Butwal Multiple Campus

Tribhuvan University

Institute of Science and Technology

A Final year Project Report

On

"Clothing Rental System"

(Course Code: CSC-412)

Under the supervision of

Mr. Bhuban Panthee

Butwal Multiple Campus

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In partial fulfillment of the requirements for the Bachelor's Degree in Computer Science and Information Technology (B.Sc. CSIT)

Submitted to:

Butwal Multiple Campus

Department of Computer Science and Information Technology

Butwal, Rupandehi

March, 2024

Supervisor Recommendation

I hereby recommend that this project report under my supervision by **Miss. Asmita Nyoupane, Miss. Mahima Paudel, and Miss. Sabina Paudel** entitled **"Clothing Rental System** in partial fulfillment of the requirement for Bachelor's Degree in Computer Science and Information Technology of Tribhuvan University be processed for the evaluation.

……..

Signature of Supervisor

Mr. Bhuban Panthee

(Project Supervisor)

Butwal Multiple Campus

Butwal, Rupandehi, Nepal.

Date:

Seal:

Letter of Approval

This is to certify that this project was prepared by **Miss. Asmita Nyoupane, Miss. Mahima Paudel and Miss. Sabina Paudel** of BSc. CSIT students 2076 Batch, Butwal Multiple Campus entitled **"Clothing Rental System"** is a web application that can be used in renting the Clothes. It is an original project carried out under my guidance and supervision towards the partial fulfillment of Bachelor's degree of Computer Science and Information Technology.

…….	…….
Mr. Sunil Kumar Yadav	**Mr.Bhuban Panthee**
Program Coordinator	Supervisor
Butwal Multiple Campus	Butwal Multiple Campus
…….	……
Dr. Khimananda Neupane	External Examiner
Campus Chief	
Butwal Multiple Campus	

Student's Declaration

We are in the final year of B.Sc. CSIT students (7^{th} semester) of Butwal Multiple Campus, hereby declare that, project report entitled **"Clothing Rental System"** submitted in partial fulfillment of the requirement for Bachelor's Degree in Computer Science and Information Technology of Tribhuvan University. This system is carried out by us under the guidance and supervision of **Bhuban Panthee sir**, of Butwal Multiple Campus. We assure that this project is our original work and not submitted for the award of any other degree, diploma, fellowship or any other similar title or prize.

…….

Miss.Asmita Nyoupane (25109/076)

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Miss.Mahima Paudel (25135/076)

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Acknowledgement

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Furthermore, we would like to acknowledge the leadership and support of the Head of the department, **Sunil Kumar Yadav**, the Campus Chief, **Dr. Khimananda Neupane**, and our supervisor, **Bhuban Panthee**, who provided us with guidance and encouragement throughout the project. We also wish to express our appreciation to each member of our group for their hard work, commitment, and cooperation throughout the project. It was their combined efforts that made this project a success.

Finally, we would like to acknowledge the support of our family and friends, whose encouragement and motivation have been the driving force behind our success. Thank you once again for your invaluable contribution to our academic growth, and we look forward to your continued guidance and support in our future endeavors.

ABSTRACT

This project introduces a **"Clothing Rental System**" dedicated to revolutionizing the way individuals discover and access clothing for various occasions. The current challenge in searching for rental clothes, is addressed through the innovative use of the Internet, which significantly simplifies the process. The system aims to facilitate a seamless experience for users in finding and renting clothing items of their choice, whether for special events, daily wear, or exploring fashion options without committing to permanent purchases.

The "Clothing Rental System" serves as a transformative platform, leveraging technology to empower users to effortlessly explore and rent a diverse array of clothing items, including formal attire, casual wear, wedding wear etc. This digital solution eliminates the hurdles associated with traditional clothing searches, making fashion accessible, sustainable, and convenient. Users can browse and update listings with ease, while also providing a platform for individuals to showcase and promote their clothing collections by uploading high-quality images.

Keywords: *Clothing Rental System, Seamless experience, Fashion option, Sustainable, Digital solution*

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LIST OF ABBREVIATIONS

CSS: Cascading Style Sheet

CRS: Clothing Rental System

DB: Database

DFD: Data Flow Diagram

ER: Entity Relationship

GUI: Graphical User Interface

HTML: Hyper Text Markup Language

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CHAPTER 1: INTRODUCTION

1.1 Introduction

In the contemporary landscape, the integration of information technology has propelled the exponential growth of content and services, presenting new opportunities and fostering the creation of innovative business rentals. Within this dynamic environment, the challenge of locating rental clothes, ornaments, and shoes of personal preference has been a formidable task. However, the transformative power of the Internet emerges as a solution to simplify this endeavor, enabling individuals to seamlessly search for and access a diverse array of clothing items. This study is dedicated to the development of a pioneering system known as the "Clothing Rental System," aimed at revolutionizing the process of acquiring clothing for various purposes, be it for special events, everyday wear, or the opportunity to monetize one's fashion assets.

The Clothing Rental System serves as an innovative platform, empowering users to experience a fresh look without the need for additional purchases. It stands as a testament to the transformative potential of technology, facilitating effortless exploration and rental of clothing items. The platform caters to diverse needs, offering a wide spectrum of clothing items, including formal attire, casual wear, sportswear, accessories, and more, all conveniently accessible from the comfort of users' screens. Furthermore, the system provides a platform for individuals to showcase and promote their clothing collections, fostering a community of fashion-conscious users. The process of adding clothing items to the website is straightforward, emphasizing user-friendly interactions for browsing and updating listings. In the subsequent sections of this proposal, we will delve into the core of our project, delineating the problem statement and illustrating how the Clothing Rental System aims to reshape the fashion landscape, emphasizing accessibility, sustainability, and convenience for all.

1.2. Problem Statement

In our country, the current landscape of clothing rentals predominantly revolves around business-to-consumer (B2C) platforms. These platforms facilitate the rental of clothing Items from established businesses to consumers, offering a level of convenience and variety. However, a noticeable gap exists in the market, particularly concerning consumer-

to-consumer (C2C) clothing rental systems. The absence of C2C options restricts opportunities for individuals looking to monetize their wardrobe by renting out clothing they own. Introducing C2C rental systems could not only serve as an additional income source for individuals but also contribute to sustainability by prolonging the life cycle of clothing items.

The dearth of C2C clothing rental options represents a significant limitation, hindering the potential economic benefits for individuals seeking to share their fashion assets. Enabling C2C rentals not only expands consumer choices but also aligns with sustainable fashion practices. By promoting the reuse and sharing of clothing items within the community, C2C systems contribute to reducing fashion-related waste and encouraging responsible consumption. Furthermore, the development of such systems fosters economic opportunities for individuals, empowering them to leverage their existing wardrobe as a valuable asset. In essence, the introduction of consumer-to-consumer clothing rental systems is pivotal for the fashion landscape in our country. Beyond merely addressing a market gap, it holds the potential to create a more sustainable, economically inclusive, and community-engaged fashion industry. As the fashion sector continues to evolve, incorporating C2C rental systems becomes imperative for promoting a holistic and responsible approach to clothing consumption.

1.3. Objectives

The main objectives of Clothing Rental System are:

- To provide platform that directly connect lender and renter.
- To enable direct chat between lender and renter.
- To enable the user to find the renting clothes nearer to their location.

1.4. Scope and Limitation

1.4.1 Scope

The Clothing Rental System is a new online platform that makes it easy to borrow clothes for different occasions, like parties, everyday wear, or even making money from your own clothes. It has a wide range of options, from formal to casual clothes and accessories, all

available through a simple website. You can rent clothes without having to buy them, and the website also lets people show off their own clothes and connect with others who love fashion. The system focuses on being easy to use, good for the environment, and making fashion accessible to everyone.

1.4.2 Limitations

The Clothing Rental System offers convenience and accessibility for users seeking to borrow clothing items for various occasions, such as special events or everyday wear. However, it faces limitations that include a potentially limited selection of styles and sizes, concerns about the quality and cleanliness of rented garments, challenges in ensuring proper fit and comfort, affordability issues, logistical complexities related to shipping, and sustainability considerations. Overcoming these limitations will be essential for the system to fulfill its promise of revolutionizing the fashion landscape while providing a seamless and sustainable rental experience for users.

