

A

PROJECT REPORT

ON

Cloths Reusable Foundation

Submitted for the Partial Fulfilment of

MASTER OF COMPUTER APPLICATION

(MCA)

Part - II Semester -IV

Submitted By

Ms. Vaibhavi Krishnat Patil

Under the Guidance of

Prof. S.Nagaonkar

(Project Guide)

TO

THE DIRECTOR

CHH. SHAHU INSTITUTE OF

BUSINESS EDUCATION & RESEARCH, KOLHAPUR

2022-2023



CHH.SHAHU INSTITUTE OF BUSINESS EDUCATION & RESEARCH, KOLHAPUR

CERTIFICATE

This is to certify that Ms. Vaibhavi Krishnat Patil (Seat No: 8350) has satisfactorily completed the Project work on "Cloths Reusable Foundation" developed through "Java & Angular" for the partial fulfilment of MCA-I(Sem-IV) submitted to Chh. Shahu Institute of Business Education & Research, Kolhapur during the academic year 2022 – 2023.

Place: Kolhapur

Date: 06/11/2023

Dr. S.D.Bhoite

External Examiner

(HOD)



CHH.SHAHU INSTITUTE OF BUSINESS EDUCATION & RESEARCH, KOLHAPUR

DECLARATION

I undersigned hereby and declare that the project entitled "Cloths Reusable Foundation" Developed through "Java & Angular" submitted by me is an original work. The project presented is developed by me independently and is not duplication from any other source. The work is hereby submitted to "Chh. Shahu Institute of Business Education and .Research, Kolhapur" for the partial fulfilment of MCA-II (Sem-IV) Project.

Place: Kolhapur

Date: 06/11/2023

Ms. Vaibhavi Krishnat Patil



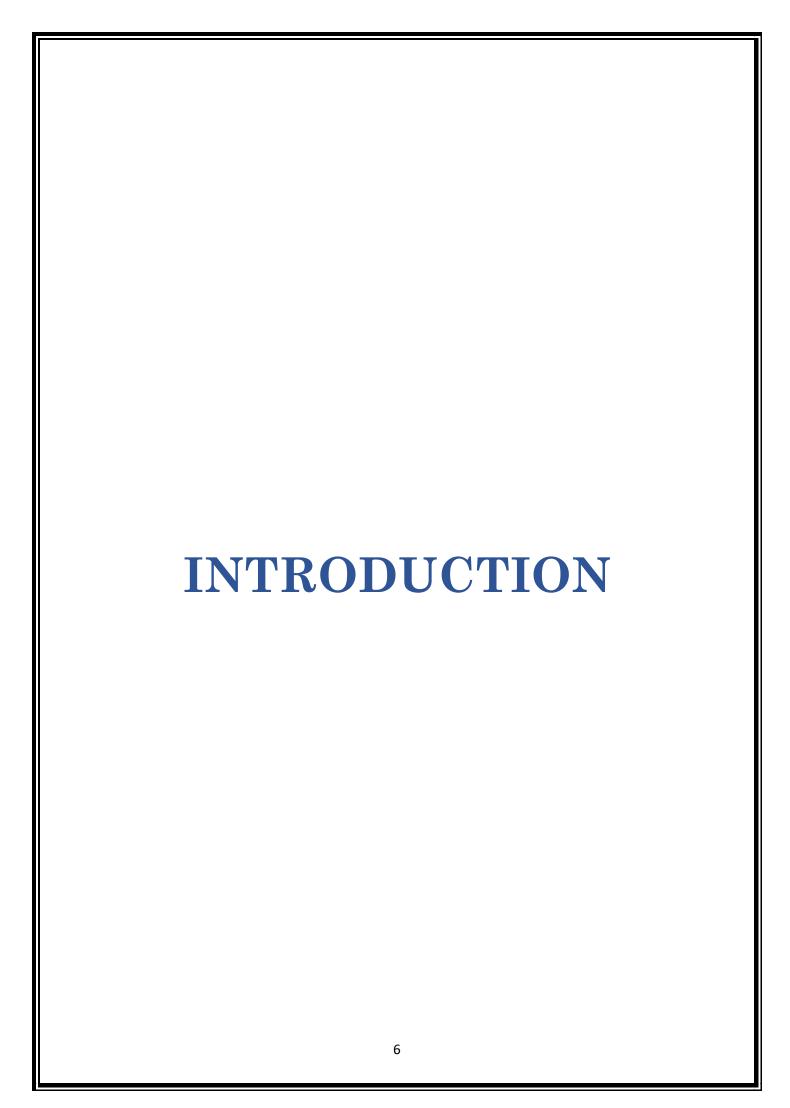
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ACKNOWLEDGEMENT

I have great pleasure while submitting this Project Report entitled for "Cloths Reusable Foundation" in partial fulfilment of MCA-II (Sem-IV) while submitting this Project Report, I take this opportunity to thank to those who directly or indirectly related to project work without their active co-operation and guidance it would have become extremely difficult to complete this task in time. At the outset, we keep on giving deep gratitude towards my Project Guide Prof. S.Nagaonkar mam who gave me guidance right from the initial stage of project and offered us several valuable suggestions for developing this project in systematic and presentable manner. I am also thankful to our H.O.D.Dr . S.D.Bhoite and all the staff members of Computer Department. In the end, I express my gratitude to our friends and parents who inspired me in this work, without their inspiration the work was almost impossible.

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1.1)Introduction to project:-

Cloth Share Foundation is a form of electronic commerce which allows consumers to directly buy good or service from the seller over the internet using web browser or mobile app. This site is to sell the old cloths and books or other stationary things.

Here is the place where user can sell their old cloths and earn some money. Even they can donate to the needed one and get some rewards after donating. We share your donation to the NGO and orphanage.

This may sound a bit lame, but it's true; giving really does make us feel good.

There are so many people in the world and in our own neighborhoods around us that are in need.

1.2) Module Introduction

This system we have developed by combining few modules, those are as follows:

User Register Form-

User has to register himself on a system by providing personal information like name, email, password.

User Login Form -

User login by entering username and password into the system.

