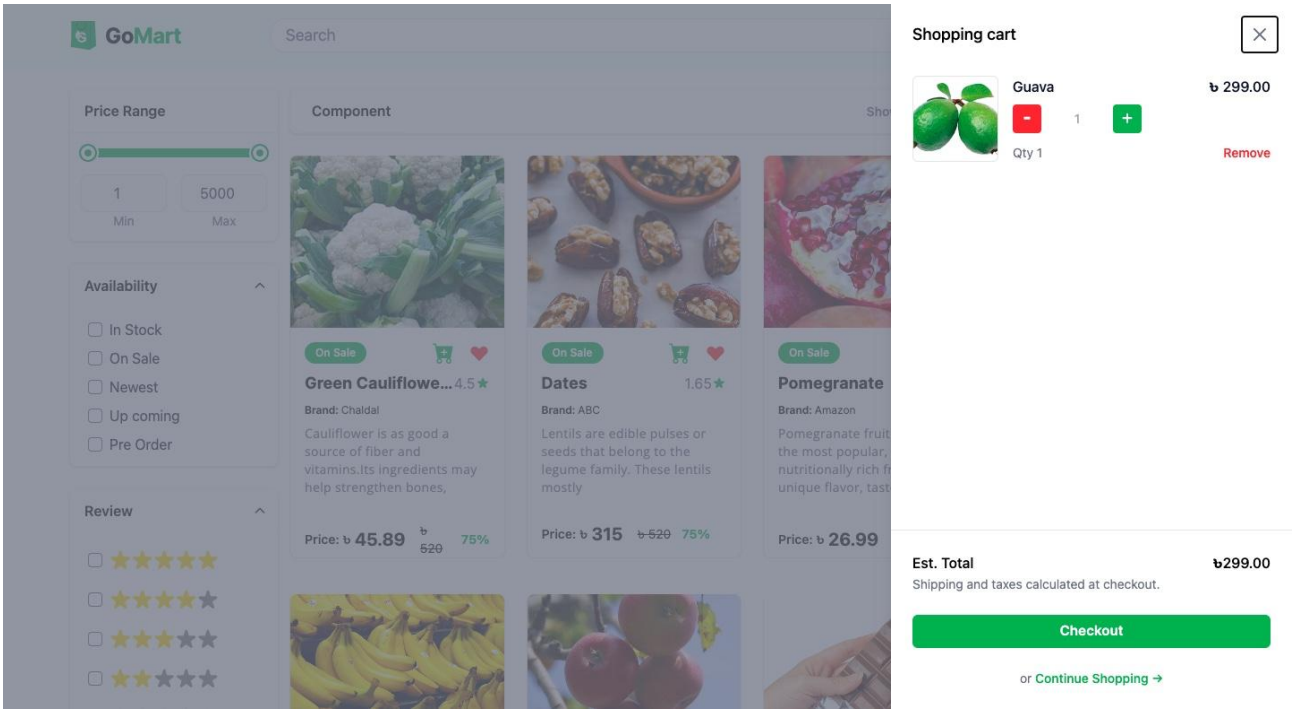


Figure: Cart

Chapter 7

Conclusion

This system is very simple compared to traditional manual methods. With this system, people will feel comfortable using the internet. To fully realize the potential of the application, however, a few features still need to be developed.

The system enhances user and shareholder conveniences alike. Making the switch from a manual to an automated system for keeping track of records will improve efficiency and safety in our nation. The true potential of the internet is still largely unknown in our country, and web literacy is generally low. That limits us, in our opinion. We'll ease their concerns about reporting wrongdoing through our app and make it simple for them to help law enforcement, government officials, and themselves.

Future Research Directions Suggestions This is what we promise:

- 7.1** a redesigned interface with an improved user interface.
- 7.2** In the future, there will be more improvements.
- 7.3** The app will be strengthened in terms of reliability.

7.4 Reference

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