1.5. Development Methodology

The Agile method is used as a development methodology for system development. It aims to deliver working software in incremental iterations, allowing for continuous improvement and adaptation to changing requirements. Rather than trying to predict every detail upfront, Agile embraces change. The Agile methodology promotes a more responsive and adaptive approach to project development, enabling teams to deliver value to customers more efficiently and effectively. Project requirements and priorities are expected to evolve, so plans are flexible and adapted as needed throughout the project. Agile allows making changes and adapting to the evolving environment and requirements throughout the project lifecycle.

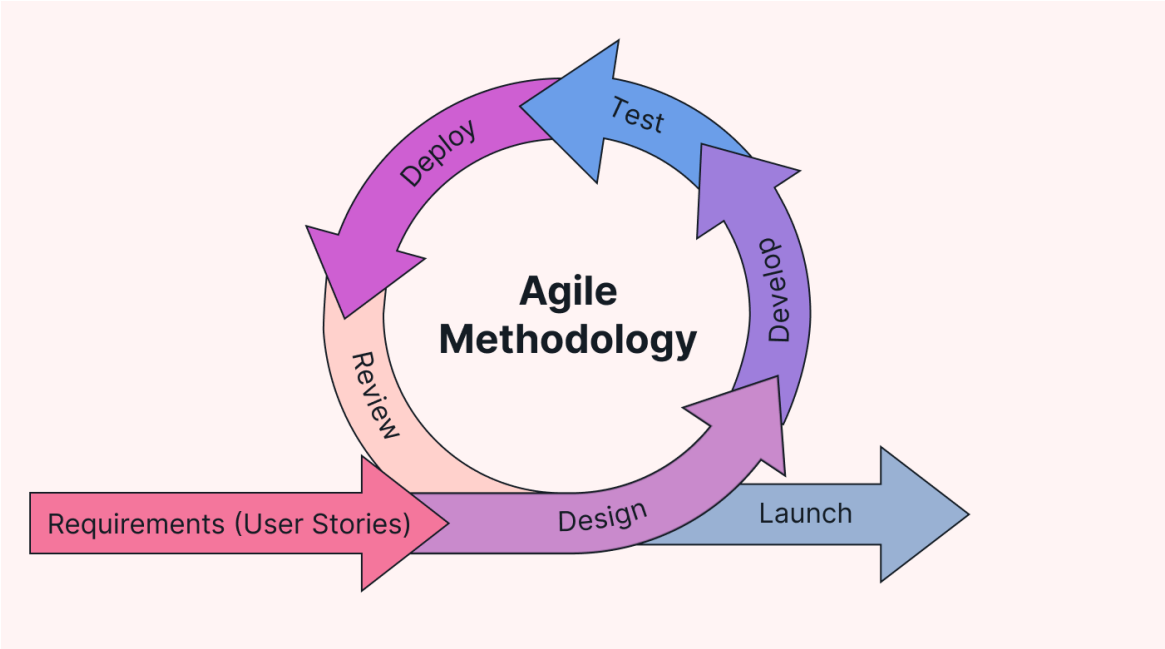

Figure 1.1 Agile Methodology

1.6. Report Organization

This report has been prepared following the guidelines of Tribhuvan University. The report is separated into different chapters. Each chapter consists of various sub chapters with its content. The preliminary section of the report consists of Title Page, Acknowledgement, Abstract, Table of Contents, List of Abbreviations, List of Figures, and List of Tables. The main report is divided into 6 chapters, which include:

Chapter 1: Introduction. It includes the general overview of the system and the project as a whole. It includes the Problem Statement, Objectives, Scope/Limitations and the Development Methodology for the project and the system being developed.

Chapter 2: Background Study and Literature Review. It includes the study of the current scenario/environment the system will be deployed into. It includes the study of the current trends, preferences of people, the existing systems, and areas of improvement among others.

Chapter 3: System Analysis. It includes the requirement and feasibility analysis of the system that can be generated through the studies presented in the previous two chapters.

It will also include the ER and DFD for the system which specifies the workflow, entities, attributes and their relationships.

Chapter 4: Design. It includes the design of the database, forms and interface of the system. It also includes the implementation details of the selected methodology and the details of the algorithm used.

Chapter 5: Implementation and Testing. It includes the details of the different design and development tools used and the implementation details of the modules presented in the form of code snippets of functions, classes. It also includes the testing of the system with different test cases as per the requirement.

Chapter 6: Conclusion and Future Recommendations. It includes the summary of the system and the project as a whole. It also includes the possibilities/aspects which the system can implement in the future. The final part of the report consists of References and Appendices. The references are listed in accordance to the IEEE referencing standards and the Appendices includes the screenshots of the system and the major source code snippets.

CHAPTER 2: BACKGROUND STUDYAND LITERATURE REVIEW

2.1. Background Study

The C2C (Consumer-to-Consumer) clothing rental system has emerged as a significant trend in the fashion industry, driven by various factors including environmental awareness, price consciousness, and the desire for unique and up-to-date fashion without the burden of ownership. This model promotes sustainability by reducing waste and promoting a culture of sharing and temporary consumption. The integration of social media and online platforms has facilitated the growth of this market, making it more accessible to consumers who are increasingly seeking flexible and affordable fashion options. The system leverages technology to connect renters with lenders, offering a convenient and efficient way to access clothing for special occasions or everyday wear. The research conducted by Lee and Huang provides valuable insights into the motives for online fashion renting, highlighting the positive impact of attitudes, subjective norms, environmental awareness, and relative advantages on the intention to use online fashion rental services [1].

2.2. Literature Review

Access-based consumption, particularly in the fashion industry through fashion renting, has been gaining traction as a sustainable and cost-effective alternative to traditional ownership models. This trend is driven by several factors, including environmental benefits, consumer benefits, and the evolving landscape of online retail and the entertainment industry [2]. The global demand for online clothing rental grew at a compound annual growth rate (CAGR) of 8.7% from 2018 to 2022, indicating a significant shift in consumer behavior towards renting over purchasing. This trend is expected to continue, with the overall online clothing rental market projected to grow at a CAGR of 10.6% between 2023 and 2033 [3].

The growth is fueled by increasing online retail, technological advancements, internet penetration, and the rising popularity of online shopping portals. Additionally, the entertainment industries, including fashion vlogs, film, and television, which require clothing for short durations, prefer renting to buying. The concept of low-cost, high-

quality online clothing rentals complements the vintage fashion phenomenon. This model allows for the refurbishment and rental of clothing items that have only been worn a few times, reducing waste and making new or expensive clothing accessible to a wider audience at a lower cost. This approach not only benefits consumers by providing access to a variety of products without the burden of ownership but also contributes to environmental sustainability by minimizing waste [4].

The fashion rental market addresses the fashion needs of consumers who may not be able to afford new clothes for infrequent use. It offers a more affordable and convenient option, allowing consumers to enjoy the usage and function of products without the responsibilities of ownership, such as the cost of purchasing, maintaining, and storing the product, as well as the risk of obsolescence and disposal.

In 2019, Kathmandu started witnessing a growing number of fashion rental stores. The majority of these stores rented out party outfits for people to wear to social events, thus relieving people of the financial burden of buying new dresses. But as the Covid-19 pandemic gripped the country in 2020, social events started getting cancelled and people began worrying about contracting Covid-19 by touching and using rented clothes. The growth of fashion rental stores then came to an abrupt halt. However, with the number of Covid-19 cases decreasing, fashion rental stores are now making a comeback [5].