Donation Form-

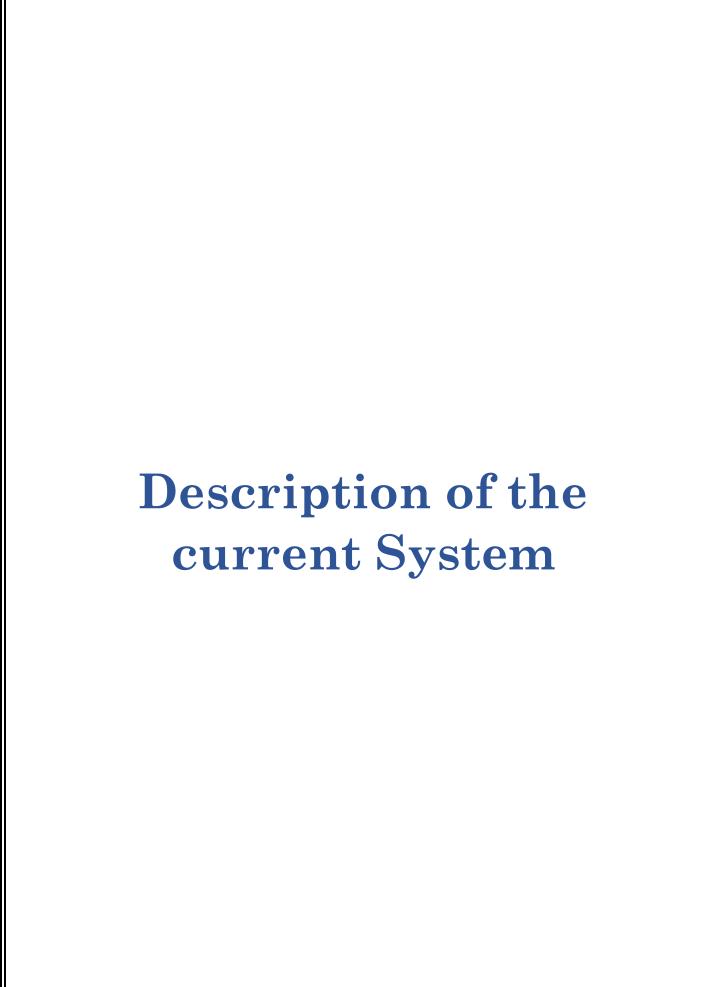
To donate, Donar has to enter mobile number, name, location. Donar need to select product image that he want to donate & Upload it.

Store Form-

This form shows all the products i.e. Cloths, Stationary material & Books.

Payment Form-

Here User can make payment by entering his Payment details.



2.1)Objectives

- 1. To promote the reuse of old clothes, books, and stationary items, contribute to reduced waste and a more eco-friendly lifestyle.
- 2. To develop a user-friendly e-commerce platform accessible via web browsers and mobile apps.
- 3. Users have the opportunity to earn money by selling their old clothes and items.
- 4. The platform facilitates charitable giving by allowing users to donate their old items to those in need, including impoverished students and children from NGOs and orphanages.
- 5. The inclusion of rewards for charitable actions can motivate users to participate actively in both selling and donating, reinforcing a culture of social responsibility.
- 6. To provide educational resources and information about the benefits of reusing and donating old items for the betterment of society and the environment.
- 7. The project aligns with eco-conscious values by promoting the environmental benefits of reusing items and reducing the carbon footprint associated with the production and disposal of new goods.

2.2) Current System and its Limitations

EXISTING SYSTEM

This system is not much user-friendly as one need to go to the market physically. This platform is where user can sell their olds cloths, books and other stationary things and earns some money.

Even the buyer can also get the product in less amount. User can also Donate their books and cloths to the needed one. This website is to help the poor students or child from NGO and Orphanages who can affords the cloths and others things.

LIMITATIONS OF THE EXISTING SYSTEM

- 1. Managing the collection, distribution, and quality control of donated items can be logistically challenging, particularly as the platform grows.
- 2. Users, especially older individuals or those from less technical backgrounds, may face difficulties in using web browsers or mobile apps effectively, potentially excluding some demographic groups.
- 3. The current system may not have a structured mechanism for users to donate their old clothes and books to those in need,
- 4. As with any online platform, there are security risks such as data breaches, phishing attempts, and fraud.
- 5. As the platform grows, scaling up infrastructure and maintaining performance can be challenging without careful planning.

2.3) Requirement Analysis And Feasibility Study

REQUIREMENT ANALYSIS

Since the users of this system are online, user requirement analysis becomes one of the major steps that would ultimately enable the developer to make the system much more user friendly. Various detailed Studies were conducted to analyse the system thoroughly.

Based on the results, various user requirements emerged.

The user requirements can be categorized as follows:

- a. Functional Requirements
- b. Non Functional Requirements

A] FUNCTIONAL REQUIRMENTS:

All of the following functional requirements are kept in mind for the designing process which would follow.

The functional requirements are as follows:

- a. A reliable and a user-friendly system. The reliability of the system depends on the accurate and efficient information provided by the system.
- b. The user interface must be simple, not complicated and extremely easy to follow.
- c. The proper report format is to be prepared by a discussion with the respective persons.
- d. The system must be developed in such a manner that in the future if the need arises, changes should easily be done.

B] NON FUNCTIONAL REQUIREMENTS

The System must be compatible with all web browsers and this system will use the default internet securities.

FEASIBILITY STUDY

1] Technical Feasibility

Building this system is technically feasible. The hardware and software needed are all available, it not difficult to get them. This system is very much concerned with specifying equipment and the website will successfully satisfy almost all the user's requirements. In Brief I can say the necessary resources needed for the development and maintenance of the system are available. I am going to use JavaScript and MYSQL database.

2] Operationally Feasibility

The project I am developing is operationally feasible as there is no need for users to have good knowledge in computer before using it. The user can learn and use the system with easiness; he just needs to read the manual or tutorial from the developers

3] Economic Feasibility

Besides being technically feasible, developing this system is economically feasible as well. Economic analysis is most frequently used for evaluation of the effectiveness of the system. The development of the system does not require the developers to spend a lot of money. The tools I will be using to develop the system are not expensive and the software's are open source. All I need is time. Even the maintenance of the system will not be expensive. The system is indeed economically feasible.

REQUIREMENT ENGINEERING

- 1. How the system saves user data?
- 2. Is the system user-friendly?
- 3. Is the system works correctly?
- 4. Is the system saves valid data?

