206730

DUET DIVINE

A PROJECT REPORT

Submitted by

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In partial fulfilment for the award of the degree of

BACHELOR OF ENGINEERING

In

Computer Engineering

Sal College Of Engineering, Ahmedabad

Gujarat Technological University, Ahmedabad

Academic Year (2021-2022)

206730

SAL COLLEGE OF ENGINEERING

Ahmedabad

CERTIFICATE

This is to certify that the project report submitted along with the project entitled **DuetDivine** has been carried out by **Parmar Dhirenkumer Bharatbhai.** under my guidance in partial fulfilment for the degree of **Bachelor of Engineering** in **Computer Engineering**, **8th** Semester of Gujarat Technological University, Ahmadabad during the academic year 2021-22

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(Internal Guide)   (Head of the Department)

206730

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DECLARATION

We hereby declare that the Internship report submitted along with the Internship entitled Online food order and delivery system submitted in partial fulfilment for the degree of Bachelor of Engineering in Computer Engineering to Gujarat Technological University, Ahmedabad, is a bonafide record of original project work carried out by me at Designer2Developer Software Company under the supervision of Varsha Shah and that no part of this report has been directly copied from any students' reports or taken from any other source, without providing due reference.

Name of the Student   Sign of Student

1.   Parmar DhirenKumar Bharatbhai

Acknowledgement

I wish to express our sincere gratitude to our External guide **Varsha Shah** for continuously guiding me at the company and answering all my doubts with patience. I would also like to thank my Internal Guide **Assi. Pro. Ajeet Patel** for helping us through our internship by giving us the necessary suggestions and advices along with their valuable co-ordination in completing this internship.

We also thank our parents, friends and all the members of the family for their precious support and encouragement which they had provided in completion of our work. In addition to that, we would also like to mention the company personals who gave us the permission to use and experience the valuable resources required for the internship.

Thus, in conclusion to the above said, we once again thank the staff members of **Designer2Developer** for their valuable support in completion of the project.

Thank You.

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Abstract

The Duet Divine, web-based application is proposed with aim to facilitate customers to order cloths/dresses online for different occasions such as Engagement, Nikkah, Mehndi, Barat etc. Customers can buy Bridal, Groom, and Party wear dresses etc. Party wear dresses can be for Men, Women and Kids. The customers will be able to receive ordered dresses at their doorstep. Amount will be paid through online payment. The admin will manage dresses information, stock information, orders information, and user's information etc. User can sign up as seller or customer. Seller can manage products details.

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Chapter 1: Overview of the Company

1.1 HISTORY

Designer2Developer is a core technology service company having team of 30 in house resources maintaining that fine balance between IT & software development services and IOE (Internet of Everything) with in-house capability to deliver the complete solution. We have experience delivering tailor-made solutions for our clients on web & mobile platform in various domains like Education, E-Learning, Healthcare, Automotive, Food & Restaurants, Travel & Tourism, Connected Car, IOT, Retail & E-commerce, Marketplaces, Smart Cities & Smart Home, Social Networking, Manufacturing & Business Automation software solution.

We have experience in working with start-ups for building Prototype, MVP development and defining road map for the product as well as we have expertise to work with giant organizations for their solutions in SaaS Development & PaaS Development with SDK's & open APIs available for users under license, by understanding of the process, standards & architecture.

We have experienced & competent team with latest technology stack which enable us to provide end to end software development services such as intuitive web development, mobile application development, Device server communication development, IOT Application Development, embedded software development & integrated solutions with data analysis & predictive analytics supported by an intuitive backend system & user interface.

1.2 SCOPE OF WORK

Software development is ever changing process. Website is also a kind of software, so it is always prone to changes. There is always a chance of improvement as technology evolves. As we discussed in the limitations section, we can upgrade the website to incorporate those changes. We can make the website more dynamic and we can also extend it to manage more than one department.

1.3 SERVICES

- Android Development

- iOS Development

- Windows Development

- Web Development

- Enterprise Solution

- UI/UX Design

CHAPTER 2: Overview of Different Department of The Organization and Layout of the Process Being Carried Out in Company

2.1 It includes the details about the work being carried out in each department

Designer2developer is an innovative web and mobile apps development company in India that has the specialization and expertise in developing Web and mobile applications for organizations in various verticals – Retail, Travel, Construction, Entertainment, Lifestyle, Social Networking and Education etc.

2.2 List the technical specifications of major equipment used in each department.

We work on many technologies like Android, iOS, Python, .Net, Java etc...

Designer2developer, receive the, Mobile application development, .Net development, Training directly from industry experts. Our experts are Mobile application developers having great experience and understanding in App designing and development. Designer2developer will teach you coding, designing and developing Web Application and Mobile Application enabling you to get the best job in the competitive field of Information Technology. Designer2developer is currently working with latest technologies like IOT development and also AngularJS and NodeJS technologies for web development.

2.3 Prepare schematic layout which shows the sequence of operation for manufacturing of end product.

Administrator can do the following functions

- ➢ Admin can system.

- ➢ Admin can login.

- ➢ Admin can manage customer and seller.

- ➢ Admin can manage orders.

- ➢ Manage Payments

- ➢ Logout

User (Customer) can do the following functions

- ➢ Login
- ➢ Sign Up
- ➢ Change password and update profile
- ➢ User can show details about artists
- ➢ User can search products
- ➢ User can order products
- ➢ User can do payment online
- ➢ User can see all orders
- ➢ Logout.

Artist can do the following functions

- ➢ Login

- ➢ Sign up
- ➢ Update profile and change password
- ➢ Add product and its details
- ➢ Update and delete product

- ➢ Sign up

Chapter 3: Introduction to Project / Internship and   Product / Internship Management

3.1 Project Summery

The DuetDivine, web based application is proposed with aim to facilitate customers to order cloths/dresses online for different occasions such as Engagement, Nikkah, Mehndi, Barat etc. Customers can buy Bridal, Groom, and Party wear dresses etc. Party wear dresses can be for Men, Women and Kids. The customers will be able to receive ordered dresses at their doorstep. Amount will be paid through online payment. The admin will manage dresses information, stock information, orders information, and user's information etc. User can sign up as seller or customer. Seller can manage products details.

3.2 Purpose

Our purpose of this project is to manage the online shopping of cloths suitable for varies occasions like weddings and parties. It helps customer to order cloths for varies occasions from any time at anywhere at. Also make payment on delivery for it. It helps one to order desired cloths at time one comfortable with.

3.3 Objective

Our main objective is to manage the details of Product Category, Products, Delivery Address, Order, Shopping Cart. It manages all the information about Product Category, Customer, Shopping Cart, Product Category. The project is totally built at administrative end and thus only the administrator is guaranteed the access. The purpose of the project is to build an application program to reduce the manual work for managing the Product Category, Food, Customer, Delivery Address.

The study has the following specific objectives:

- To develop a system that will surely satisfy the customer service.
- To design a system able to accommodate huge number of orders at a time.
- To evaluate its performance and acceptability in terms of security, user-friendliness, accuracy and reliability.
- To improve the communication between the client and the server and minimize the time of ordering.
- The system will also automatically calculate and displays the final bill so the bills will ready to print without having any error because the information for that item is already inserted.
- To automatically compute the bill.

3.4 Scope

Project scope is the part of project planning that involves determining and documenting a list of specific project goals, deliverables, features, functions, tasks, deadlines, and ultimately costs. In other words, it is what needs to be achieved and the work that must be done to deliver a project.

Duet Divine has made wedding shopping comfortable and easier. This system offers product description, pictures, comparison, price and much more.

Duet Divine makes use of digital technology for managing the flow of information, products and payment between customers and sellers. Customers can view, purchase products as per their needs.

Shopping cart is one of the important facilities provided in our system which will help our customers to browse products till the final selection.

Customers are provided with up-to-date information on the products available.

3.5 Technology and Literature Review

Tools

- Vs Code
- Django Framework

Technology

Python:

Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. Its high-level built in data structures, combined with dynamic typing and dynamic binding, make it very attractive for Rapid Application Development, as well as for use as a scripting or glue language to connect existing components together. Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. Python supports modules and packages, which encourages program modularity and code reuse. The Python interpreter and the extensive VS

Often, programmers fall in love with Python because of the increased productivity it provides. Since there is no compilation step, the edit-test-debug cycle is incredibly fast. Debugging Python programs is easy: a bug or bad input will never cause a segmentation fault. Instead, when the interpreter discovers an error, it raises an exception. When the program doesn't catch the exception, the interpreter prints a stack trace. A source level debugger allows inspection of local and global variables, evaluation of arbitrary expressions, setting breakpoints, stepping through the code a line at a time, and so on. The debugger is written in Python itself, testifying to Python's introspective power. On the other hand, often the quickest way to debug a program is to add a few print statements to the source: the fast edit-test-debug cycle makes this simple approach very effective.

Django:

Django is a high-level Python web framework that encourages rapid development and clean, pragmatic design. Django makes it easier to build better web apps quickly and with less code.

Note − Django is a registered trademark of the Django Software Foundation, and is licensed under BSD License.

History of Django

- **2003** − Started by Adrian Holovaty and Simon Willison as an internal project at the Lawrence Journal-World newspaper.

- **2005** − Released July 2005 and named it Django, after the jazz guitarist Django Reinhardt.

- **2005** − Mature enough to handle several high-traffic sites.

- **Current** − Django is now an open source project with contributors across the world.

Django – Design Philosophies

Django comes with the following design philosophies −

- **Loosely Coupled** − Django aims to make each element of its stack independent of the others.

- **Less Coding** − Less code so in turn a quick development.

- **Don't Repeat Yourself (DRY)** − Everything should be developed only in exactly one place instead of repeating it again and again.

- **Fast Development** − Django's philosophy is to do all it can to facilitate hyper-fast development.

- **Clean Design** − Django strictly maintains a clean design throughout its own code and makes it easy to follow best web-development practices.

3.6 Project Planning

The **DuetDivine** is a ecommerce project developed using Django Framework. The project connects different seller with customers. The project contains an seller and the customer side. All the management like editing site contents, updating layout and checking order status can be managed from the admin side. There can be many managers on the site. For the user section, the users can go through the homepage, about, and contact pages. In order to order products, the user has to create an account and sign in or log in. The product comes with the cost as well. This project makes a convenient way for customers to buy/purchase online, without having to go to the shop. Talking about the features of this system, it contains the seller and customer sides. All the editing, updating, managing order details are from the admin section while users can only go through the site and sign up as seller or customer. The design of this system is simple so that the user won't get any difficulties while working on it.

3.6.1 Project / Internship Development Approach and Justification

Incremental Model Design:

The incremental build model is a method of software development where the model is designed, implemented and tested incrementally (a little more is added each time) until the product is finished. It involves both development and maintenance. The product is defined as finished when it satisfies all of its requirements. This model combines the elements of the waterfall model with the iterative philosophy of prototyping.

Following is the pictorial representation of Iterative and Incremental model:

Iterative and Incremental development is a combination of both iterative design or iterative method and incremental build model for development. "During software development, more than one iteration of the software development cycle may be in progress at the same time." and "This process may be described as an "evolutionary acquisition" or "incremental build" approach."

In incremental model the whole requirement is divided into various builds. During each iteration, the development module goes through the requirements, design, implementation and testing phases. Each subsequent release of the module adds function to the previous release. The process continues till the complete system is ready as per the requirement.
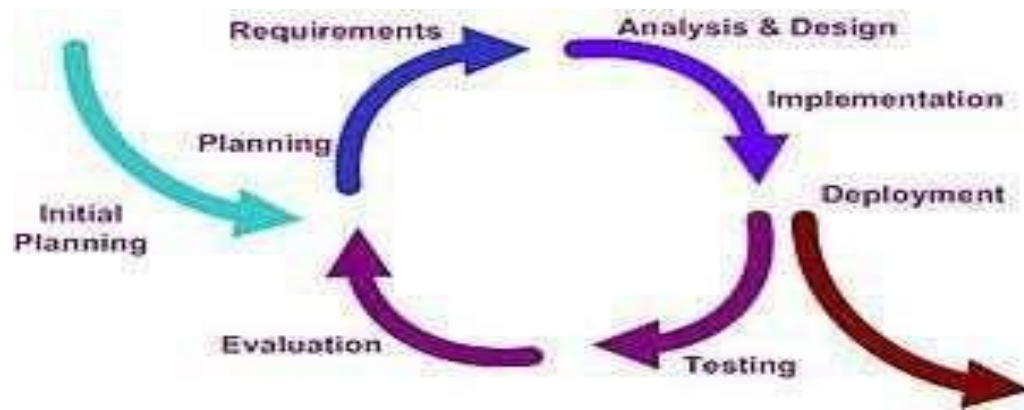
Fig 3.6.1.1

The key to successful use of an iterative software development life-cycle is rigorous validation of requirements, and verification & testing of each version of the software against those requirements within each cycle of the model. As the software evolves through successive cycles, tests have to be repeated and extended to verify each version of the software.