Existing Clothing Rental System

i. Kapada Rent

Kapada rent is the pioneer dress rental service based in Kathmandu, Nepal which provides party wear for both male and female for rent. It believes that wearing a dress multiple times extends its lifespan and reduces the amount of waste ending up in landfills [6].

ii.Antidote Nepal

Antidote is an online store based in Kathmandu, Nepal where customers can purchase accessories, books, bags, and shoes from the comfort of your home. It provides end to end service and takes care of everything from the moment it collects the items from the seller’s home to the final sale of the items [7].

iii. Kuro

Kuro is India's 1st 3 in 1 sustainable platform where you can rent outfits, buy preloved and sell luxury with growing awareness towards the sharing economy. It aims to eradicate the social stigma towards rental and preloved. It brings a balance between fashion and sustainability by providing a platform that facilitates renting and preloved Indian outfits, at a fraction of its cost. [8].

Chapter 3: System Analysis

3.1 System analysis

A use case is a method used in system analysis to figure out what a system needs to do. It helps to clarify and organize these needs. Once we know what users want, we create a functional specification based on those needs. This document outlines what the system should do, and it also ranks each function by importance. Functional requirements are the services the system must provide. They explain how the system should behave when it gets certain inputs and how it should react according to the situation.

3.1.1 Requirement analysis

Requirements analysis, also known as requirements engineering, is all about figuring out what users want in a new or updated product. It's like understanding their wish list. Once we know what they need, we create a use case diagram to visualize these requirements. It's like drawing a map of how the product will work based on what users want. This diagram helps us see the big picture and plan how to meet those needs.

i. Functional Requirement

- Implement a secure login and sign-up form to authenticate users and distinguish between authorized and unauthorized access.
- Provide a clear and intuitive lend form enabling users to post details about clothing items, including essential fields for item description, size, and rental terms.
- Allow only authorized users to edit, delete, and manage their own posts, implementing secure user authentication for post integrity.
- Implement a geospatial algorithm for users to search for nearby clothing items, enhancing platform accessibility.
- Allow users to leave comments on posts and provide the option to view and delete their own comments, encouraging user engagement
- Develop a real-time chat system for direct communication between renters and lenders.

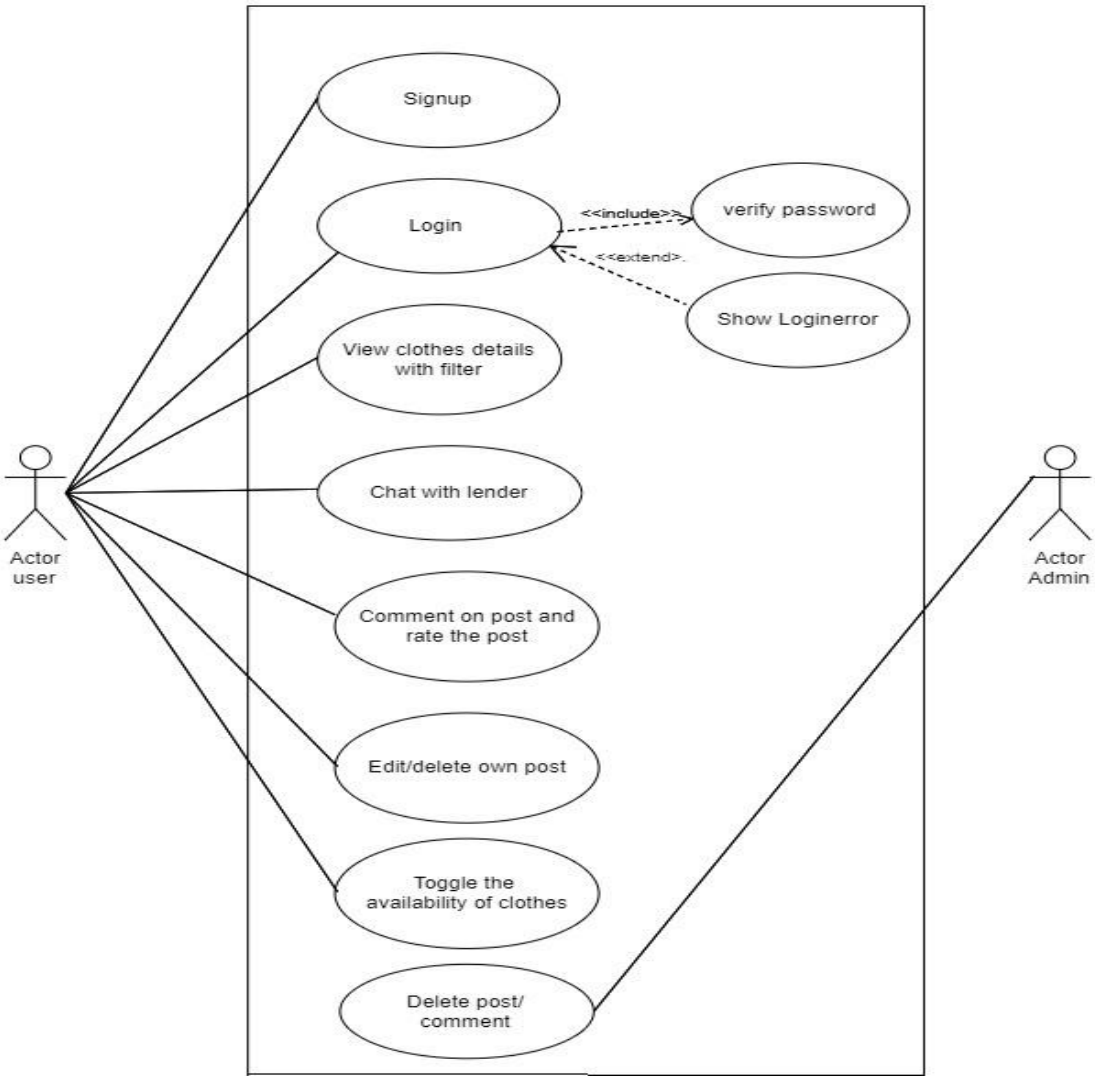

Figure 3.1 Use Case Diagram of CRS

ii. Non Functional Requirement

- Ensure secure storage of user data and robust authentication mechanisms to protect user accounts and data.
- Design an intuitive and user-friendly interface, optimizing response times for actions such as loading pages and submitting forms.
- Design the system to accommodate a growing user base and increased clothing items, considering scalability for increased traffic and data volume.
- Optimize the geospatial algorithm for efficient location tracking and search performance.
- Provide low-latency communication in the real-time chat system for immediate and effective dialogue.

3.1.2. Feasibility Analysis

The feasibility analysis analyzes whether the software meets its requirements and whether it can be implemented using the current technology and within specified budget and schedule. It guides the project team in determining whether to proceed with the project and it identifies the important risks associated with the project that must be managed if the project is approved.

i. Technical Feasibility

Technical feasibility for our clothing rental system developed using the MERN stack is high due to the complementary skill set of our team members. Our team is strongly made up of members with a variety of technical skills required for the project. Two members specialize in frontend development, possessing strong expertise in HTML, CSS, and JavaScript, as well as proficiency in popular frontend frameworks such as React.js. Additionally, one member specializes in backend development with proficiency in Node.js, Express.js, and MongoDB. By leveraging individual strengths, our team is well-equipped to tackle the frontend and backend development tasks required for the clothing rental system. This leads to good technical feasibility for our project.

ii. Operational Feasibility

From the perspective of the users, our UI will be user-friendly and easy to navigate processes. This will allow any simple users to use the Clothing Rental System easily. As far as our system's operational feasibility is concerned, the more the user base will be the more we will be operating efficiently. So, we see great operational feasibility for this project.

iii. Economic Feasibility

The technology stack required for the development of the platform consists primarily of open-source tools and frameworks, reducing the need for substantial financial investment in proprietary software or licensing fees. By leveraging existing open-source solutions, we can significantly mitigate development costs while still delivering a high-quality and feature-rich clothing rental platform.

iv. Schedule Feasibility

Scheduling feasibility means planning out each step carefully to finish the project on time, and setting a realistic timeline for completing different tasks involved in creating the report. This includes researching, planning, writing, revising, and formatting. Each phase must be allocated enough time to ensure quality work without rushing. By following the schedule, the report can be finished on time and meet the project's needs.