Questionnaires

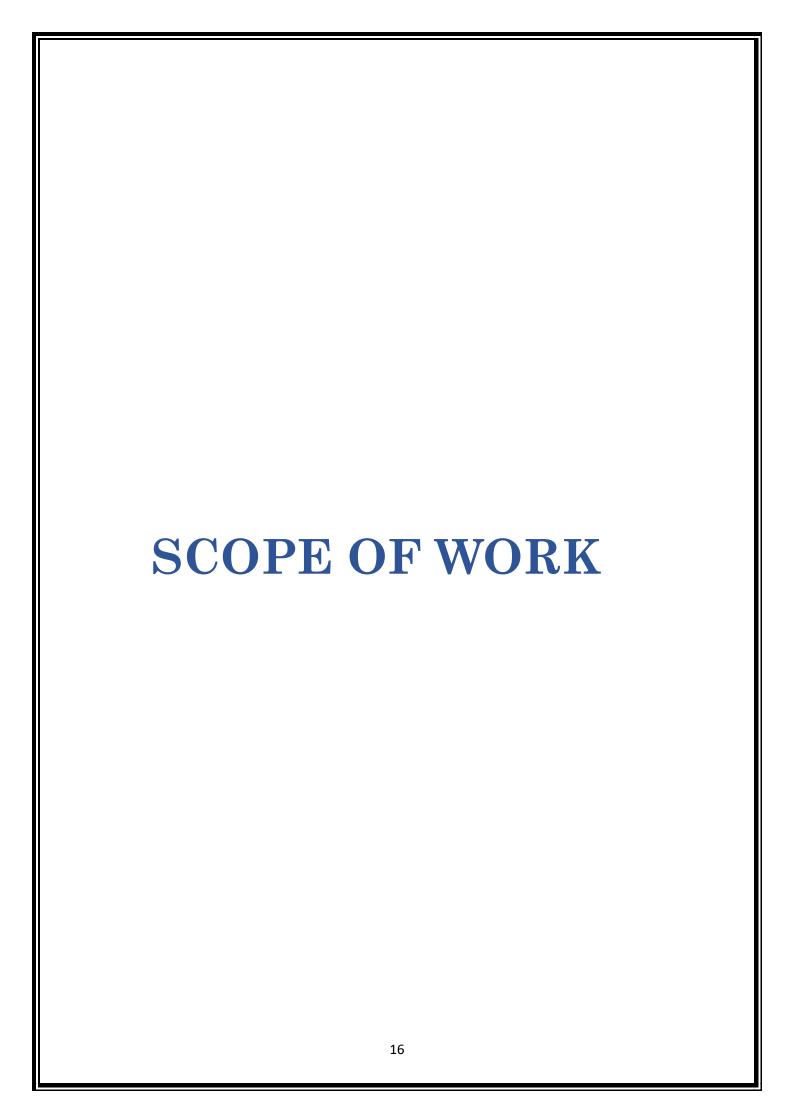
Questionnaires mean a set or questions that are given to the user for answering it. We had also formed out questionnaire and they filled it.

- 1. What type of Books do you want?
- 2. What kind of difficulties do you face while selling any material.
- 3. What kind of improvement do expect from our system?
- 4. What kind of difficulties do you face while using service.
- 5. What do you expect from our system?
- 6. Do you want other material/service from us.

2.4) Methodology Adopted

Methodology used to develop system is:

- 1. Requirement Analysis is done to analyse the requirements of the user.
- 2. The module is designed as per the requirements of the user.
- 3. After designing the module, then coding of the Web application is done.
- 4. After coding, testing of the system to check whether system is working appropriately.



SCOPE

The project involves the development and maintenance of a user-friendly e-commerce platform accessible through web browsers and mobile apps. This platform enables users to engage in buying and selling activities for old clothes, books, and stationary items. Sellers can create detailed listings for the items they wish to sell, including descriptions, prices, and images.

Buyers can browse and search for items based on their preferences. The platform facilitates secure transactions between buyers and sellers, including payment processing, order management, and dispute resolution mechanisms.

Users have the option to donate their old clothes, books, or stationary items to individuals in need. The project manages the collection, distribution, and quality control of donated items.

3.1) About Environment / Platform Used

Java

What is Java?

Java is a high-level, versatile, and widely used programming language known for its portability, platform independence, and strong community support. Developed by James Gosling and his team at Sun Microsystems (now owned by Oracle Corporation), Java was first released in 1995.

Below is an introduction to Java and its key features:

- 1. Platform Independence: One of the most prominent features of Java is its "Write Once, Run Anywhere" capability. Java programs can be written on one platform (e.g., Windows) and executed on another platform (e.g., Linux or macOS) without modification, thanks to the Java Virtual Machine (JVM), which interprets and runs Java bytecode.
- 2. Object-Oriented: Java is a pure object-oriented programming language. Everything in Java is an object, including primitive data types, and follows the principles of encapsulation, inheritance, and polymorphism.
- 3. Strongly Typed: Java enforces strong type checking at compiletime, reducing the likelihood of runtime errors. This helps ensure the reliability and stability of Java programs.
- 4. Automatic Memory Management: Java employs a garbage collector that automatically manages memory by deallocating objects that are no longer in use.
- 5. Multi-Threading: Java supports multi-threading, allowing developers to create concurrent and multi-threaded applications.
- 6. Exception Handling: Java has a robust exception handling mechanism that helps developers identify and handle errors in a structured manner, improving program reliability.
- 7. Portability: Java's platform independence and standardization make it an ideal choice for cross-platform development, from desktop applications to mobile apps (Android), embedded systems, and web applications.

Angular

What is Angular?

Angular is a JavaScript framework written in TypeScript and maintained by Google. It enables users to develop and test large applications easily. It has surpassed Javascript for developing single-page applications that require modularity, testability, and developer productivity. In this Angular tutorial, you will learn about the different features of Angular, Angular Architecture, its advantages, and its limitations.

Features of Angular:

- 1. Component-Based Architecture: Angular follows a component-based architecture, where the application is built as a collection of reusable and self-contained components.
- 2. Two-Way Data Binding: Angular provides two-way data binding, which means changes to the application state are automatically reflected in the user interface, and vice versa, without the need for manual DOM manipulation.
- 3. Dependency Injection: Angular has a built-in dependency injection system that makes it easy to manage and inject dependencies into components, services, and other parts of the application.
- 4. Routing: Angular provides a powerful router for managing navigation within a single-page application. Developers can define routes, associate components with routes, and handle navigation events.
- 5. Services: Angular encourages the use of services to encapsulate and share functionality and data across different parts of an application. Services are typically used for tasks like making HTTP requests or managing application state.
- 6. Forms: Angular offers both template-driven forms and reactive forms for handling user input and form validation. Reactive forms are particularly useful for complex forms with dynamic behavior.