Iterative Model Application:

Like other SDLC models, Iterative and incremental development has some specific applications in the software industry. This model is most often used in the following scenarios:

- ✓ Requirements of the complete system are clearly defined and understood.
- ✓ Major requirements must be defined; however, some functionalities or requested enhancements may evolve with time.
- ✓ There is a time to the market constraint.
- ✓ A new technology is being used and is being learns by the development team while working on the project.
- ✓ Resources with needed skill set are not available and are planned to be used on contract basis for specific iteration

3.6.2 **Roles and Responsibilities**

There is role of the user to first of all analysis, designing, coding, testing and documentation. The main responsibility of the system is to satisfy the student requirements and provide the all solution of their query

Chapter 4: System Analysis

4.1 Study in current system/existing system

The DuetDivine is ecommerce web application in which people can easily purchase products by using the internet. Online shopping gives us an idea of the availability of everything online at a cost of our data. Online shopping is a growing and trending aspect. It provides customers with buying various products and services, and sellers to carry on their business and transactions in an online mode. It is time saving and convenient way of shopping. It can be said that it is the development of traditional shopping ways to make shopping more accessible, relaxing, and flexible.

4.2 Problem or weakness of current system/limitation of existing system

- Location of the customer is not known; customer from rural area or without internet unable to use this web application
- Delivery time can be varies.

4.3 Proposed system/requirement of new system

This system consists of student module, Driver module and Admin Module which will help the system to work smoothly as admin have rights to manage the user and driver both and also, he can allocate new drivers for different routes.

The student module will get all details in system with timings of bus with capacity so that he can select appropriate bus in that route.

4.4 Feasibility study

When a new project is proposed, it normally goes through feasibility assessment. Feasibility study is carried out to determine whether the proposed system is possible to develop with available resources and what should be the cost consideration. Facts considered in the feasibility analysis were.

- Technical Feasibility
- Economic Feasibility
- Behavioural Feasibility

Technical Feasibility

Technical Feasibility deals with the hardware as well as software requirements. Technology is not a constraint to type system development. We have to find out whether the necessary technology, the proposed equipment's have the capacity to hold the data, which is used in the project, should be checked to carry out this technical feasibility.

The technical feasibility issues usually raised during the feasibility stage of investigation includes these

- This software is running in windows 2000 Operating System, which can be easily installed.
- The hardware required is Pentium based server.

  The system can be expanded.

This feasibility study present tangible and intangible benefits from the prefect by comparing the development and operational cost. The technique of cost benefit analysis is often used as a basis for assessing economic feasibility. This system needs some more initial investment than the existing system, but it can be justifiable that it will improve quality of service.

Thus feasibility study should centre along the following points:

➢ Improvement resulting over the existing method in terms of accuracy, timeliness.

➢ Cost comparison

➢ Estimate on the life expectancy of the hardware

➢ Overall objective

Our project is economically feasible. It does not require much cost to be involved in the overall process. The overall objectives are in easing out the requirement processes.

Behavioural Feasibility

This analysis involves how it will work when it is installed and the assessment of managerial environment in which it is implemented. People are inherently resistant to change and computers have been known to facilitate change. The new proposed system is very much useful to the useful to the users and there for it will accept broad audience from around the world.

Schedule Feasibility

In Schedule Feasibility Study mainly timelines/deadlines is analyzed for proposed project which includes how many times teams will take to complete final project which has a great impact on the organization as purpose of project may fail if it can't be completed on time.

Economic Feasibility

A system that can be developed and that will be used if installed must still be a good investment for the organization. Financial benefits must equal or exceed the costs. The financial and economic issues raised are as under:

✓ No extra cost is incurred for developing the system.

✓ No extra cost for the modification or addition of software and hardware will require in case of future expansion of the current system.

The company will be at profit if they implement this system because of the cost of implementation is nominal as compared to the profit they will be earning in terms of efficiency.

4.5 Functional Requirement

ADMIN: The admin logs into the system with user name and password, the admin mages customers, sellers and products. he can add users and delete them, also admin does is manages information that are stored in the database, also the user's data is stored into the database in the users' table.

SELLER: The visitor can sign up as a seller and can add product and edit product related information to the shopping side, can delete product, view products, view orders. For seller side change password and search among his/her products by search option features available.

CUSTOMER: The visitor can sign up as a customer and then login into the web application. For customer there are change password, search product option available. They can view products added by the all seller logged in the system and can view their details, if they want they can add product to wishlist. They can add products they want to buy to the cart and then can purchase it.

4.6 Non-Functional requirement

Usability: The interface should use terms and concepts, which are drawn from the experience of people who will make most of the system.

Efficiency: The portal must provide easy and fast access without consuming more cost.

Readability: Users should never be surprised by the behaviour of the system and it should also provide meaningful feedback when error occurs so that user can recover from the error.

Accuracy: The user should require that data obtained from the database and stored in the database must be accurate.

Security: The user wants the data stored in database must be secured and cannot be accessed by unauthorized user.

Maintainability: Users want that the system should be maintained easily means that if there are some changes required in the system that can be done easily.

4.7 Requirement validation

- It is okay with not knowing the computer. As the system is paper based.

- The risk of corrupted data is much less.

- Data loss is less of a risk, particularly if records are stored in a fire-proof environment.

- Problems with duplicate copies of the same records are generally avoided.

- The process is simplified as you don't need to be familiar with computer operation

Chapter 5: System Design

5.1 System Design & Methodology

This chapter of the report aims to provide a clear vision on methods and methodologies used for this project. In first, it describes the methodology and methods selected for the research and gives rational why these methods and methodology have been used. Then it discusses about software development methodology and give rational for it.

5.1.1 Research Methodology

Research is "a scientific and systematic search for pertinent info rmation on a specific topic" (Kothari, 2004). The research methodology is a process used to collect information and data for the purpose of making decisions. There are broadly two approaches for conducting a research. Those are: 1) Quantitative analysis 2) Qualitative Analysis. For developing the system, combined method has been applied. A systematic approach should be used for conducting any research to find the solution of the problem in systematic way. For this purpose, the research methods have been applied based on waterfall model.
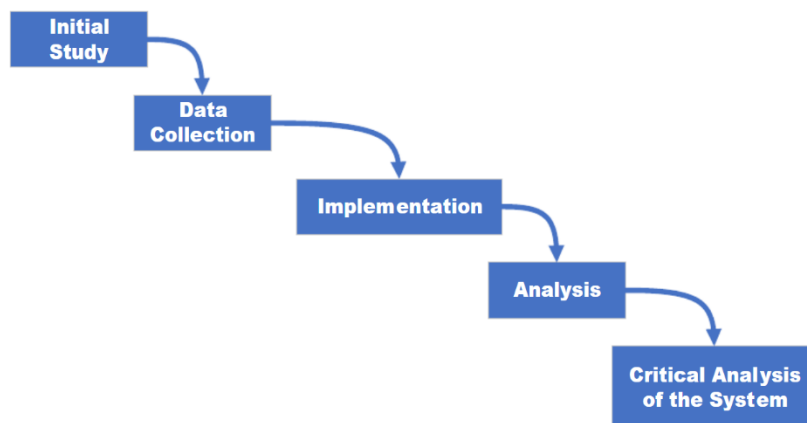
Fig 5.1.1.1 Waterfall model

5.1.2 System Development Methodology

For developing any information system, a System Development Methodology should be used which will provide a structured way for development of an IT based systems. SDLC refers to System or Software Design Life Cycle. It is phases of processes taken down to build a system properly. The main aim of SDLC process is to help provide a system that is effective, cost-efficient, and of high quality. SDLC methodologies typically has the following stages: Analysis (requirements and design), construction, testing, release, and maintenance(response). But the phases can be changed in deferent SDLC mythologies. There are many software developments models for different types of projects. In following lines, only popular three of them will be discussed.