3.1.3 Analysis

Process Modeling using DFD

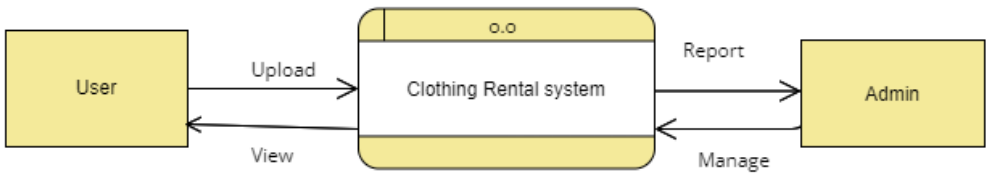

Figure 3.2 Level 0 DFD of CRS

Level 0 DFDs, also known as context diagrams, are the most basic data flow diagrams. They provide a broad view that is easily digestible but offers little detail. Level 0 data flow diagrams show a single process node and its connections to external entities. In our clothing rental system, the process follows between the user and clothing rental system.

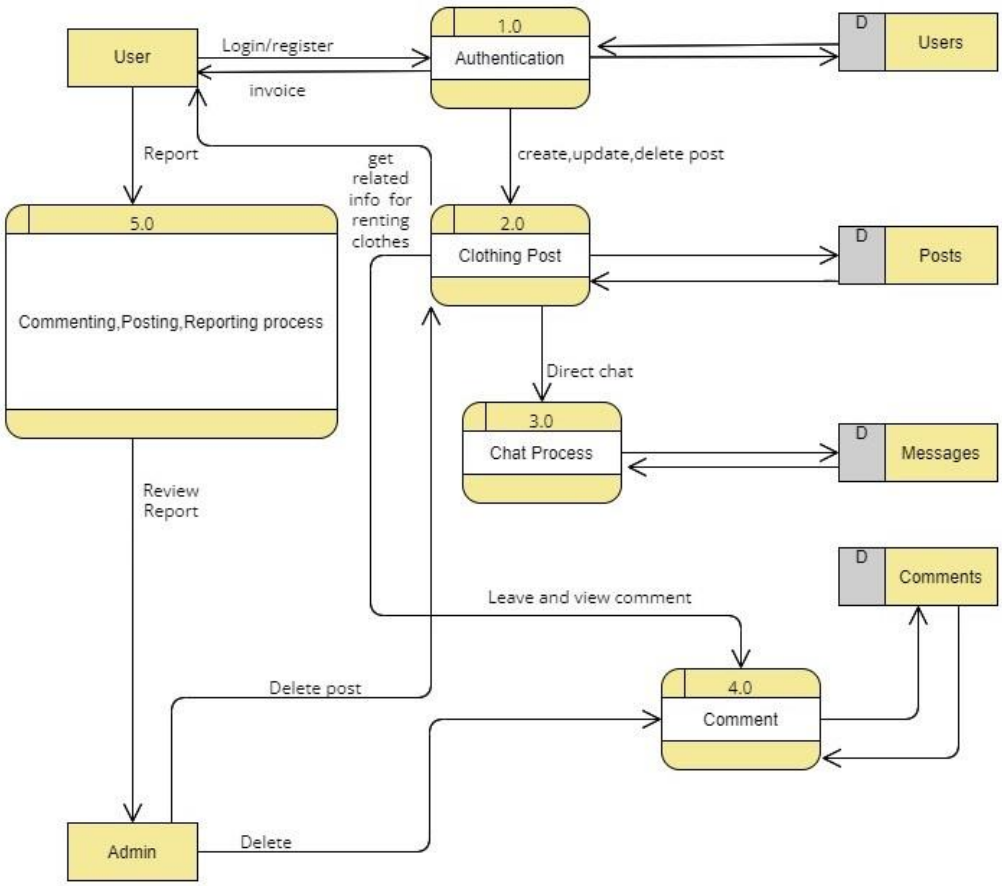

Figure 3.3 Level 1 DFD of CRS

Level 1 DFDs are still a general overview, but they go into more detail than a context diagram. In level 1 DFD, the single process node from the context diagram is broken down into sub-processes. As these processes are added, the diagram will need additional data flows and data stores to link them together. In our clothing rental system. Level 1 DFD includes adding the authentication, clothing post, chat process, comment and commenting, posting, reporting process with the use of users, posts, messages and comments databases

Data modeling using ER Diagrams

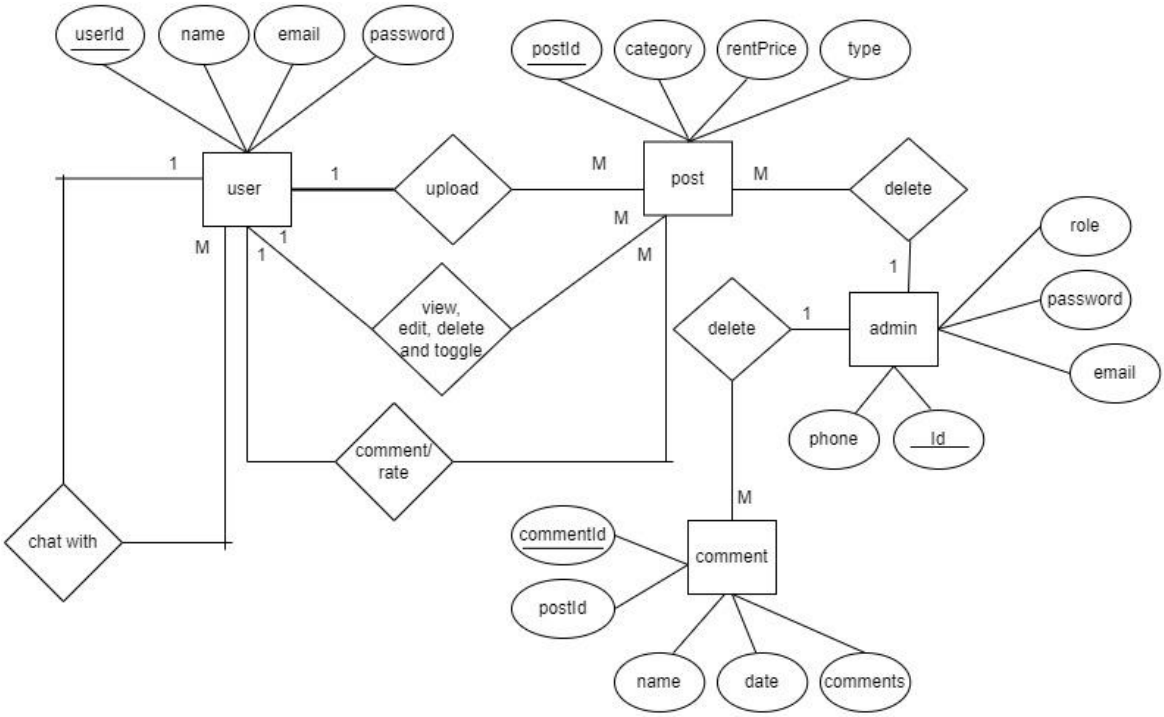

Figure 3.4 ER Diagram of CRS

The ER stands for Entity Relationship Diagram that explains the relationship among the entities present in the database. ER diagram is a structural design of the database. ER diagram is created based on three principal components: entities, attributes and relationships. The above diagram showcases four entities of Clothing Rental System - User, post, Admin and comment. There is one to many relationship among user and post as a user can upload many post and a post can be upload by only one user .User entity possess attributes – userId, name, email, password . Post has postId, category, rentPrice, type. Similarly Comment has commentId, postId, name, date, comments and Admin has id, password, name, email,phone.