- 7. TypeScript: Angular is built using TypeScript, a statically typed superset of JavaScript. TypeScript brings strong typing and better tooling to the development process, making it easier to catch errors early.
- 8. Security: Angular helps developers address security concerns like cross-site scripting (XSS) and cross-site request forgery (CSRF) by providing built-in mechanisms for data sanitization and protection.
- 9. Community and Ecosystem: Angular has a large and active community, which means extensive documentation, a wide range of third-party libraries, and strong community support.

Angular continues to evolve, with regular updates and improvements, making it a popular choice for building modern web applications.

Spring Boot

What is Spring Boot?

Spring Boot provides a good platform for Java developers to develop a stand-alone and production-grade spring application that you can just run. You can get started with minimum configurations without the need for an entire Spring configuration setup.

Spring Boot is an open source Java-based framework used to create a micro Service. It is developed by Pivotal Team and is used to build stand-alone and production ready spring applications.

Advantages

- 1. Spring Boot offers the following advantages:
- 2. Simplified Development: Spring Boot simplifies the development process by providing a set of default configurations and sensible defaults
- 3. Rapid Development: Spring Boot's auto-configuration feature automatically configures various components based on project dependencies.
- 4. Microservices Ready: Spring Boot is well-suited for building microservices-based architectures. It provides features like embedded web servers and support for building RESTful APIs, making it easy to create microservices and deploy them independently.
- 5. Production-Ready Defaults: Spring Boot offers production-ready features like health checks, metrics, and monitoring out of the box.
- 6. Embeddable Web Servers: Spring Boot includes support for embedded web servers such as Tomcat, Jetty, and Undertow.
- 7. Dependency Management: Spring Boot manages dependencies through the use of the Spring Initializer and Spring Boot Starter dependencies.

$\underline{\mathbf{SQL}}$

What is SQL?

SQL stands for Structured Query Language and is a computer language that we use to interact with a relational database. SQL is a tool for organizing, managing, and retrieving archived data from a computer database.

The original name was given by IBM as Structured English Query Language, abbreviated by the acronym SEQUEL. When data needs to be retrieved from a database, SQL is used to make the request. The DBMS processes the SQL query retrieves the requested data and returns it to us. Rather, SQL statements describe how a collection of data should be organized or what data should be extracted or added to the database.

What are the characteristics of SQL?

- SQL may be utilized by quite a number of users, which include people with very little programming experience.
- SQL is a non-procedural language.
- We can without difficulty create and replace databases in SQL. It isn't a time-consuming process.
- SQL is primarily based totally on ANSI standards.
- SQL does now no longer have a continuation individual.
- SQL is entered into the SQL buffer on one or more lines.
- SQL makes use of a termination individual to execute instructions immediately. It makes use of features to carry out a few formatting.
- It uses functions to perform some formatting.

3.1) About Environment / Platform Used

SOFTWARE ENVRIONMENT

• Operating System: Windows 10

• Frond-end: Java, Angular

• Back-end: Sql

• Browser: Google Chrome, Microsoft Edge

HARDWARE ENVRIONMENT

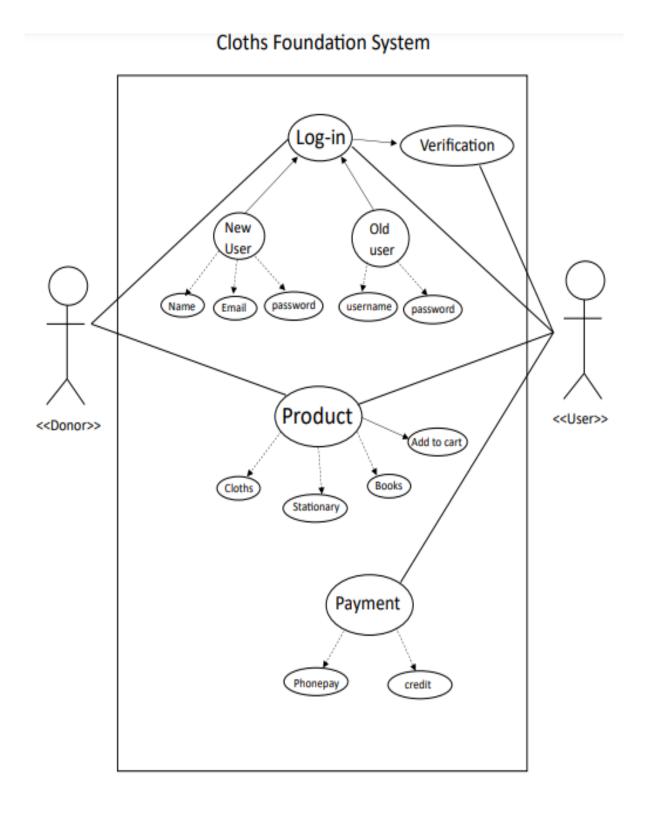
• Processor: Intel(R) Core(TM) i5-1035G1 CPU @ 1.00GHz 1.20 GHz