5.2 System Diagrams

5.2.1 System Flowchart
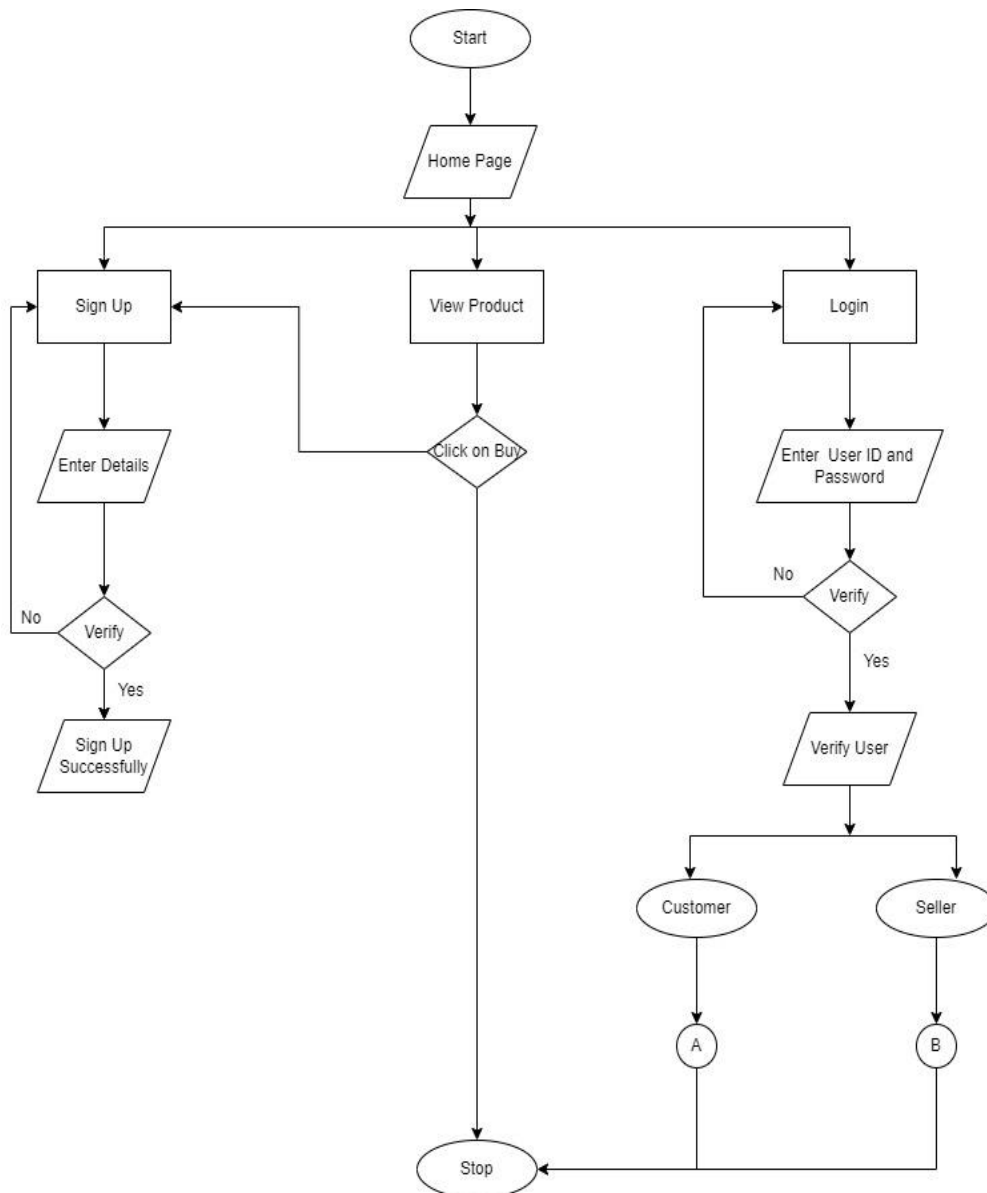
Fig 5.2.1.1 System Flow Diagram

Customer
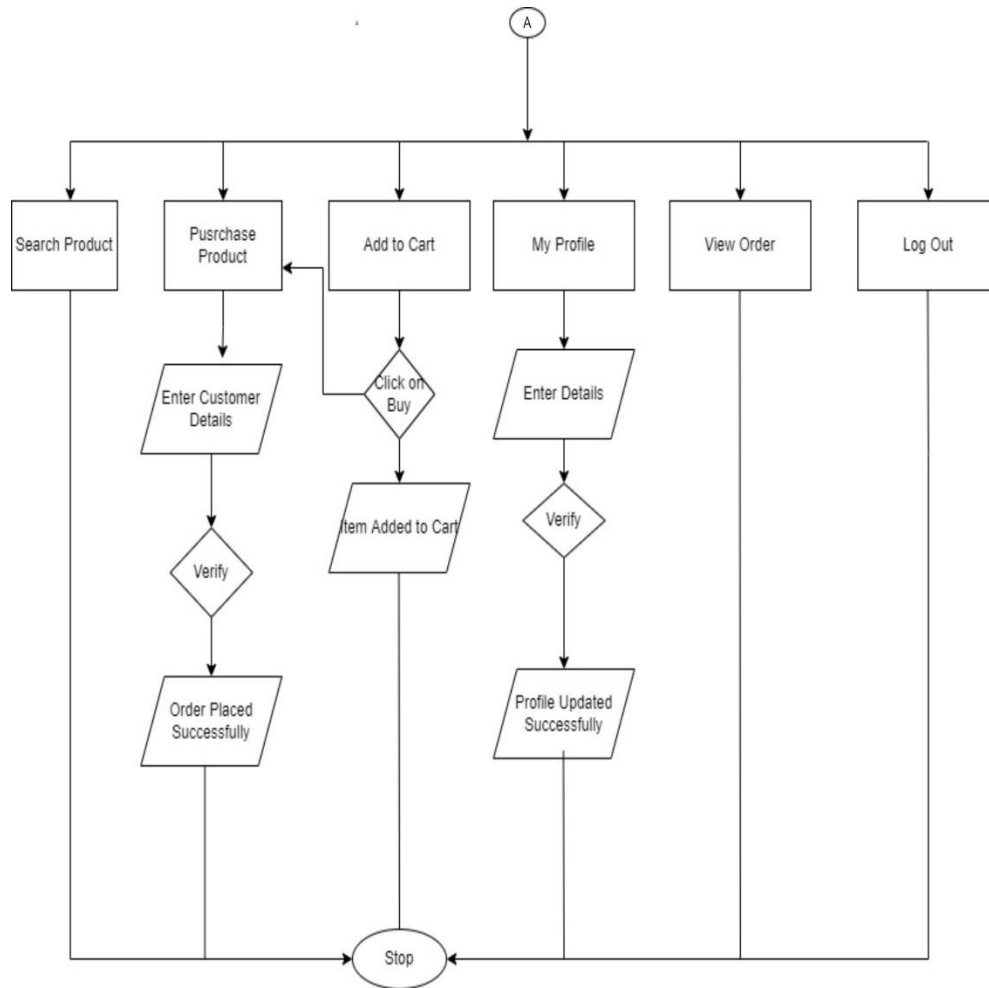
Fig 5.2.1.2 Customer System Flow Diagram

Seller
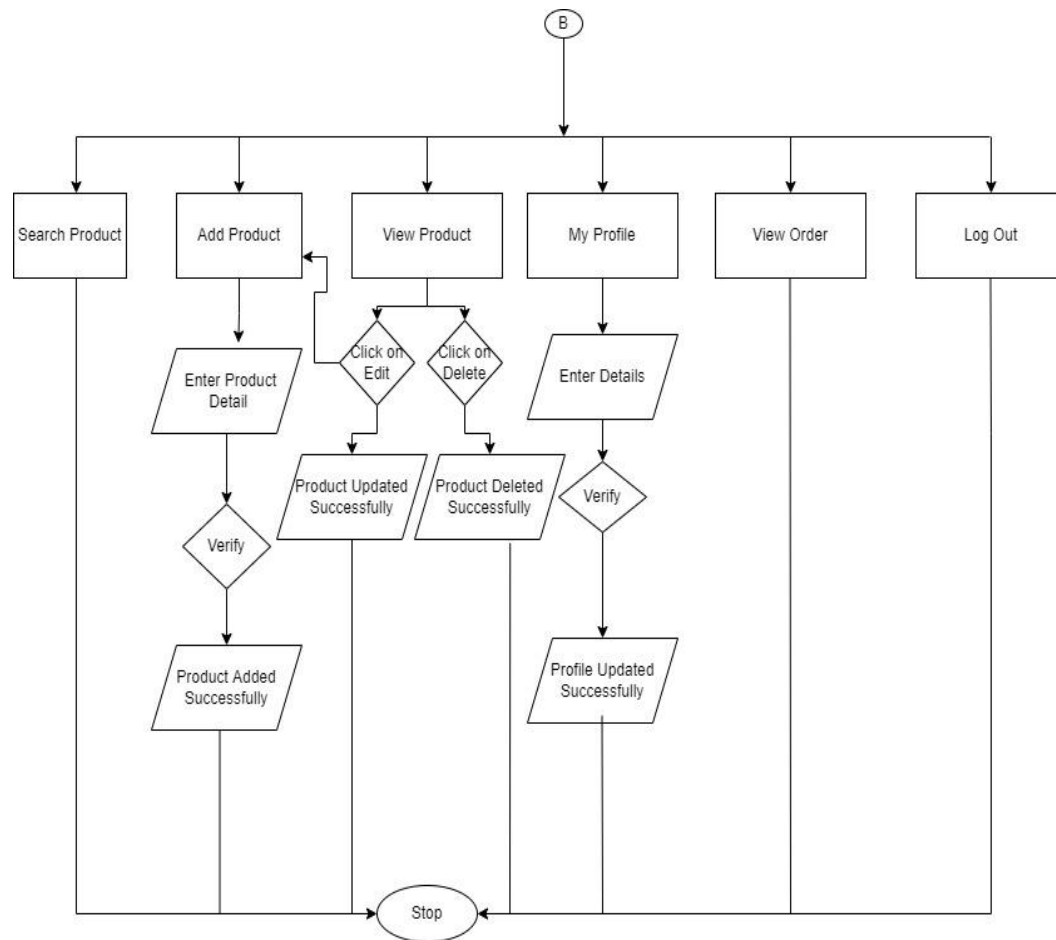
Fig 5.2.1.3 Seller System Flow Diagram