CHAPTER 4: SYSTEM DESIGN

4.1. Design

Database Design:

Table 4.1 User Table

Key	Attribute	Data Types
PK	UserId	INT
Key	Name	VARCHAR
Key	Email	VARCHAR
Key	phone	INT
Key	password	VARCHAR

Table 4.1 Database Table: Posts

Key	Attribute	Data Types
PK	PostId	INT
FK	UserId	INT
Key	category	VARCHAR
Key	rentPrice	INT
Key	gender	VARCHAR
Key	type	VARCHAR

Table 4.2 Database Table: Comments

Key	Attribute	Data Types
PK	commentId	INT
FK	postId	INT
Key	name	VARCHAR
Key	date	SMALLDATETIME
Key	comments	VARCHAR

Table 4.3 Database Table: Messages

Key	Attribute	Data Types
PK	messageId	INT
FK	sender	INT
Key	message	VARCHAR
Key	createdAt	SMALLDATETIME

4.2 Algorithm Details

Geospatial algorithms are computational techniques designed to process and analyze geographic or spatial data. These algorithms often involve mathematical calculations and data structures to handle information related to the Earth's surface, such as coordinates, distances, and shapes. [9]

In the context of showing posts near a user's current address, geospatial algorithms can be employed to analyze spatial data related to the user's location and the locations of posts. This analysis can involve calculating distances between the user's location and the locations of posts, filtering posts based on proximity, and visualizing the posts on a map. The result is a more personalized and relevant experiences for the user, as they can see posts that are near their current location.

Pseudocode of Geospatial Algorithm

```
const nearbyPosts = await Post.aggregate([
    {
      $geoNear: {
        near: {
          type: "Point",
          coordinates: [parseFloat(latitude), parseFloat(longitude)],
        },
        distanceField: "distance",
        maxDistance: maxDistance,
        spherical: true,
      },
    },
  ]);
```

The provided JavaScript code uses MongoDB's aggregation framework to perform a geo-spatial query for finding nearby posts based on a given latitude and longitude. It utilizes the `$geoNear` aggregation stage to calculate distances between the specified point and documents in the `Post` collection. The `near` option defines the point's coordinates, while `distanceField` names the field storing calculated distances. The `maxDistance` option sets the maximum range considered, and `spherical` is set to true for accurate Earth curvature calculations. The result, containing posts within the specified distance, is stored in the `nearbyPosts` variable through an asynchronous operation. This code is useful for location-based queries in applications where proximity is a key factor, such as finding nearby posts on a social platform.

In summary, the code uses MongoDB's $geoNear stage to find and aggregate posts that are geographically near the specified coordinates within a certain maximum distance. The calculated distances are stored in a field named "distance," and the results are stored in the nearbyPosts variable.

CHAPTER 5: IMPLEMENTATION AND TESTING

5.1. Implementation

When it's time to bring the clothing rental system to life, we move into the implementation phase. Here, we start turning our ideas into actual working software. The main goal is to write the code and add internal notes so that we can easily check if it does what we planned. This makes it simpler to fix any issues, test it out, and make changes as needed.

5.1.1. Tools Used

Programming languages: Html, CSS, Express, React, Node JS
Frameworks: React Bootstrap
Database platform: Mongo DB

5.1.2. Implementation Details of Modules

1. Landing Page: The landing page serves as the entry point for users accessing the clothing rental system. This page acts as a gateway directing users to the appropriate login or registration page based on their selection.

2. Register/Login Page: This page facilitates user authentication and registration. Users who are new to the system can register by providing their email and creating a password. For returning users, they can log in by entering their registered email and password.

3. Lender Page: The lender page serves as a platform for users to upload clothes they wish to rent out, thereby expanding the inventory of the clothing rental system. Input fields include options for size, type, category, description, location, and an upload button for images of the clothes. The form design emphasizes clarity and ease of use, ensuring lenders can efficiently provide all necessary information.

4. RentPage: The rent page showcases all available clothes for rent, providing users with an overview of the rental inventory. Users can browse through the listings and click on individual clothes to view detailed information on a dedicated single post page. User can also search the clothes nearby location.

5. Single Post Page: The single post page displays larger images of the clothing item, along with a more extensive description, size availability, rental price, and any additional information provided by the lender. It also shows the comments given to the post and also provides the feature to chat with the lender.

6. Chat Page: The chat page features a real-time messaging interface that allows renters and lenders to communicate seamlessly about clothing items. User authentication is implemented to ensure that only authenticated users (renters and lenders) can access the chat page and engage in conversations. Renters can only communicate with lenders whose clothing items they have shown interest in or rented.

5.2. Testing

5.2.1. Unit Testing

Table 5.1 Unit Testing

«	Test Unit	Test Description	Test Input	Expected Result	Actual Result
1	Register	This unit registers a new user who has not created an account in our system	Name:mahima paudel email:mahima@gmail.com Phone number:9867470899 Password:mahima Upload image:photo.jpg	A snack bar with a success message should be displayed	Snackbar with success message displayed

2	Login	This unit allows existing users to access the system	Email:mahima@gmail.com Password: mahima	When existing user login with email and password they are directed to home page and can view details of clothes	When existing user login with email and password they are directed to home page and can view details of clothes
3	Add Post	This unit allows us to add our Post	Category: wedding wear Price: 3400 Gender: Female Type: Lehenga Size: Medium Location: Butwal	Post successfully	Post Added successfully
4	Algorithm Module	This unit allows us to Allowing to filter and display posts based on the location	Category: wedding wear Price: 3400 Gender: Female Type: Lehenga Size: Medium Location: Butwal	Nearby location post should be shown	Nearby location post has been shown successfully
5	Chat Module	This unit allows us to communicate between the lender and renter	Enter message into the field and click on the send button	Receiver should be able to receive the message instantly”	Receiver received the message on the real time
6	Edit post	This unit allows us to edit the post you have uploaded yourself	Category: Wedding wear Price: 3400 Gender: Female Type: Lehenga Size: Medium Location: Butwal	The post should be successfully edited.	The post has been edited successfully

7	Delete post	This unit allows us to delete the post you have uploaded yourself	Delete button clicked	The post should be successfully deleted.	The post has been deleted successfully.
8	Comment on Post	This unit allow users to comment on the post	Comment on the post	Comment should be displayed below the post	Comment has been displayed below the post

5.2.2. System Testing

System testing is defined as testing of a complete and fully integrated software product. System testing of software or hardware is testing conducted on a complete, integrated system to evaluate the system's compliance with its specified requirements. System testing falls within the scope of black box testing, and as such should require no knowledge of inner design of the code or logic. One of the types of system testing is the usability testing which is performed in the system.

Table 5.2 System Testing

«	Test	Test Input	Expected Outcome	Actual Outcome
1	System Testing	Click on various link on the system	Link should take users to another web pages according to the on page URL	Users able to get the expected web pages after clicking the links

5.3. Result Analysis

The successful completion of the testing phase signifies the culmination of a rigorous and comprehensive development process, which involved various stages of planning, design, implementation, and testing. The clothing rental system has undergone several rounds of testing, unit testing, and system testing, to ensure that it meets the functional and non-functional requirements specified in the requirement analysis phase. The unit testing was conducted to test individual modules of the system to ensure that they were working correctly and efficiently. The system testing was performed to test the system as a whole, ensuring that all the components were integrated and functioning correctly. All the functionality of the application was running smoothly, and all the test cases were successfully passed. The testing phase also helped to identify any bugs or errors in the system, which were then addressed and resolved. The successful completion of the testing

Phase indicates that the project is ready for submission. The system is now ready for submission, and the results obtained from the testing phase demonstrate that the system is reliable, efficient, and user-friendly. However, it is crucial to keep in mind that the system will require continuous maintenance and updates to ensure that it remains relevant and up-to-date. The testing of our Clothing rental system, we got a satisfying result as was expected during the project planning. All the test cases are successfully passed in unit testing, and system testing. The final application is running efficiently without any performance deficiency. All the functionality of the application is running well. Thus, after analysis of results achieved from different testing phases, the project is finalized and ready for submission.

CHAPTER 6: CONCLUSION AND FUTURE RECOMMENDATIONS

6.1. Conclusion

The clothing rental market represents an exciting niche within the broader software industry that is ripe for exploration and innovation. With the rise of conscious consumerism and the increasing popularity of sustainable fashion practices, there is a growing demand for platforms that offer convenient and affordable access to stylish clothing while minimizing environmental impact. Our Clothing Rental System is poised to address this demand by providing users with a seamless and efficient way to access a diverse range of clothing items for rent. By offering essential functionalities such as browsing, renting, and managing rental transactions, our platform aims to streamline the rental process and enhance the overall user experience.