• RAM: 4 GB of RAM

• SSD: 250GB

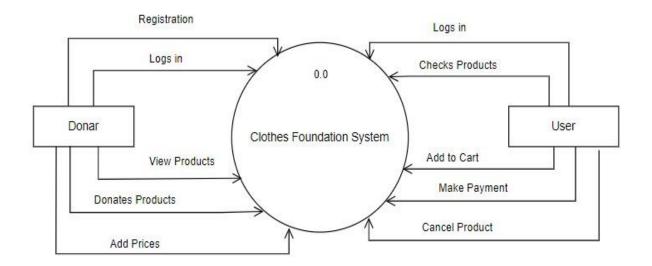
SYSTEM DIAGRAMS
24

4.1) Use Case Diagram

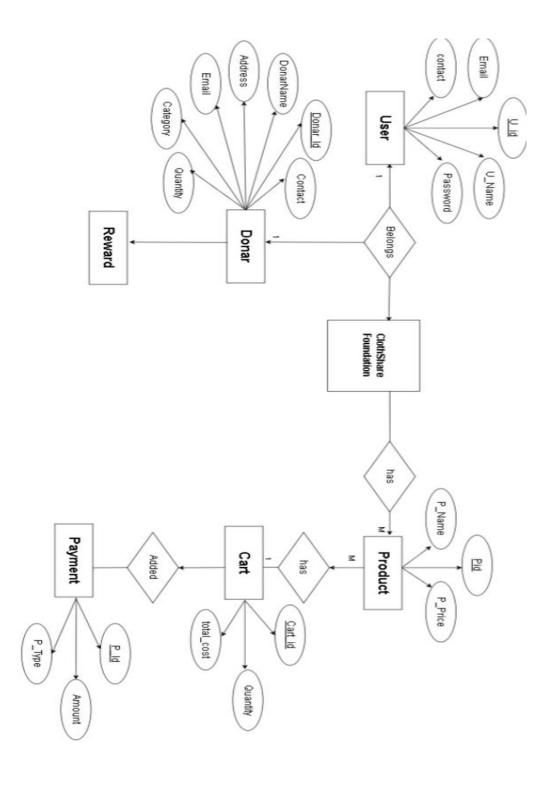


4.2)Data Flow Diagram

0 - Level Data Flow Diagram



4.3)Entity Relationship Diagram



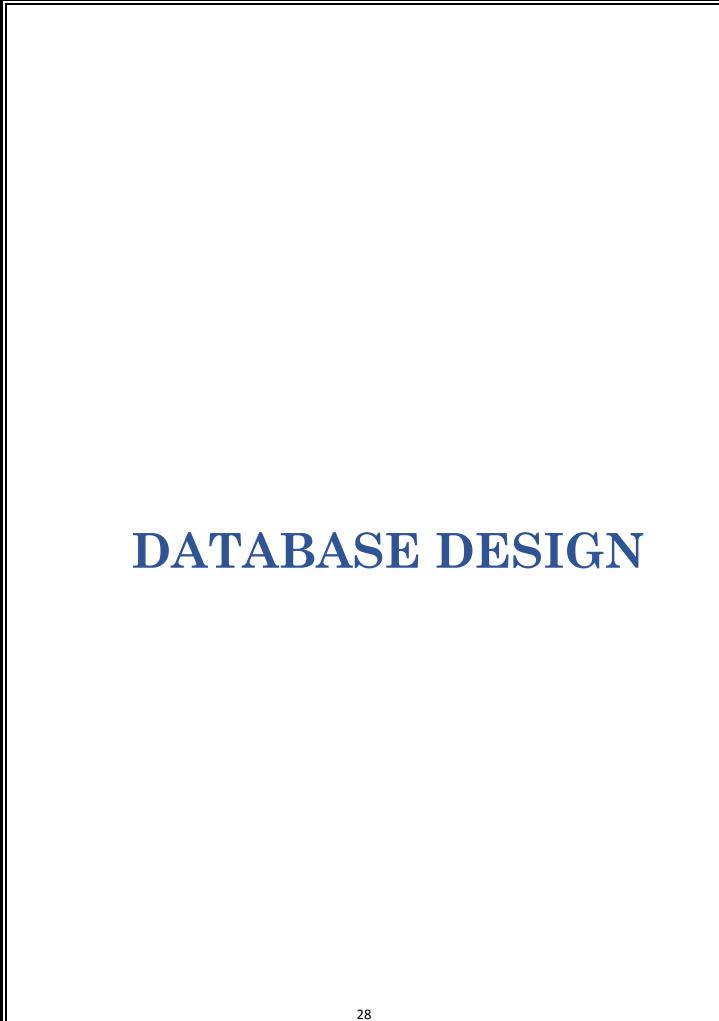


Table Specification:

Cart

Column_name DataTypes

Cart_Id	int
Product_Id	int
User_Id	int

Donar

Column_name DataTypes

Donar_Id	int
Address	String
Category	String
Contact	long
Donar_name	String
Pic byte	Byte

Product

Column_name

DataType

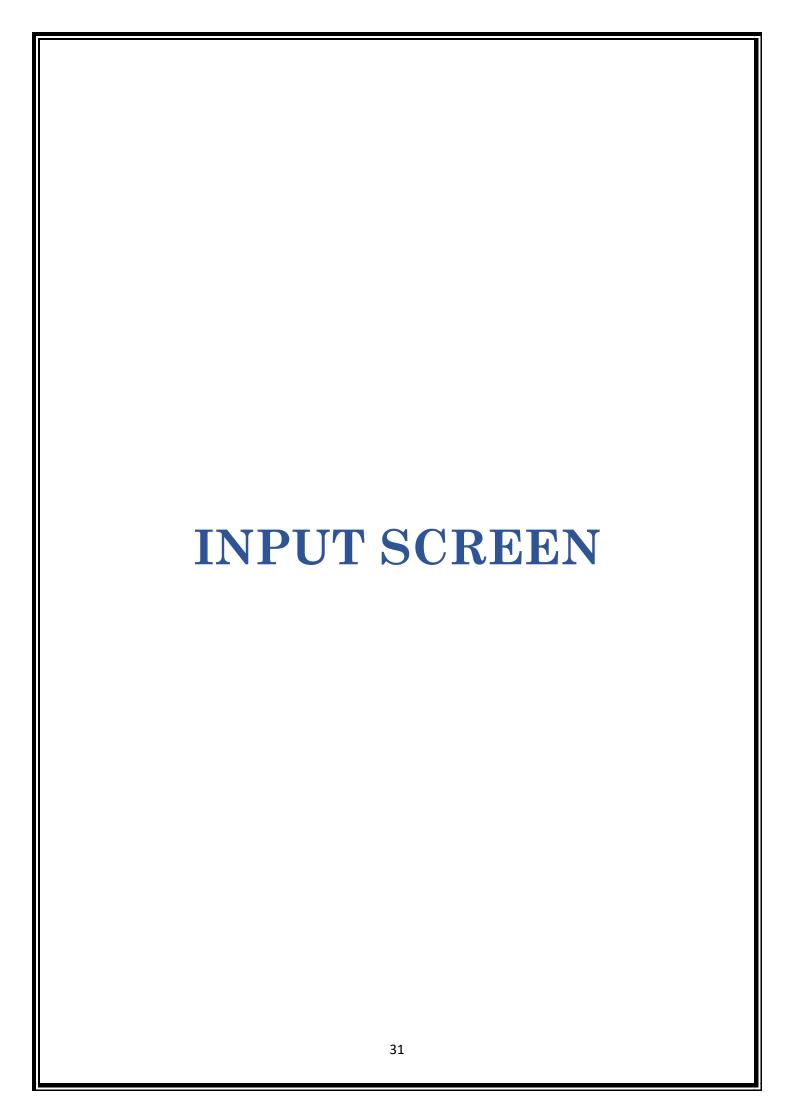
Product_Id	int
Category	String
Image_path	String
Price	int
Product_Name	String