5.2.2 Data Flow Diagram

Level 0
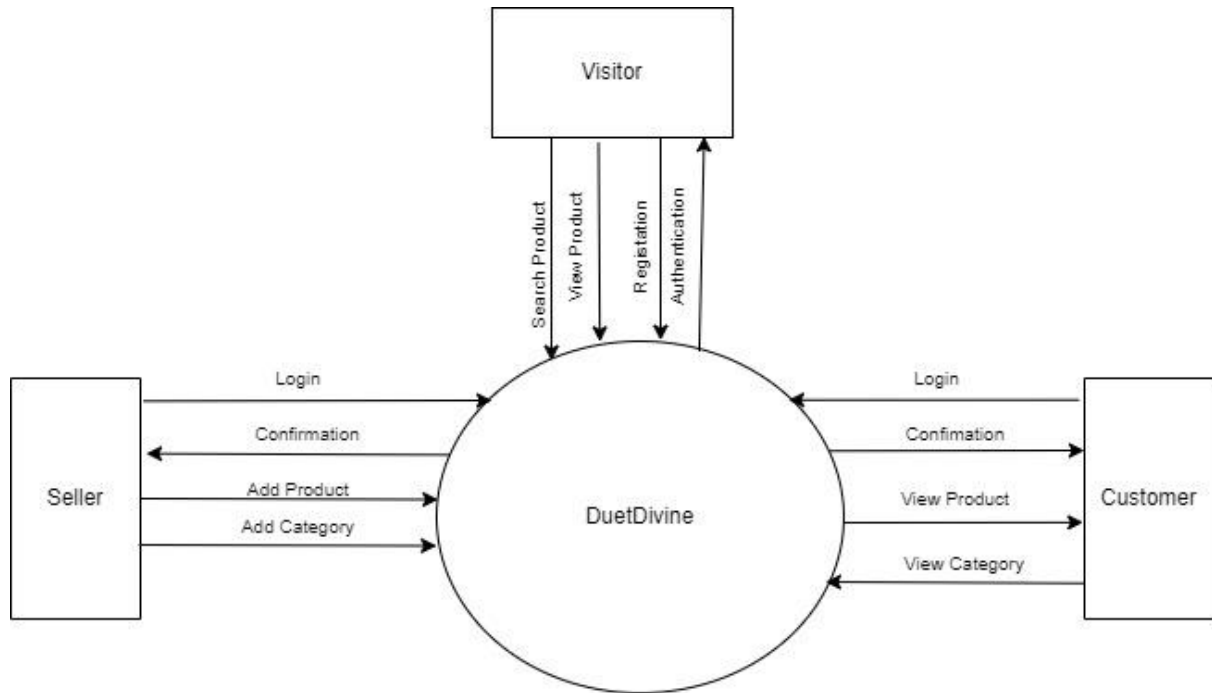
Fig 5.2.2.1 Data Flow Diagram-1

Level 1
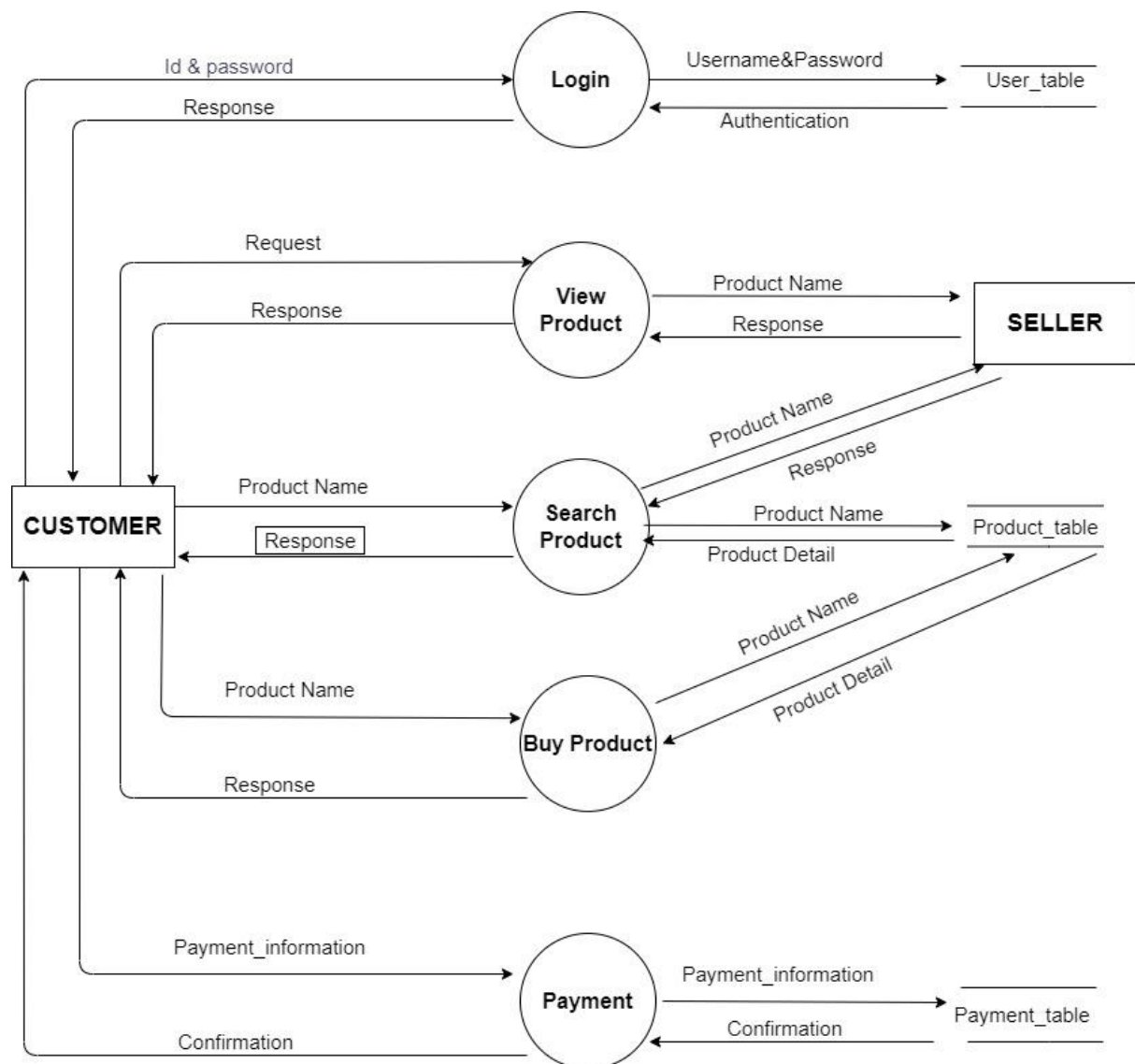
Fig 5.2.2.2 Data Flow Diagram-2

5.2.3 Activity Diagram

Customer
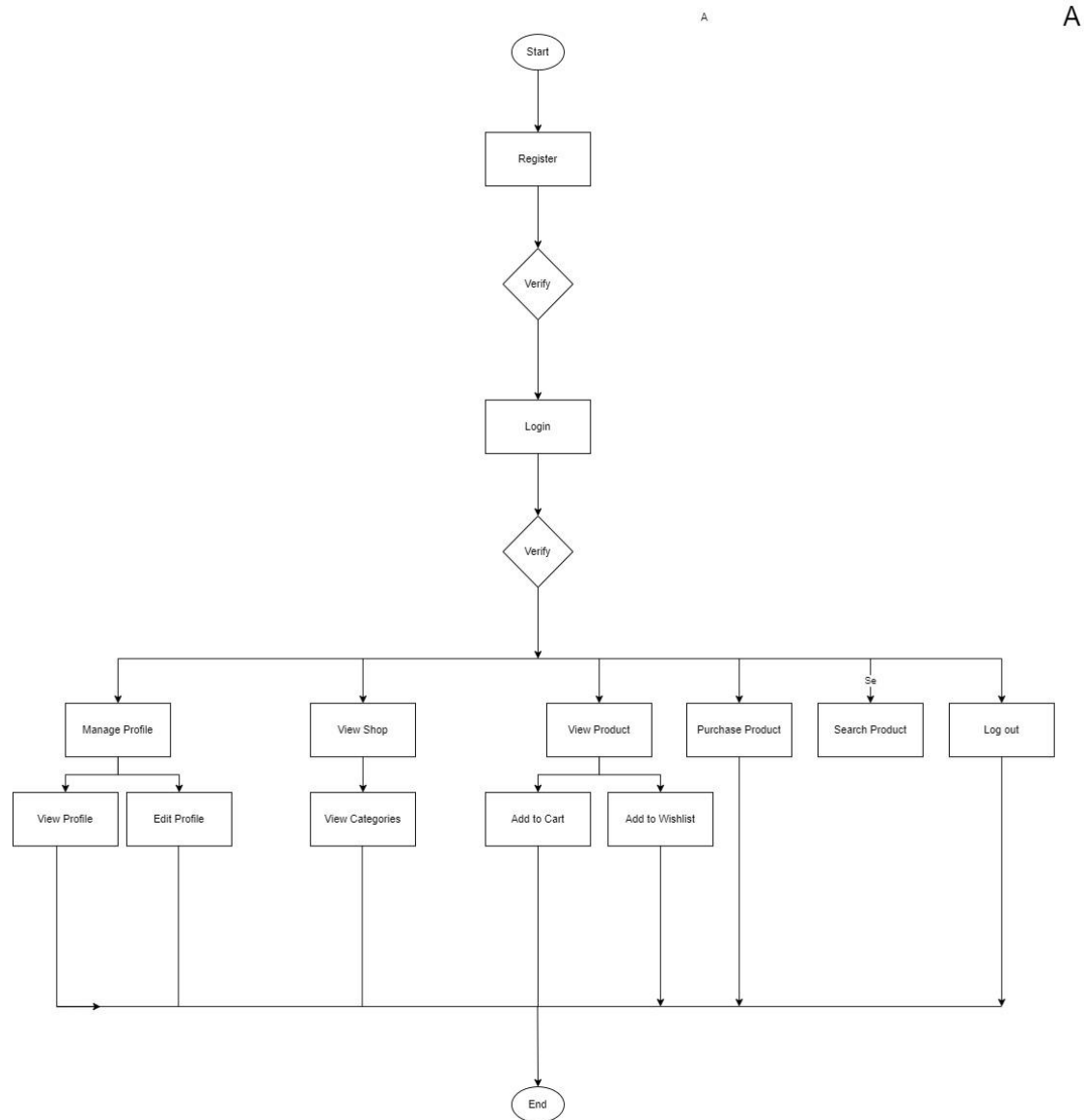
Fig 5.2.3.1 Customer Activity Diagram

Seller
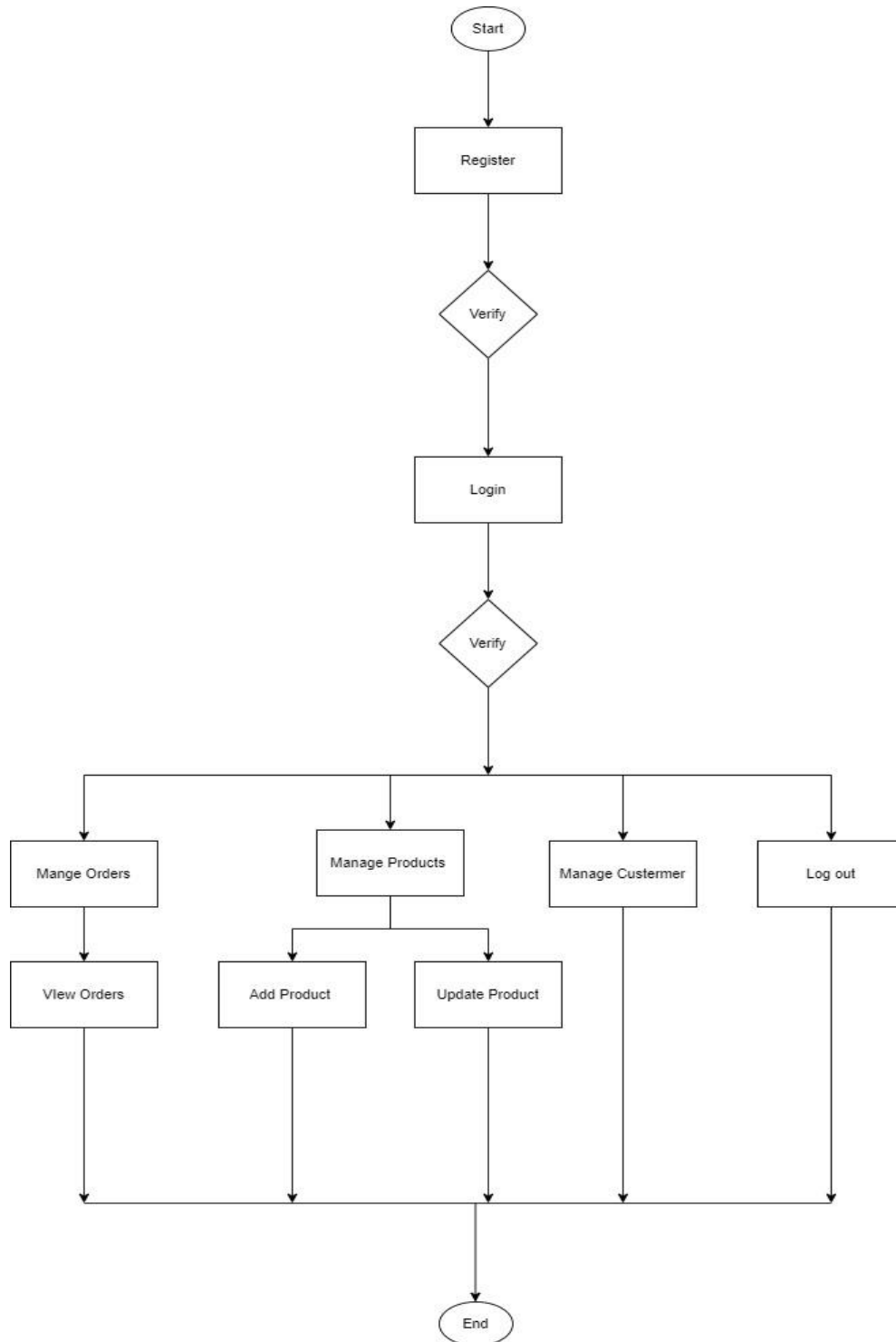
Fig 5.2.3.2 Seller Activity Diagram

5.2.4 Use Case Diagram

Visitor
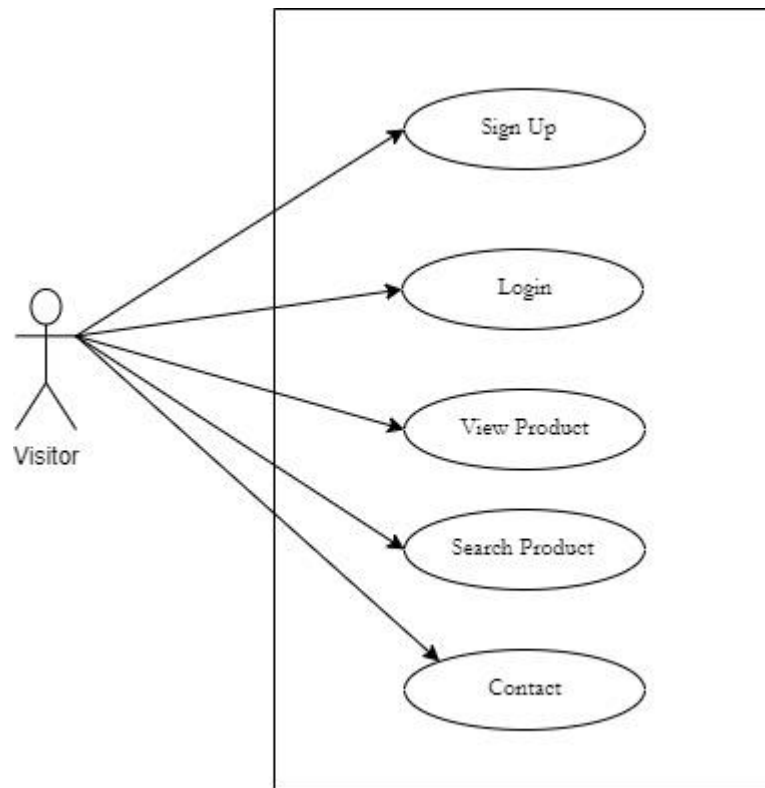
Fig 5.2.4.1 Visitor Use Case Diagram

Customer
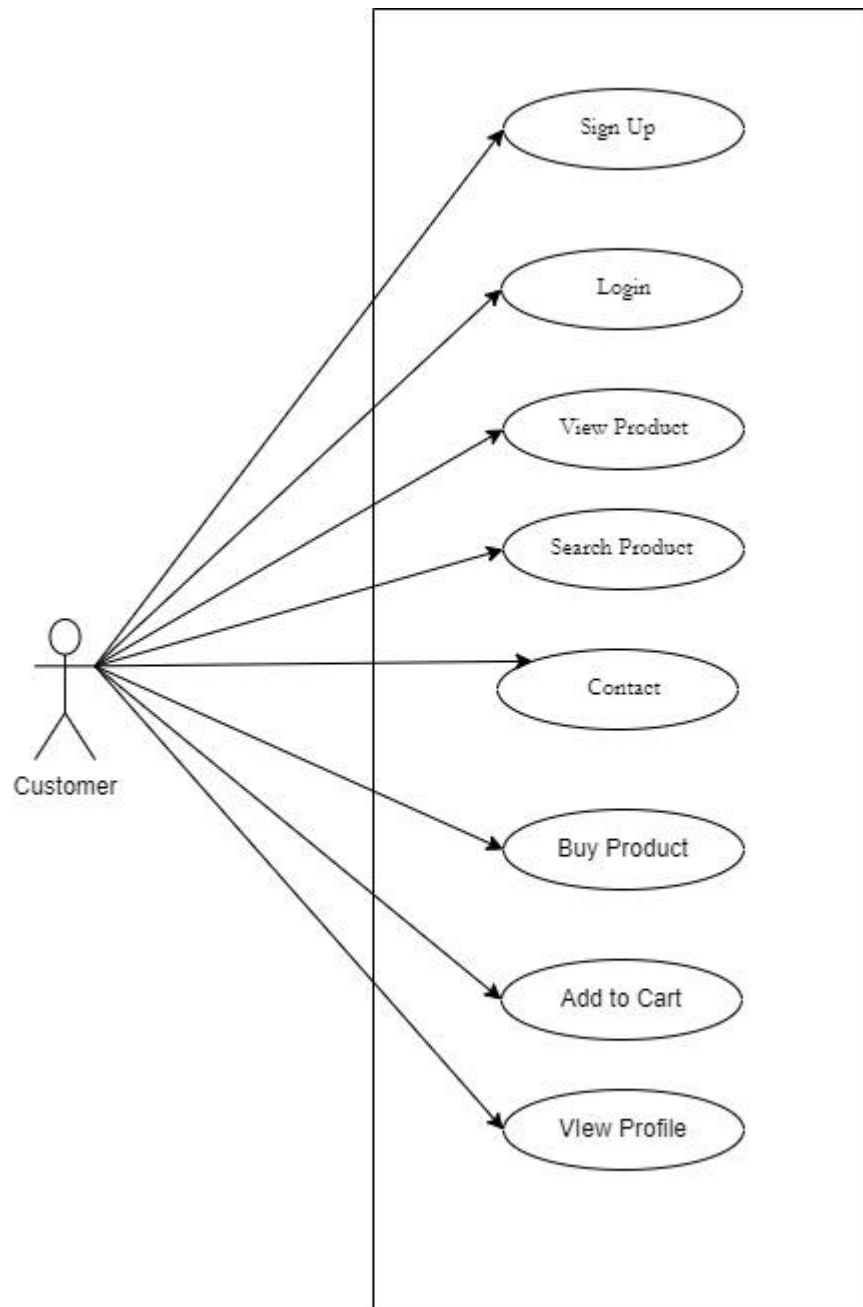
Fig 5.2.4.1 Customer Use Case Diagram