6.2. Future Recommendations

The Clothing Rental System has immense potential for growth and enhancement, offering a wide range of additional features and modules that can significantly enrich its value proposition in the market. One such future recommendation is introducing subscription-based rental plans and fostering a Social Sharing and Styling Community within the platform can further drive user engagement and loyalty. Moreover, incorporating features such as Smart Inventory Management and AI-Powered Fraud Detection can optimize operational efficiency and security, respectively, ensuring a seamless and secure user experience. Lastly, collaborating with fashion designers and prioritizing sustainable fashion initiatives can not only diversify the rental inventory but also promote environmentally conscious consumption practices, aligning with growing consumer preferences for ethical and sustainable fashion choices. By embracing these future recommendations, the Clothing Rental System can position itself as a comprehensive platform that meets the evolving needs and preferences of its users while embracing technological innovation and sustainability principles.

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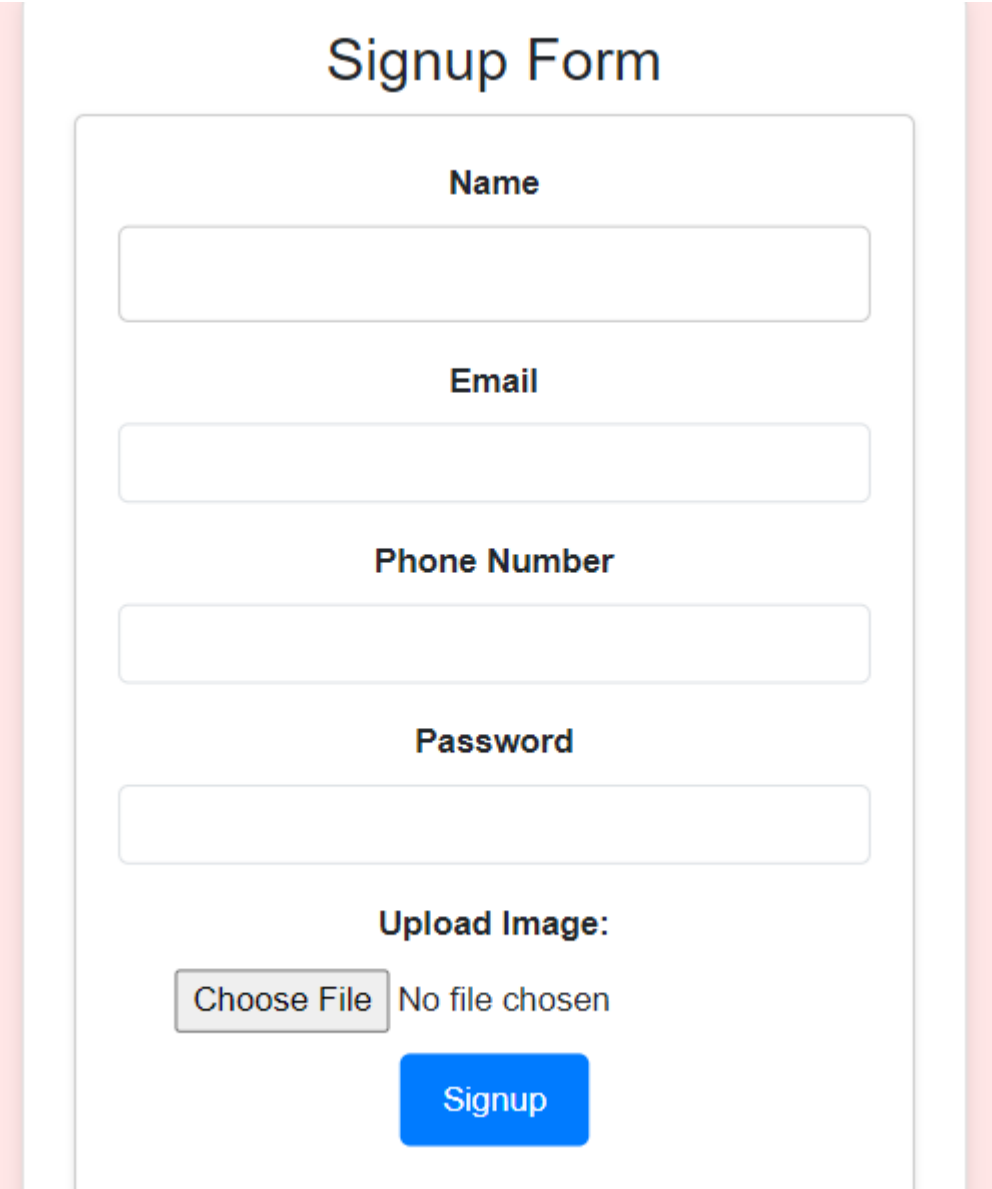
Appendix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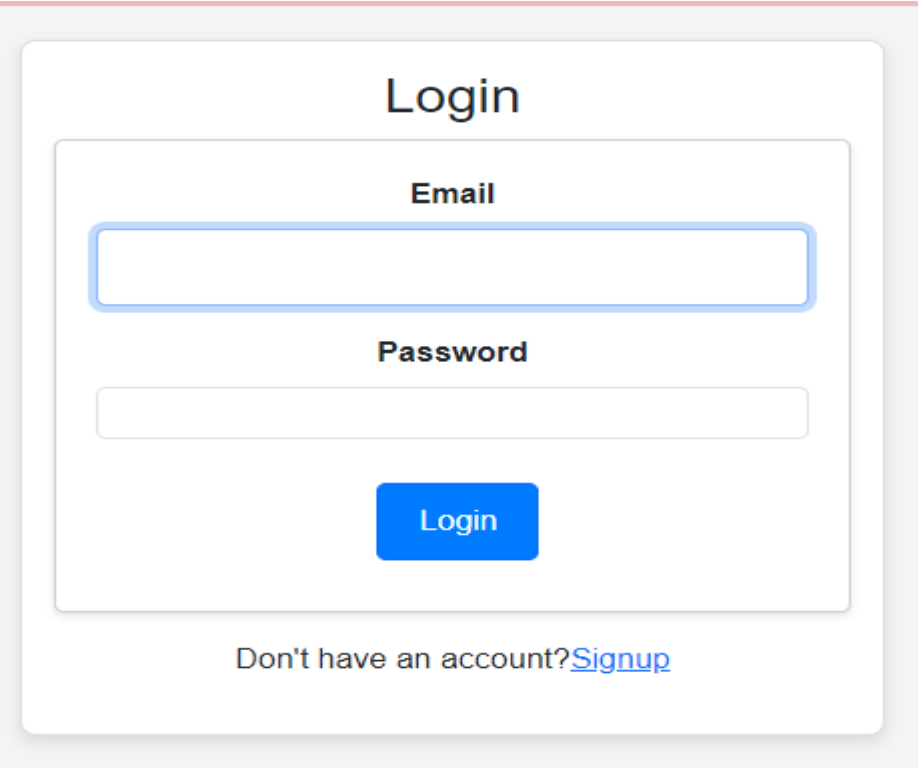
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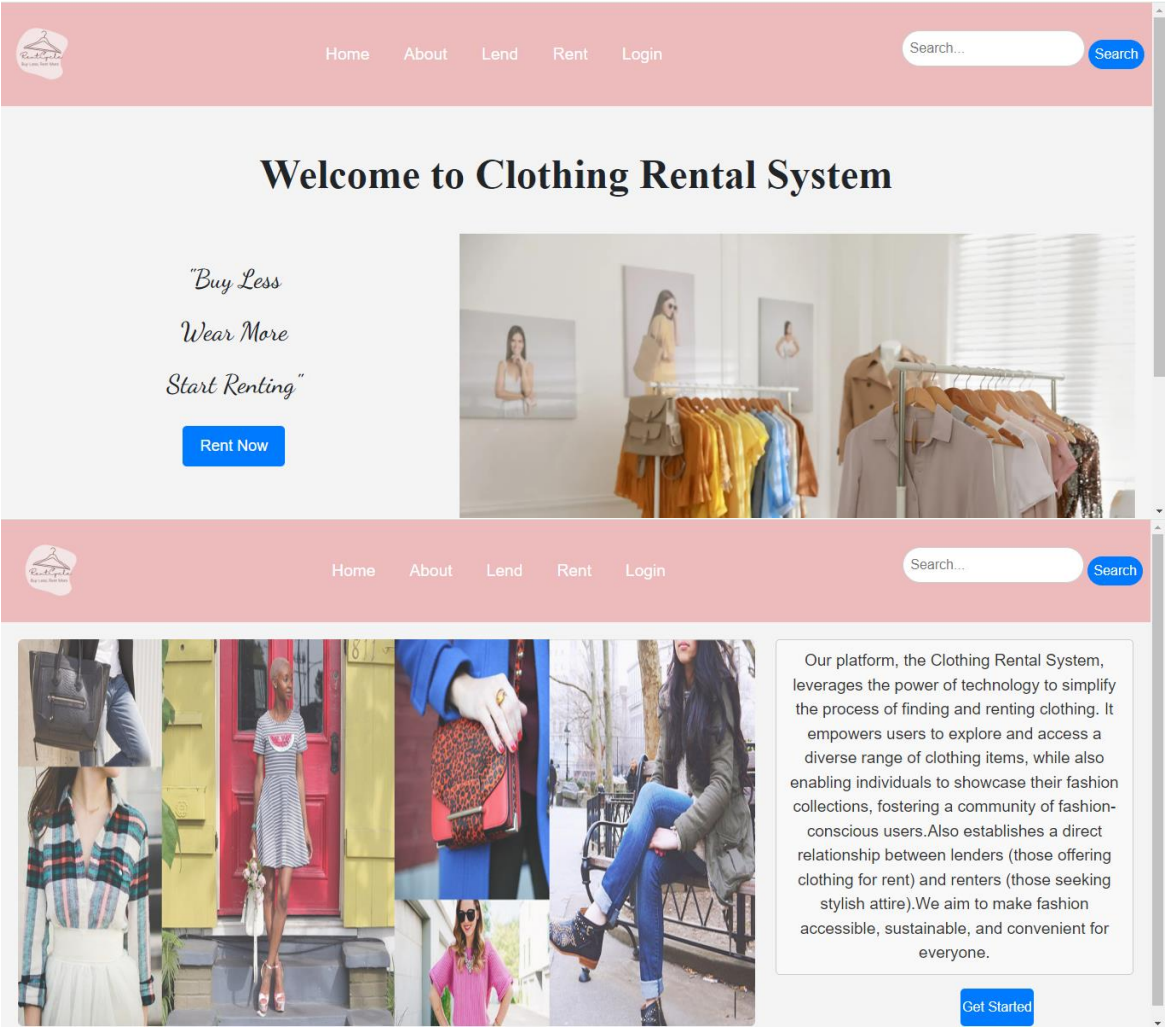
Don't have an account?Signup