User

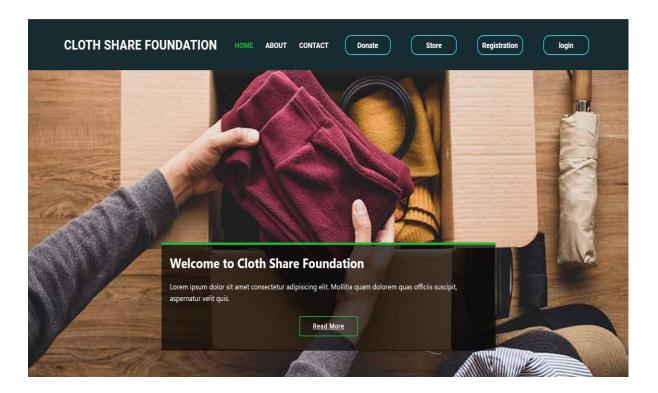
Column_name

DataType

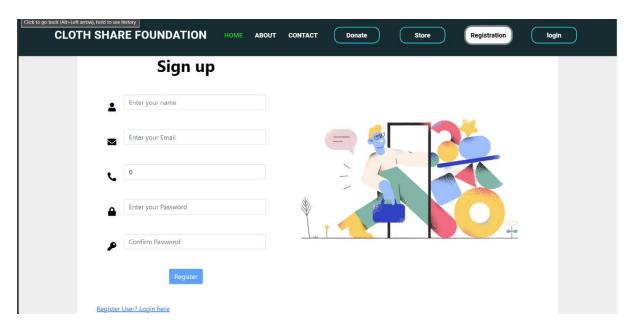
User_Id	int
Contact	long
Email	String
Password	String
User name	String



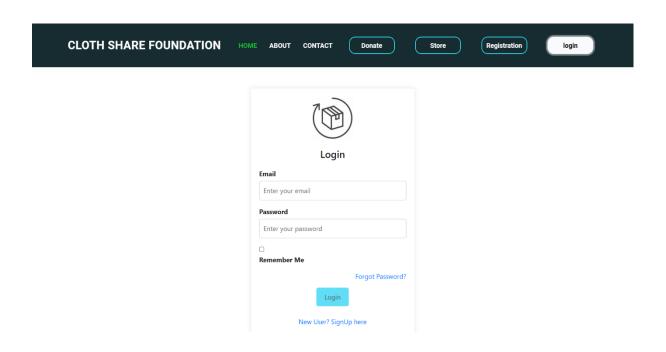
Home Page



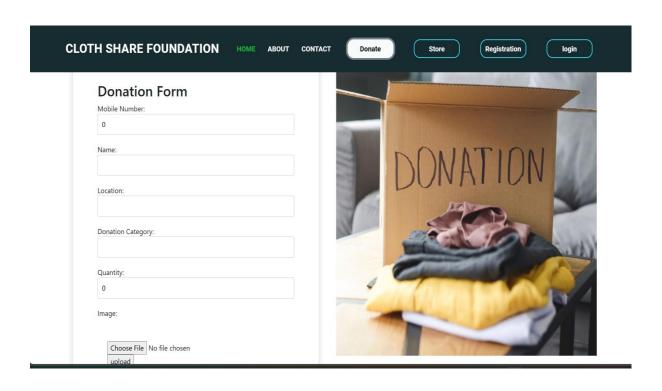
User Registration Form



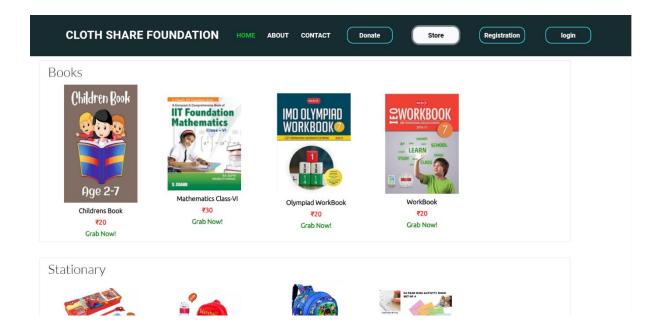
User Login Form



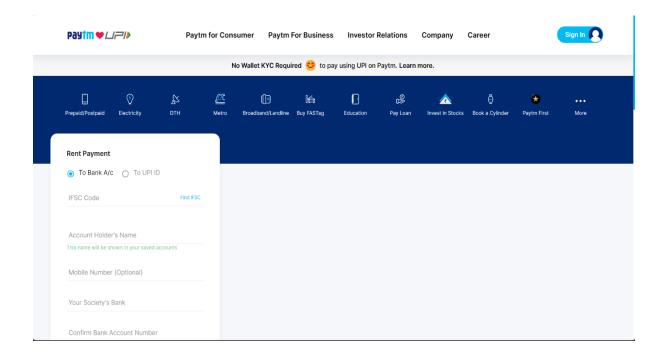
Donation Form



Store Form



Payment Form



About Us Page

CLOTH SHARE FOUNDATION HOME ABOUT CONTACT Donate Store Registration login

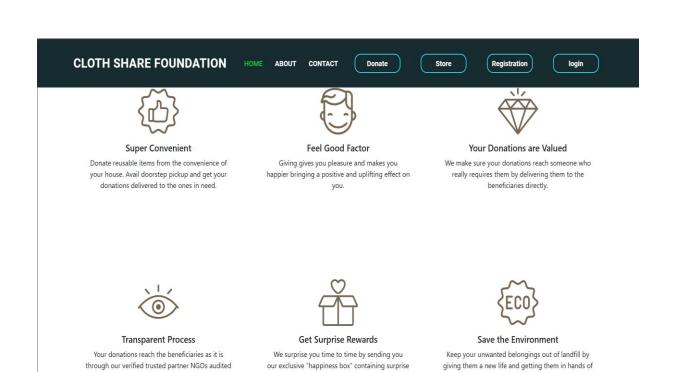
The Cloth Share Foundation is Simple!

Here is the place were you can sell your old cloths and earn money.