Seller
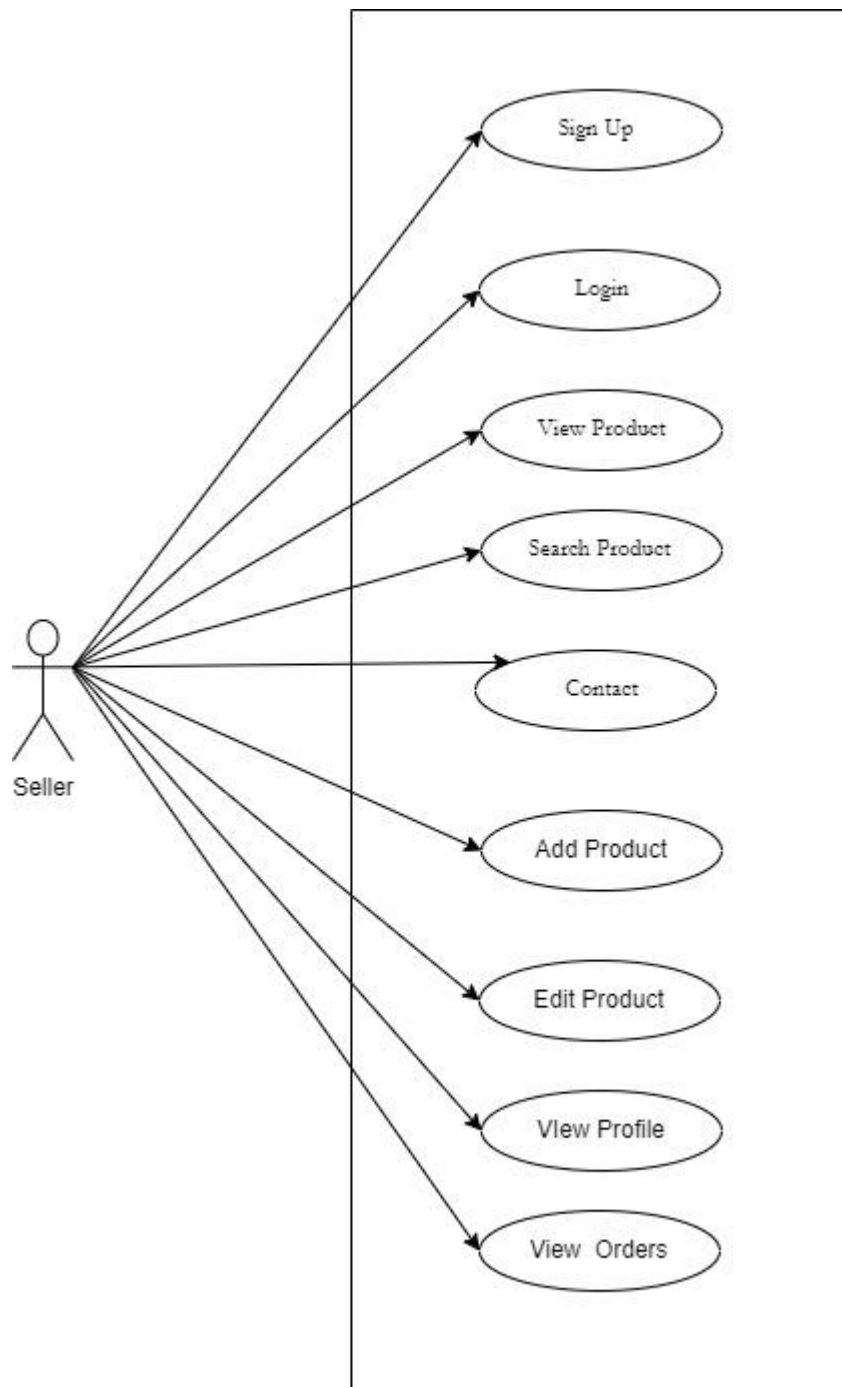
Fig 5.2.4.1 Seller Use Case Diagram

Chapter 6: Implementation

6.1 Technologies & Implementation Environment

Python with Django

Django is a free, open-source web framework written in the Python programming language. A "web framework" is software that abstracts away many of the common challenges related to building a website, such as connecting to a database, handling security, user accounts, and so on. These days most developers rely on web frameworks rather than trying to build a website truly from scratch. Django in particular was first released in 2005 and has been in continuous development since then. Today, it is one of the most popular web frameworks available, used by the largest websites in the world–Instagram, Pinterest, Bitbucket, Disqus–but also flexible enough to be a good choice for early-stage startups and prototyping personal projects.

This book is regularly updated and features the latest versions of both Django and Python. It also uses Pipenv for managing Python packages and virtual environments, though using Pip works fine as well. Throughout we'll be using modern best practices from the Django, Python, and web development communities including the thorough use of testing.

Security Features

The security feature is the main important feature of the application, it is random code generation of particular

shopkeeper which is created by distributor. No Spam or fake users are allowed to this application. Distributor cannot let add stock and add shopkeeper unless it cannot register and its correct id and password. All the data entry must be according to required pattern. If the email_id is already existing he cannot use the same email_id. password can be reset only via registered email only.

Coding Standards

The coding standard is the well-defined and standard style of coding. With the help of the coding standards any person can go into any code and figure out what's going on and new people can get up to speed quickly. Some coding standard ways of doing several things such as the way variables are to be named, the code is to be laid out, the comments are to be described, the work of function are to be carried out. This section describes the coding standards, which we have used in the program. In the context of coding standard, the tag consists.

6.2 Project Screen Shots

Visitor Side:
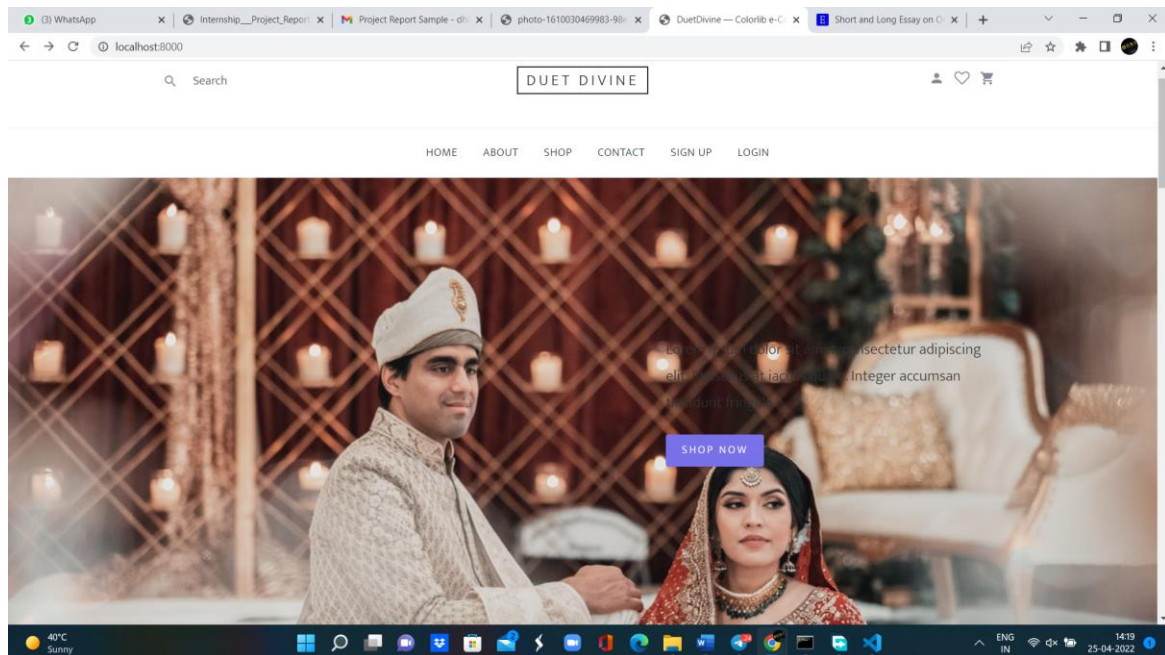
Fig 6.2.1

Visitors can browse products and contact owner.
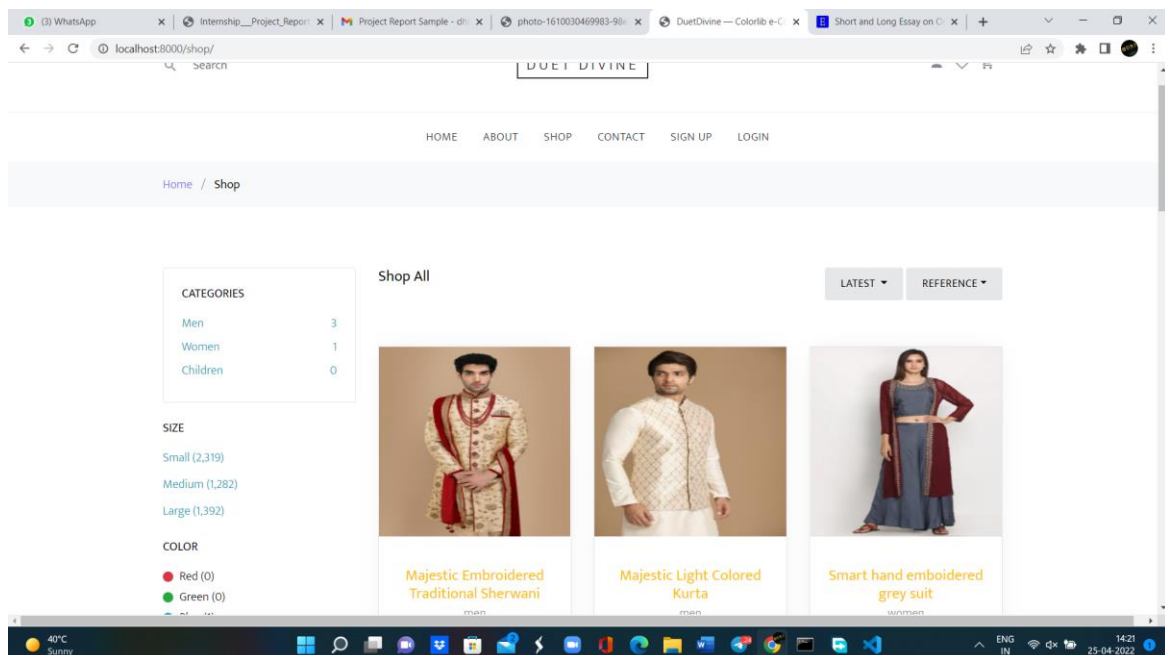
Fig 6.2.2

Fig 6.2.3

Visitors can sign up as customer or seller and then can login and buy product.