Home
About
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Search
Welcome to Clothing Rental System
"Buy Less
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Start Renting"
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Home
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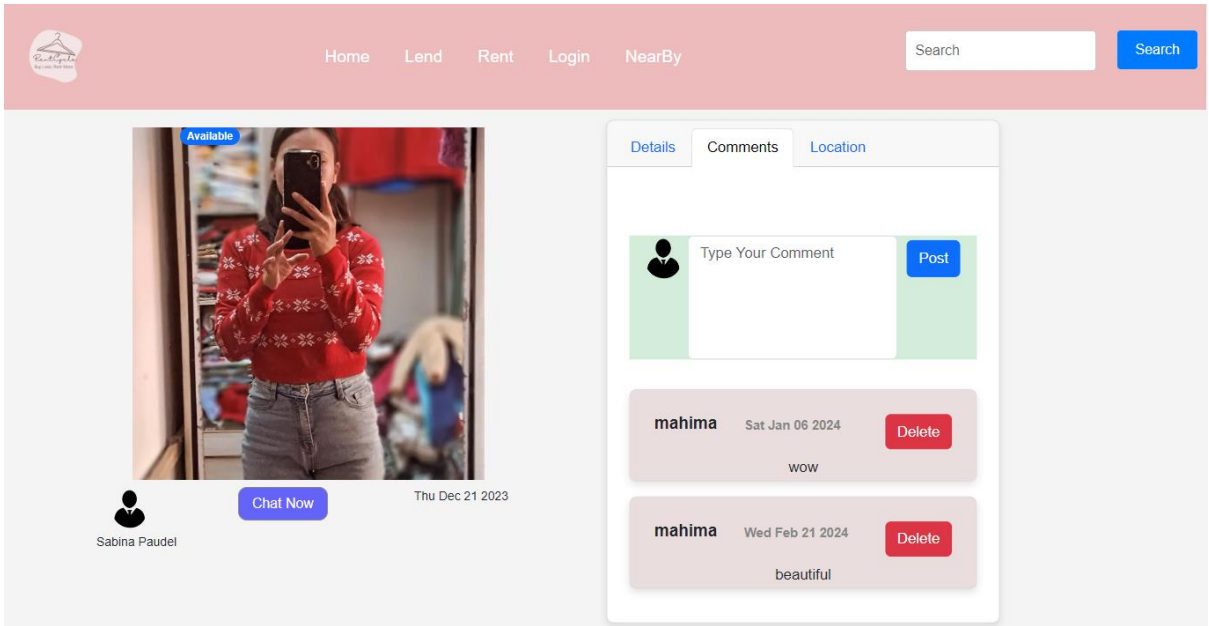
Our platform, the Clothing Rental System, leverages the power of technology to simplify the process of finding and renting clothing. It empowers users to explore and access a diverse range of clothing items, while also enabling individuals to showcase their fashion collections, fostering a community of fashion-conscious users.Also establishes a direct relationship between lenders (those offering clothing for rent) and renters (those seeking stylish attire).We aim to make fashion accessible, sustainable, and convenient for everyone.