You can also Donate your cloths to the needed one.We Deliver your Donations to the right place



WHY DONATE THROUGH Cloths Share Foundation

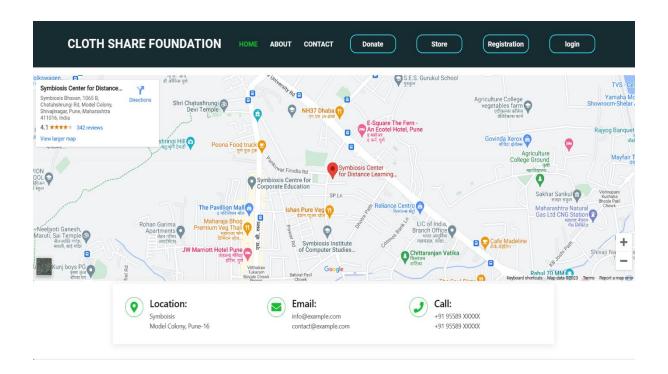


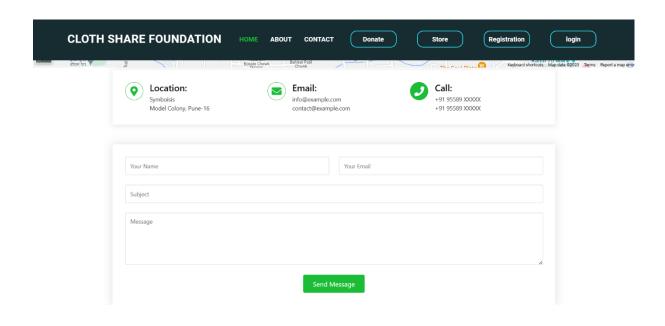
goodies and vouchers for you.

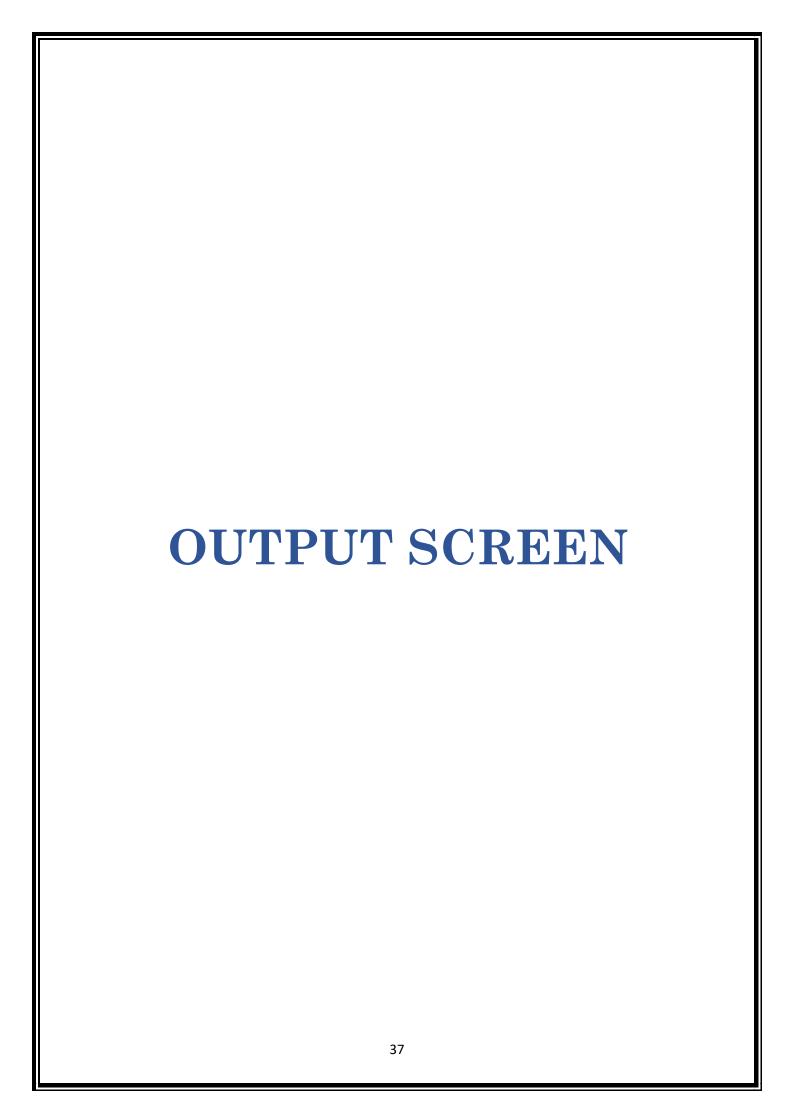
someone who really requires them.

on regular basis.