Fig 6.2.4
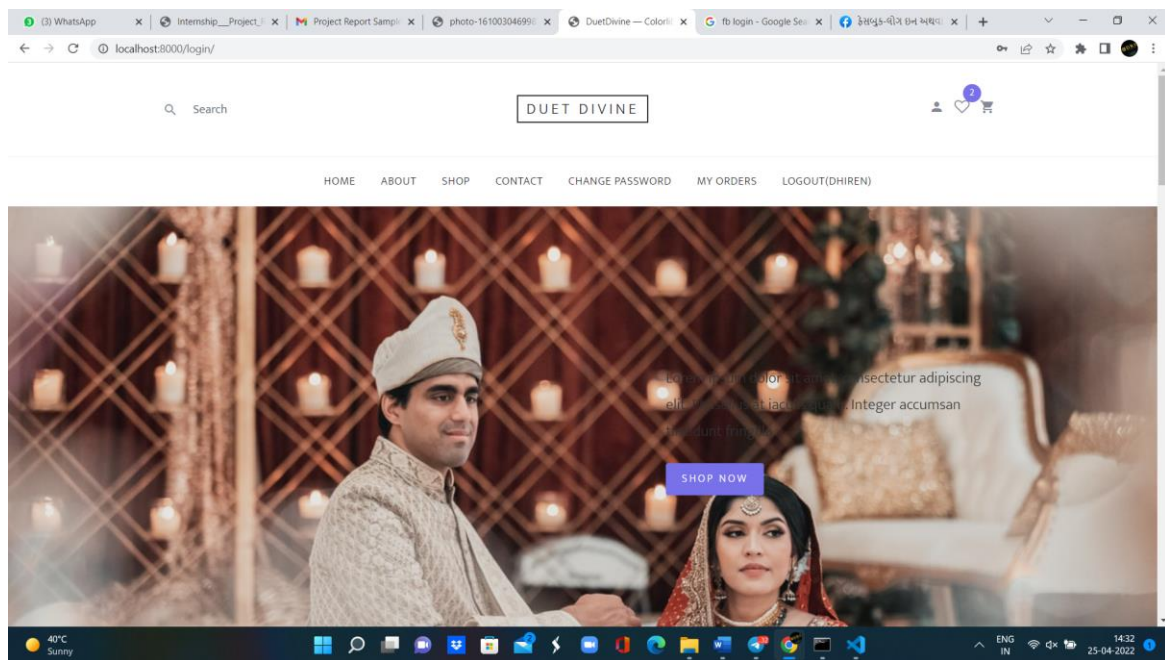
Customer Side:

Fig 6.2.5

Customers can view about section and can browse product.
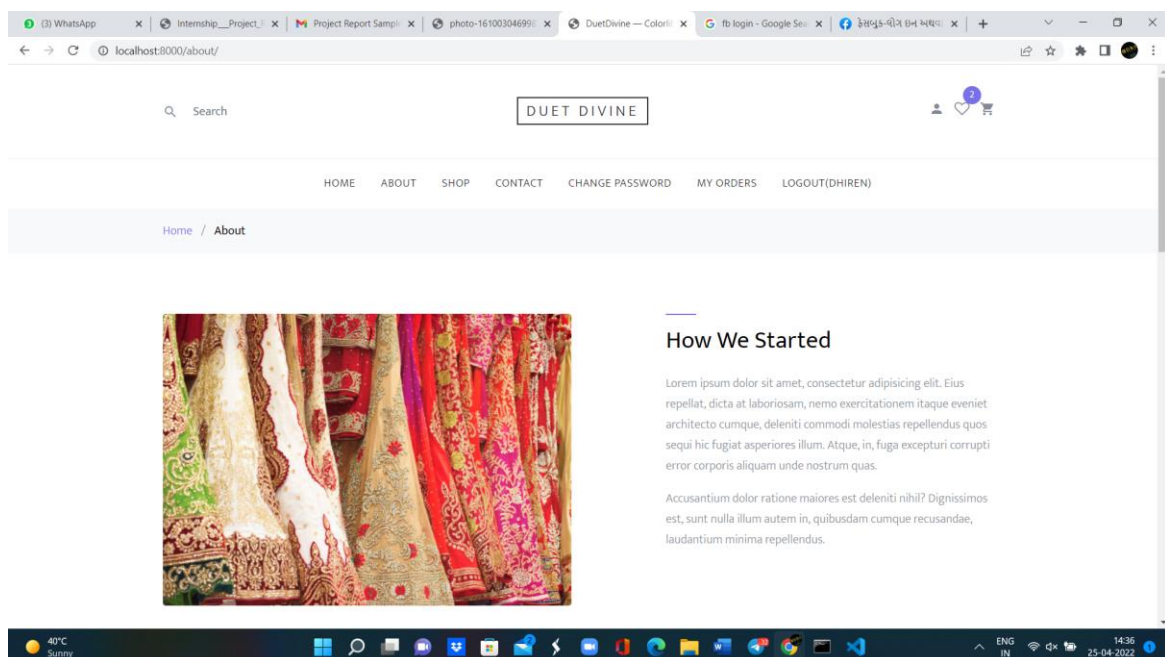
Fig 6.2.6

Customers can search product using search feature
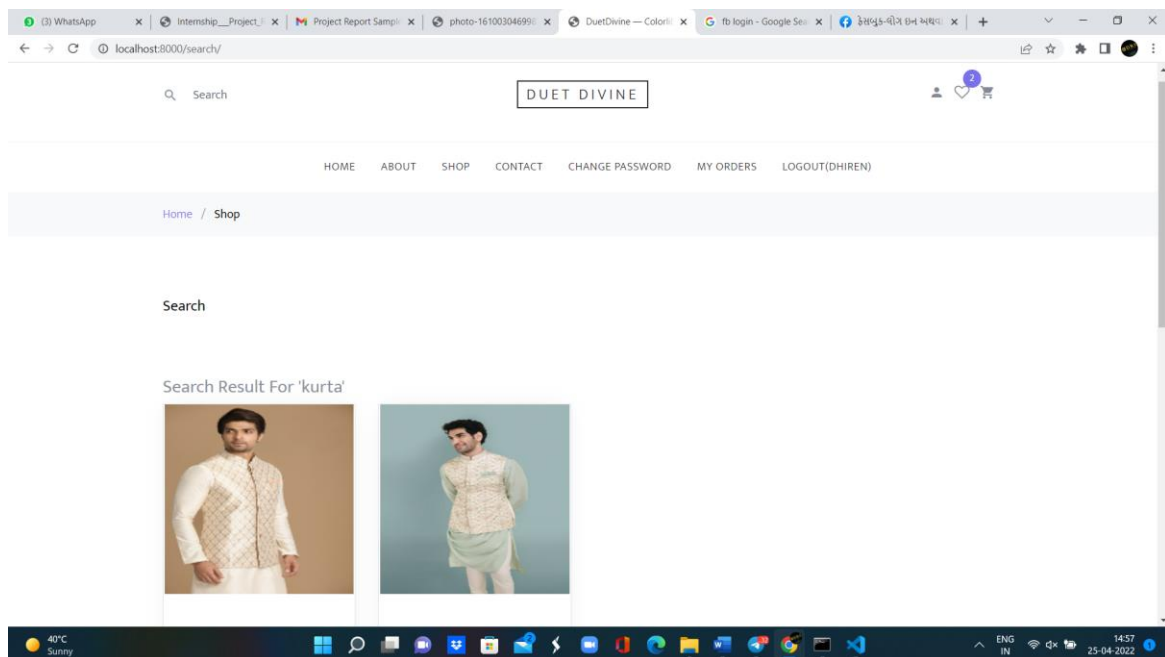
Fig 6.2.7

Customers can view product detail and can add them to their wishlist or cart.
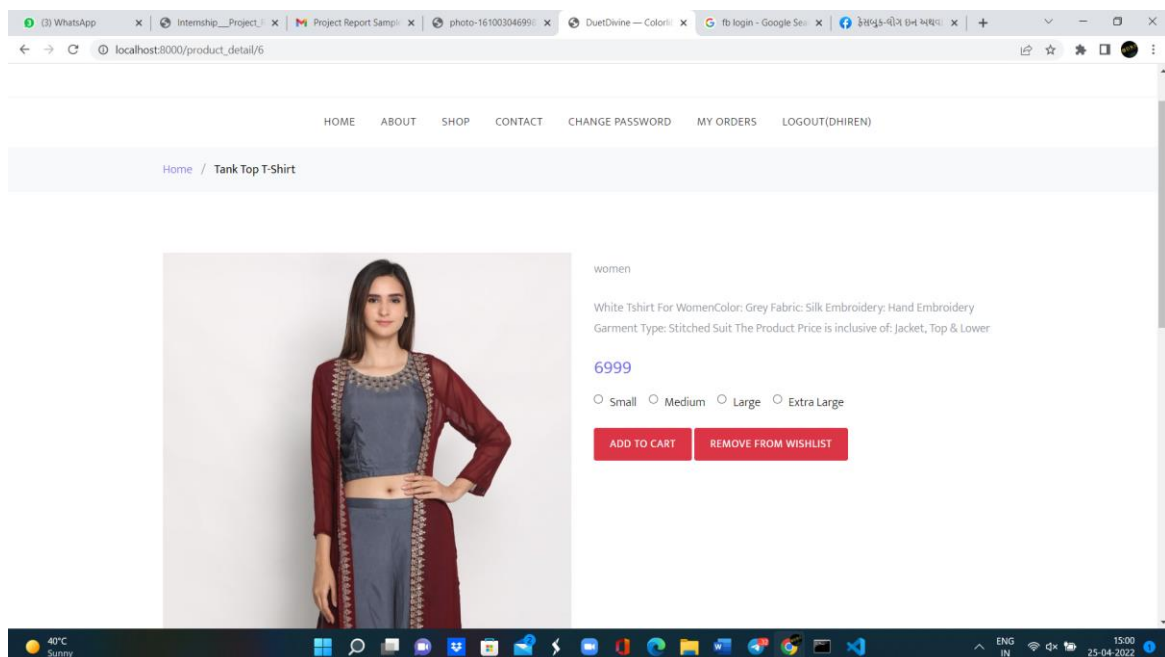
Fig 6.2.8
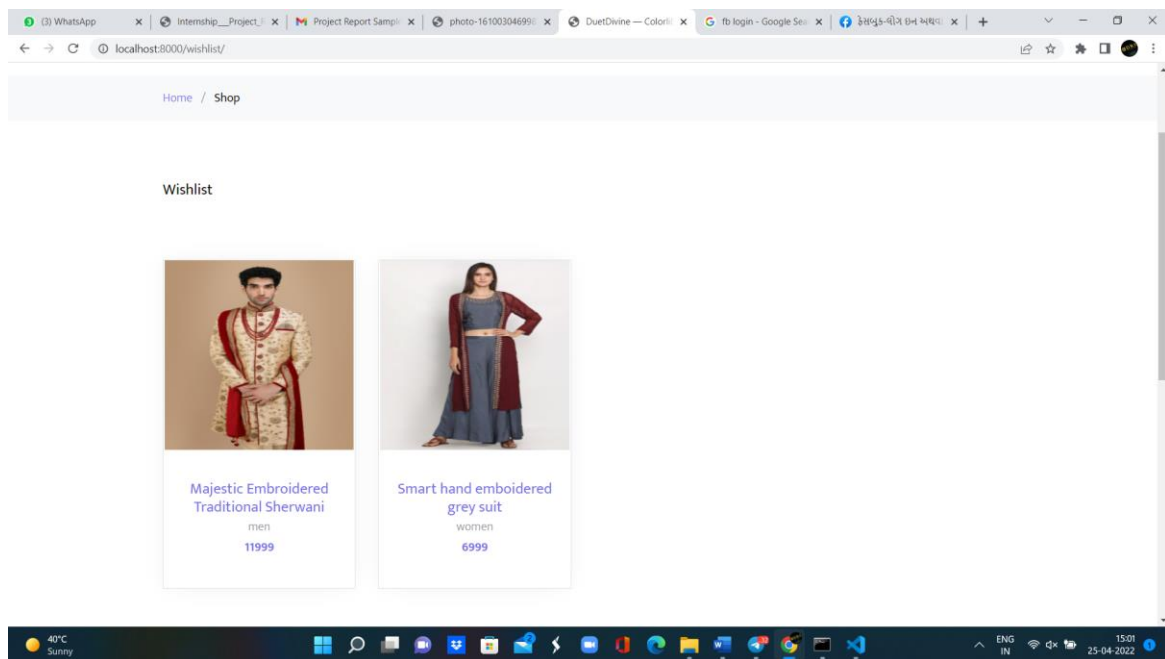
Fig 6.2.9
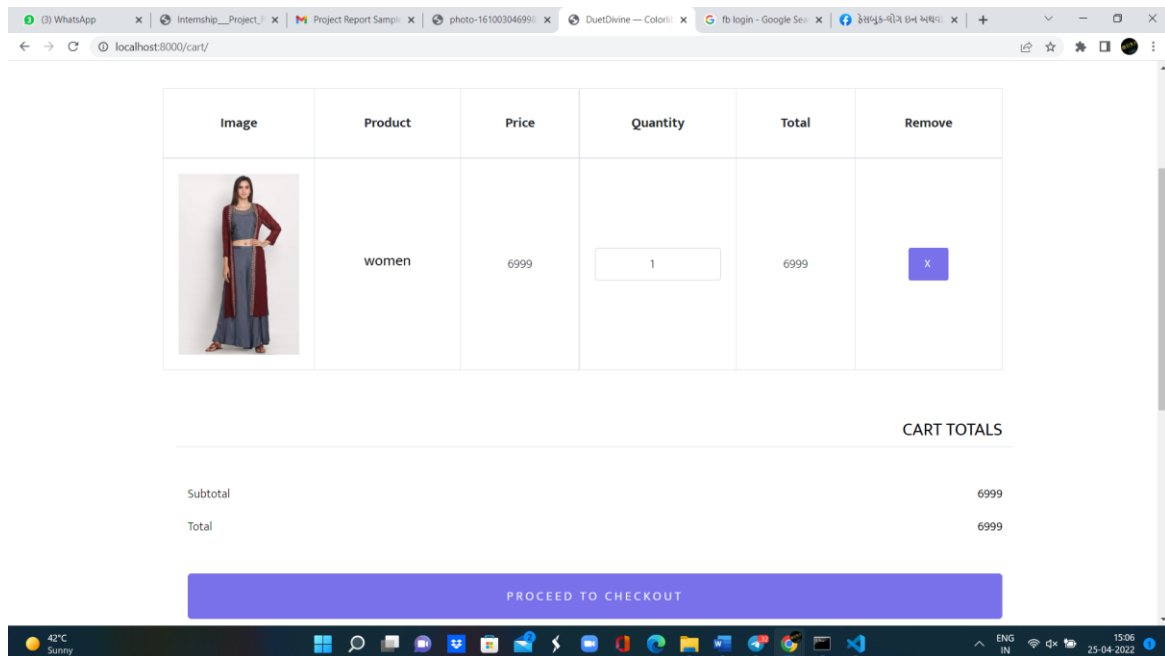
Fig 6.2.10