Get Started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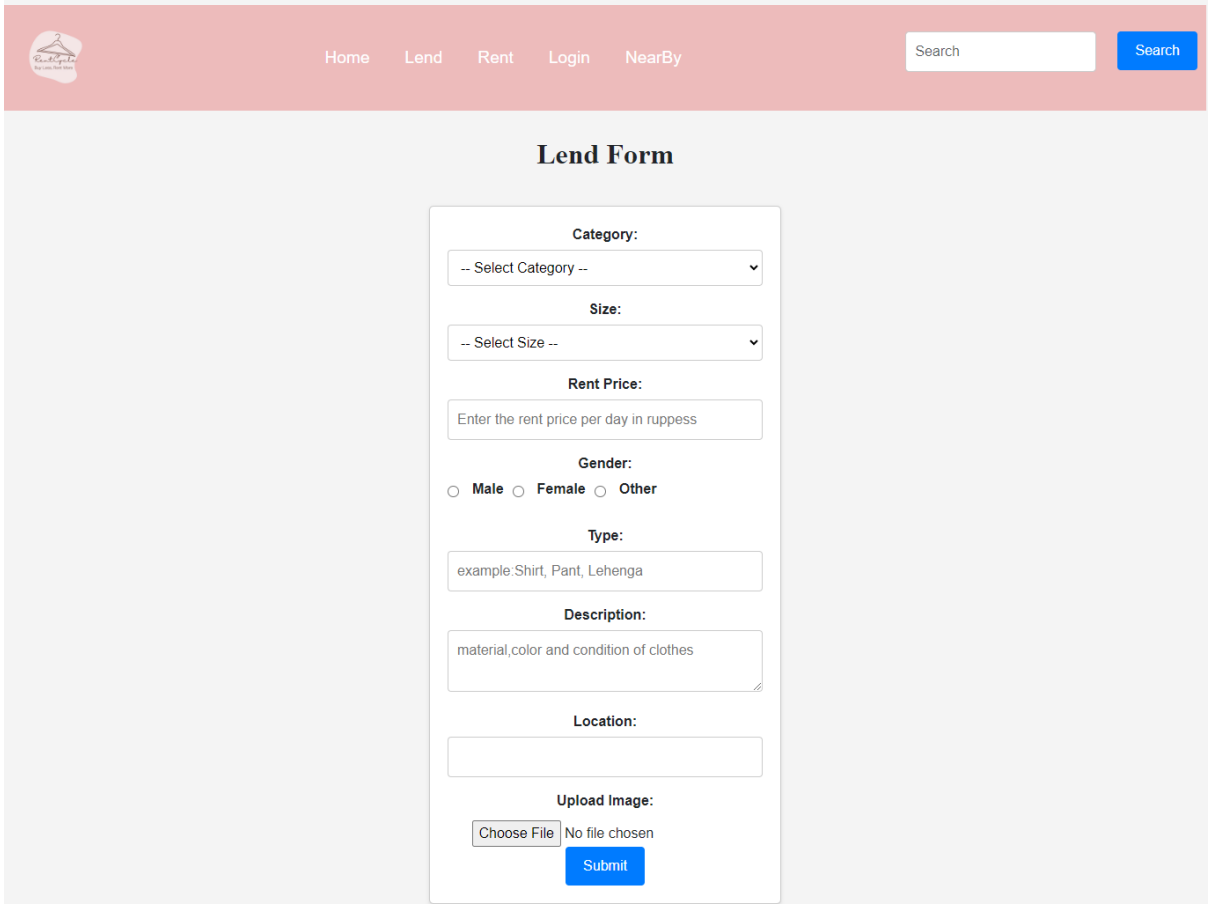
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Location:
Upload Image:
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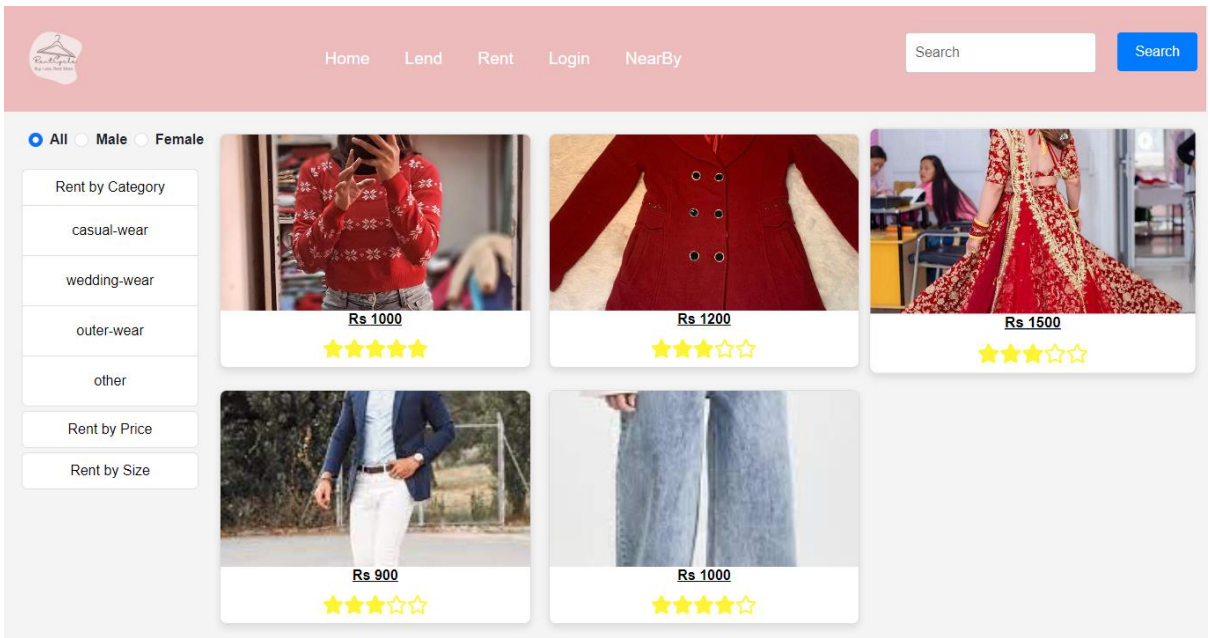
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Rs 900
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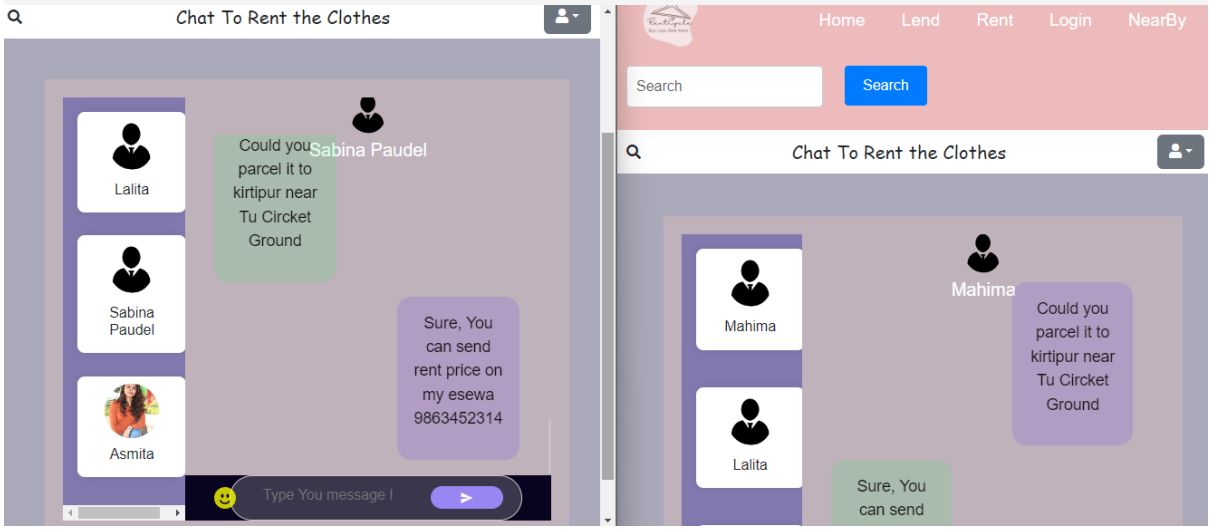
Chat To Rent the Clothes
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Sabina Paudel
Asmita
Could you parcel it to kirtipur near Tu Circket Ground
Sabina Paudel
Sure, You can send rent price on my esewa 9863452314
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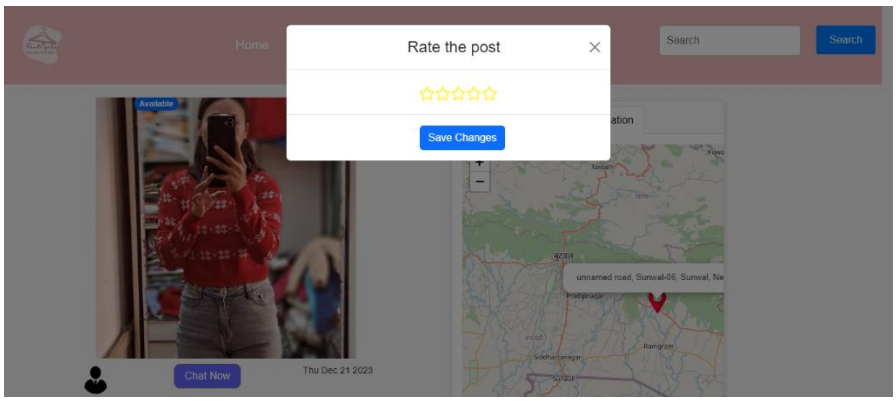
Mahima
Could you parcel it to kirtipur near Tu Circket Ground
Sure, You can send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