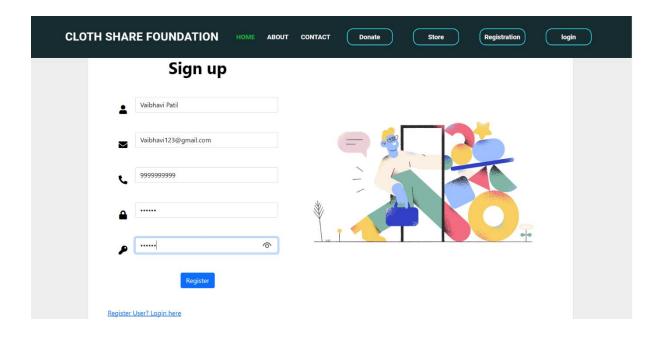
Contact Us Page



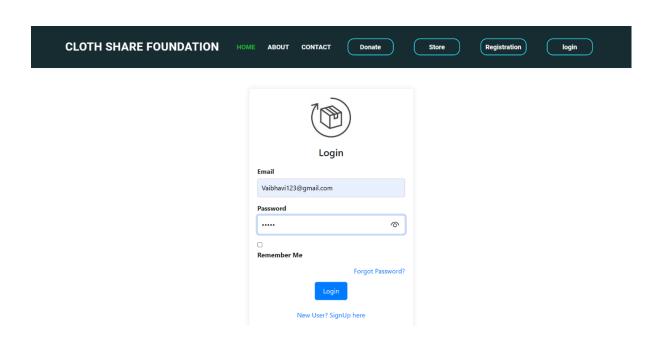




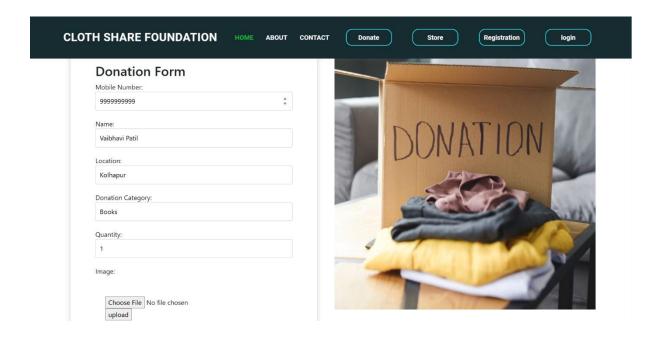
User Registration Form



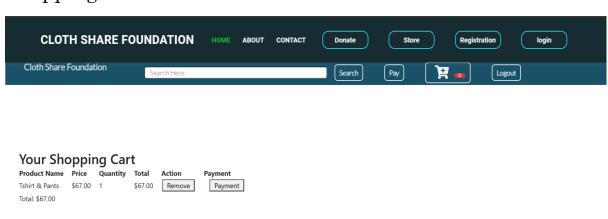
User Login Form



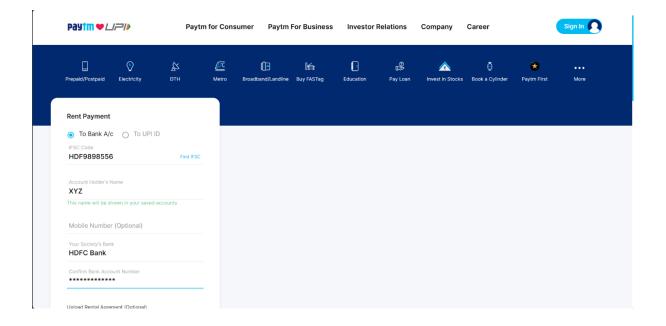
Donation Form

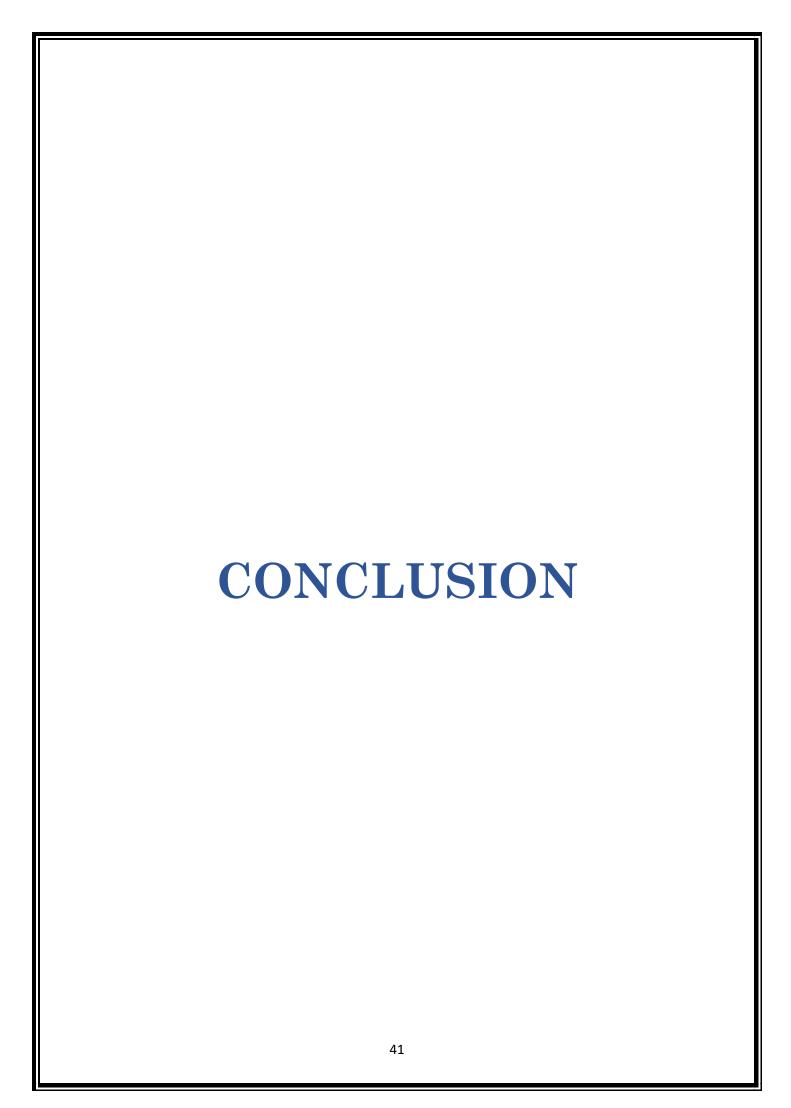


Shopping Cart



Payment Form





5.1) Conclusion

Cloth Share Foundation is a promising initiative that leverages the power of electronic commerce to facilitate the sale of old clothes, books, and stationary items while promoting charitable contributions. By providing a user-friendly online platform accessible through web browsers and mobile apps, it has the potential to bring about several positive outcomes.

It has a great pleasure for me to work on this exciting and challenging project. This project proved good for me as it provided practical knowledge of programming in Angular, Java and SQL and also handling procedure related with Foundation systems. It also provides knowledge about the latest technology used in developing application and server technology that will be great demand in future. This will provide better opportunities and guidance in future in developing projects independently.

At last it can be concluded that the **Cloths Reusable Foundation** was the real learning experience. The project has been made as per as the given specification. The system has been made as user friendly as possible.

5.2) Limitations

But there are some limitations, they are as follows:

- 1. Managing the collection, distribution, and quality control of donated items can be logistically challenging, particularly as the platform grows.
- 2. Users, especially older individuals or those from less technical backgrounds, may face difficulties in using web browsers or mobile apps effectively, potentially excluding some demographic groups.
- 3. The current system may not have a structured mechanism for users to donate their old clothes and books to those in need,
- 4. As with any online platform, there are security risks such as data breaches, phishing attempts, and fraud.
- 5. As the platform grows, scaling up infrastructure and maintaining performance can be challenging without careful planning.

5.3) Future Scope of Study

The scope of this project is very broad in terms of gaining knowledge and sharing knowledge among world.

Clothing industry that aims to lower the environmental impact of the clothes industry both production and consumption. By prioritizing quality over quantity ,reducing the amount of textile waste generated.

It is responsible for large amount of waste.

It will cater the demand of Trading and thus helps the other business entities to increase the production and service which provide service and support to this industry.

- Security can be improved more.
- Payment option can be added.
- More features or as per user feedback application can be updated. This application will be used in corporate world.

5.4) Bibliography/References

Books

- 1. "Effective Java" by Joshua Bloch
- 2. "Angular Development with TypeScript" by Yakov Fain and Anton Moisee
- 3. "Spring Boot in Action" by Craig Walls

Website

https://www.javaguides.net/2019/06/spring-boot-angular-7-crud-example-tutorial.html