Customers can fill billing info and can make online payment.
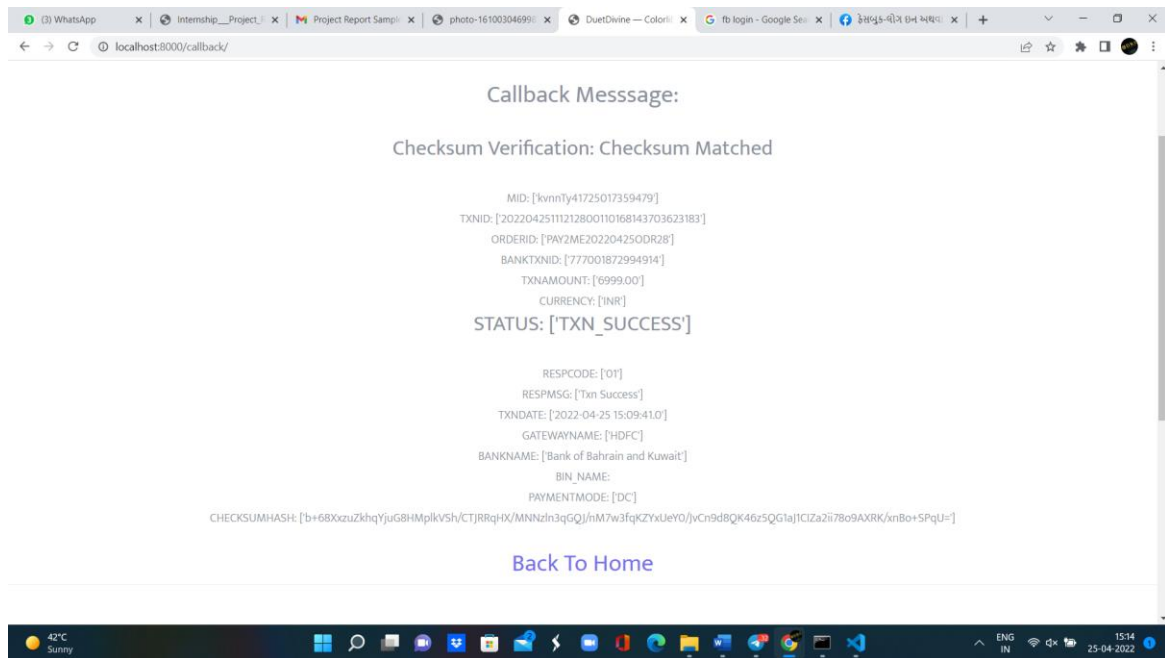
Fig 6.2.11

Fig 6.2.12

Fig 6.2.13

After successful payment customers can view their orders
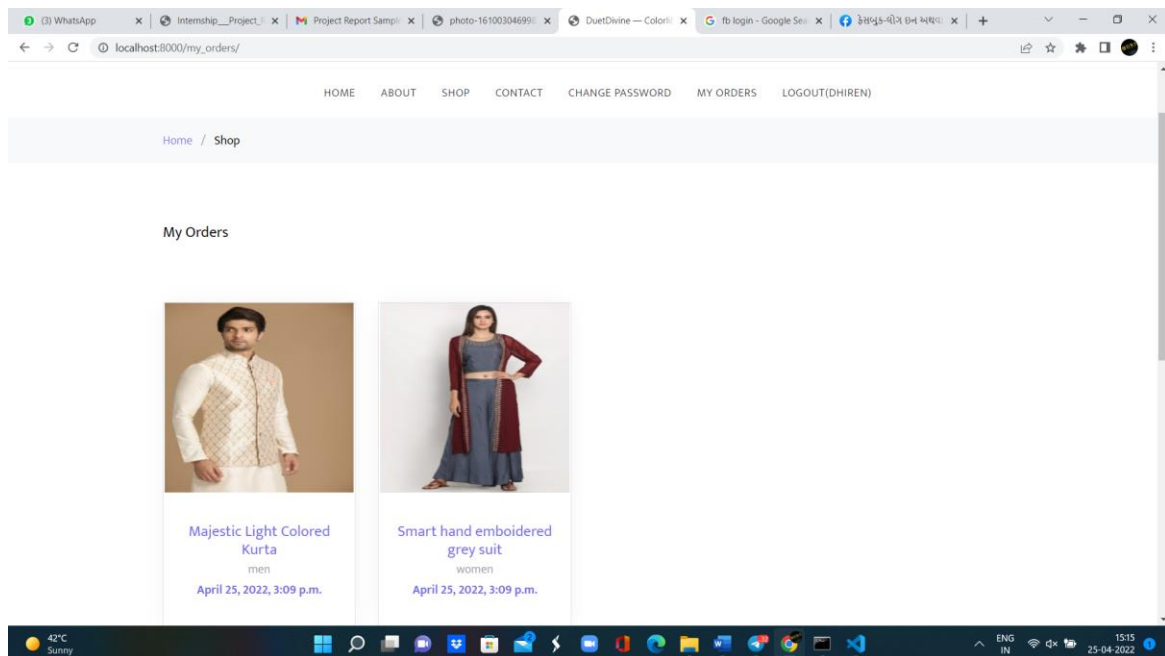
Fig 6.2.14

Customers can change their old password to new one.

Fig 6.2.15

Seller Side

After sign up as seller the features for seller can be accessed.
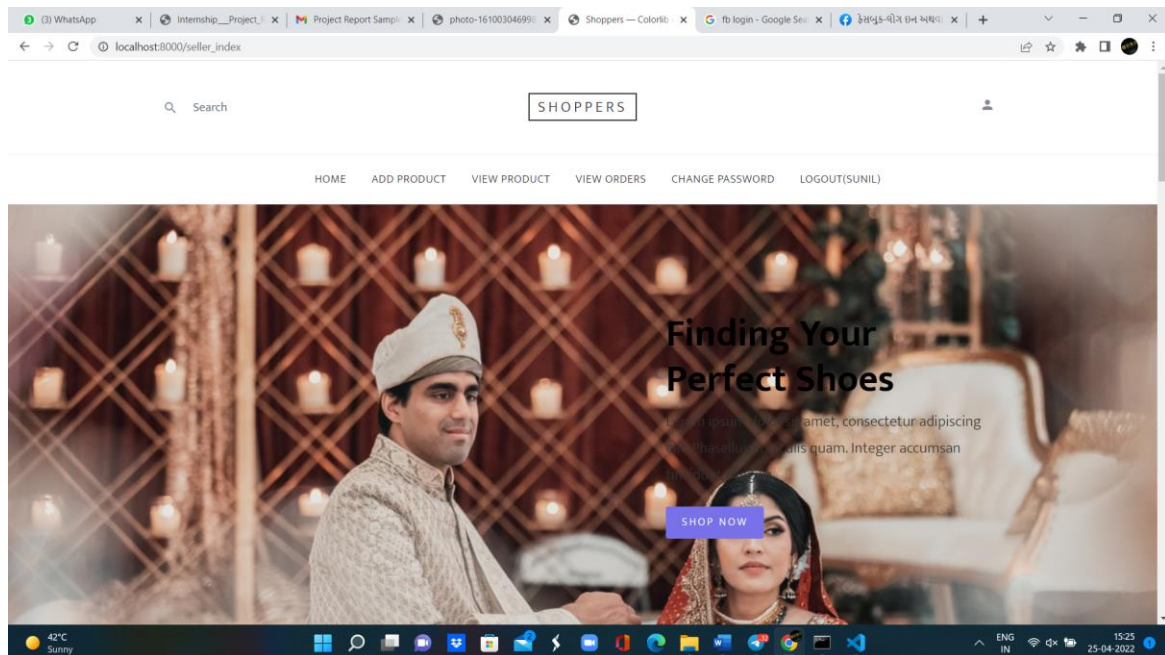

Fig 5.2.16
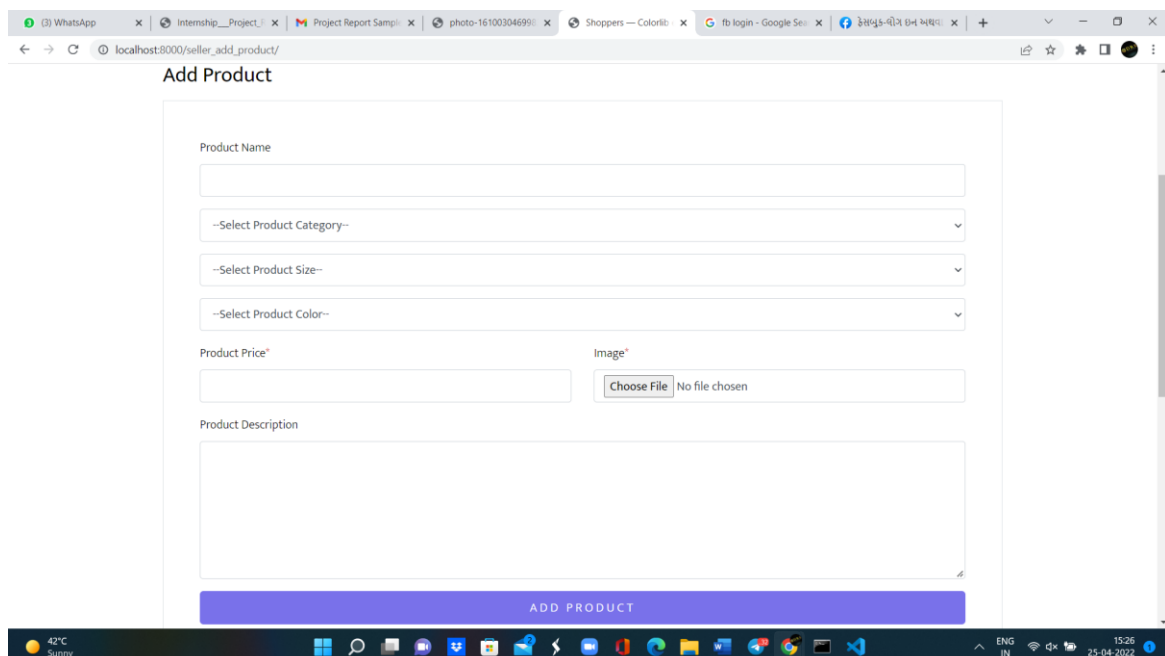
Seller can add Product

Fig 6.2.17

Sellers can view their product and can edit or delete them.
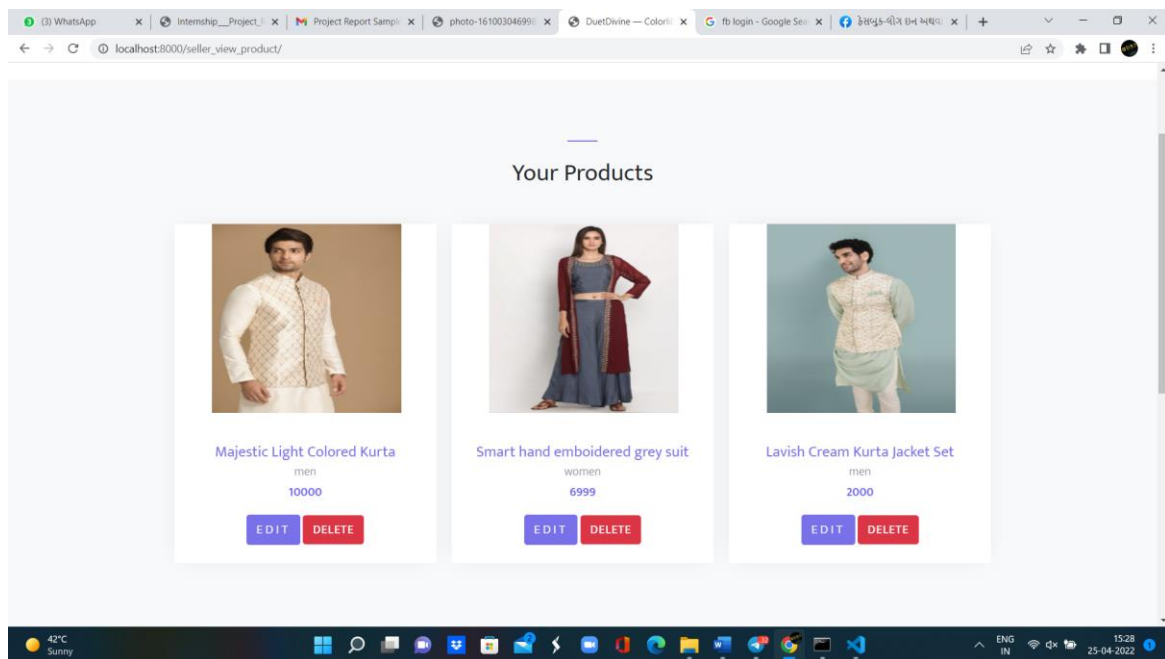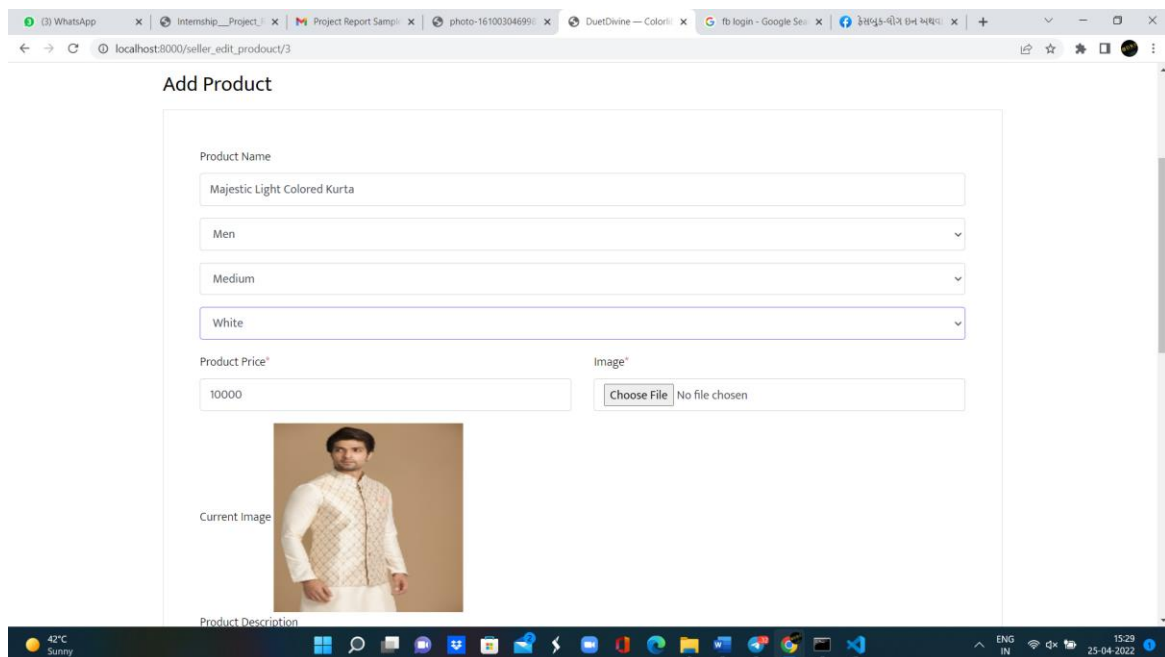

Fig 6.2.18

Fig 6.2.19

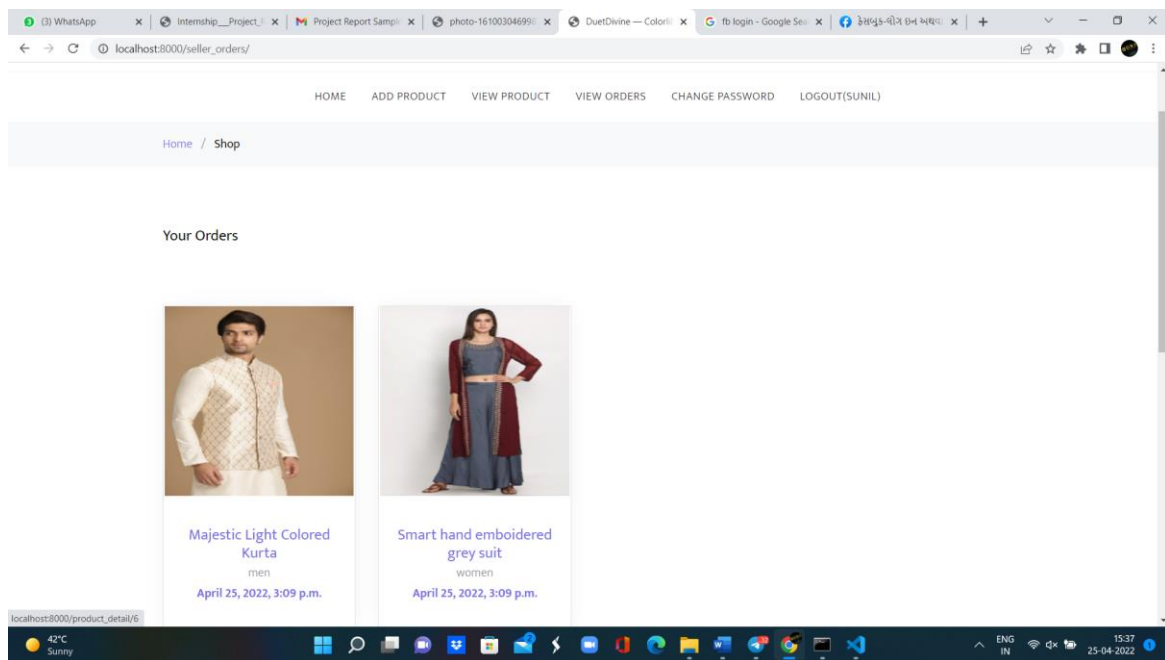Sellers can view their orders

Fig 6.2.20

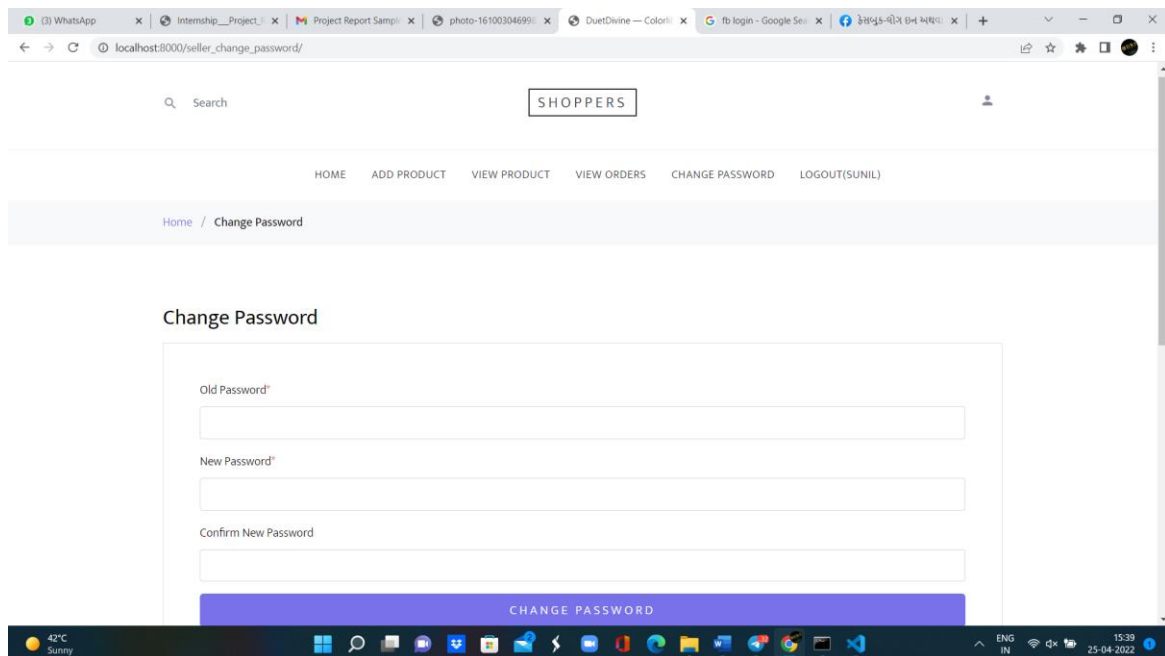Seller can change their old password to new one.

Fig 6.2.21

Chapter 7: Testing

7.1 Testing Plan /Strategy

Testing Plan/Strategy

A test plan is the cornerstone of a successful testing implementation. The testing plan represents the overall approach to the test. In many ways, the test plan serves as a summary of the test activities that will be performed. It shows how the tests will be organized, and outlines all of the tester's needs that must be met in order to properly carry out the test. The goal of test planning is to establish the list of tasks that, if performed, will identify all of the requirements that have not been met in the software. There are many standards that can be used for developing test plans. Early in the deployment planning phase, the testing effort, and identifies the methodology that your team will use to conduct tests. It also identifies the hardware, software, and tools required for testing and the features and functions that will be tested. A well-rounded test plan notes any risk factors that jeopardize testing and includes a testing schedule. So, we can say that Test Planning details the activities, dependencies and effort required to conducting the system test.

Testing Methods

Involve execution and implementation of the software with test data and examining the outputs of the software and its operational behavior to check that it is performing as required.

7.2 Test Results and Analysis

Seller Side Testing

Description	Expected Output	Actual Output	Test Status
Sign up	Seller should register	User registered	Pass
Login	Open login page	User can login	Pass
Manage Products	Seller can add & view [roduct detail	Seller can add & view product detail	Pass
View Orders	Seller should able to view order	Seller can view	Pass

Customer Side Testing

Description	Expected Output	Actual Output	Test Status
Sign up	Customer should register	Customer registered	Pass
Login	Open login page	Customer can login	Pass
Browes Product	Customer should able to view and order product	Customer is able view and order product	Pass
Manage Payment	Customer should able to do payment	Customer can able to do payment	Pass
Manage feedback	Customer should able to give feedback to site.	Customer can give feedback to sit	Pass

Chapter 8: Conclusion and Reference

Conclusion:

Finally, in Duet Divine, I have developed secure, user-friendly wedding cloths ordering system. This System can take care of each member whether it is an Seller or Customer. This application make searching, viewing and ordering of a product easier. This System is completely secure since every user is provided with user ID and Password so there is no chance of any unauthorised access. Online Payment, Registration and cancellation make it easier to use. This project is the easiest way to browse and order cloths to make customer event memorable.

It was a wonderful learning experience for me while working on this project. This project took me through the various phases of project development and gave me real insight into the world of information technology. The joy of working and the thrill involved while tackling the various problems and challenges gave me a feel of the developer's industry.

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