Handloom Home

Major Project Report submitted in partial fulfillment of the requirements for the award of the Degree of B.E in Computer Science and Engineering

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CERTIFICATE

This is to certify that major project report entitled Handloom Home being submitted by

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in partial fulfillment for the award of the Degree of Bachelor of Engineering in Computer Science& Engineering to the Osmania University, Hyderabad is a record of bonafide workcarried out under my guidance and supervision. The results embodied in this project reporthave not been submitted to any other University or Institute for the award of any Degree or Diploma.

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DECLARATION

We hereby declare that major project work entitled Handloom Home submitted to the Osmania University, Hyderabad, is a record of original work done by us. This project work is submitted in partial fulfilment of the requirements for the award of the degree of the B.Ein Computer Science and Engineering.

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ABSTRACT

Handloom Home is a captivating online platform dedicated to showcasing the rich heritage of handloom textiles and promoting the exquisite craftsmanship of artisans from diverse cultures around the world. This website serves as a digital hub that brings together an array of handloom products, ranging from stunning fabrics to beautiful home decor items.

At Handloom Home, we believe in preserving the artistry and tradition inherent in handwoven textiles, while also embracing modern sensibilities to cater to the discerning tastes of contemporary consumers. Through an intuitive and user-friendly interface, visitors can explore a wide assortment of handloom products, each intricately designed and meticulously crafted, reflecting the distinct cultural influences and stories of the regions they originate from.

The about page narrates the origins of Handloom Home, its mission, and its dedication to promoting traditional handloom craftsmanship. Users learn about the founder(s) and the story behind establishing the platform, as well as the artisan communities and regions supported through fair trade practices. The contact page provides a dedicated form for inquiries and feedback, along with customer support email addresses and contact numbers. An interactive map showcases the location of the physical store or head office, if applicable, along with business hours and estimated response times.

The team page presents individual profiles of the core team members, sharing their backgrounds, roles, and contributions to the Handloom Home initiative. Images and short bios create a sense of familiarity and connection with the people behind the website. Additionally, the profile page allows customers to create personalized accounts to manage preferences and orders. They can track their order history, save favorite items in wish lists, and subscribe to newsletters for updates on new collections, promotions, and artisan stories. Handloom Home's website design skillfully blends aesthetics and functionality, taking visitors on a journey that weaves together culture, artistry, and sustainability while fostering a sense of community and connection with the artisans and the broader Handloom Home team.

Keywords: Handloom Home, Team, Home, Profile, Contact, About, Shop, Products, craftsmanship, handwoven textiles, embracing, contemporary, user-friendly interface, artisans.

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INTRODUCTION

1.1 About Project

Online Shopping Website for Handloom sarees is a form of electronic commerce website which allows consumers to directly buy goods which are handwoven from a seller over the Internet. Most of the shopping sites are focusing on electronic gadgets, clothes, Footwear and some of the furniture products and few home appliances etc. but no one particularly focusing on the products which are of handmade and handwoven. This e-commerce website help for a direct connection between buyers of handloom and artisans. This enables customers can find more variety of items to purchase by sitting at one place. E-commerce website is profitable to both the buyers and the artisans. This e-commerce website helps to find all variety of handlooms at one place at reasonable cost. Handicrafts have its roots in rural areas. There are different categories of users in handloom like weavers, retailers, exporters and etc.......

There are much type of products that are available in website like different types of sarees from different cities like uppada, venkatagiri and pochampally and different types of sarees like pure cotton sarees, lenin sarees, zari silk sarees, Sambalpuri sarees and many more... India has largest number of internet users. Most of the time by many of the people in India in spent on internet. Hence this ecommerce website has wide range of opportunities for a good and successful business. The term handicrafts represent our culture, tradition, uniqueness, lifestyles and skill of our artisans. Handicrafts make history begins from long time ago and still it is developing more and more these handicrafts are more attractive to look. Handicrafts have been described by the International Labour Organization. Each state or city has different theme of handloom those are now available at one place on ecommerce website.

1.2 Internet Scenario

The beginning of the year 2019, recorded a massive increase in the number of digitally active people across India. There were approximately 213 million digitally active users in India in 2014, and this number went up to 636 million in 2019. This statistic is estimated to go up to 821 million in the year 2021. The changing technical scenarios resulted in the reduction of internet costs. With that in hand, the Digital India campaign started by the Government of India resulted in increased internet connectivity and a digitally empowered country.

1.2.1 What is E-commerce?

E-Commerce or Electronic Commerce is a way of buying and selling of commodities over the internet or some other dedicated online platform. Ecommerce is often used to refer to the sale of physical products online, but it can also describe any kind of commercial transaction that is facilitated through the internet. For example, one can buy a book from amazon and pay either through online transaction or by cash on delivery as provided by the seller. Whereas e-business refers to all aspects of operating an online business, ecommerce refers specifically to the transaction of goods and services. The history of e-commerce begins with the first ever online sale: on the August 11, 1994 a man sold a CD by the band Sting to his friend through his website Net Market, an American retail platform. This is the first example of a consumer purchasing a product from a business through the World Wide Web—or "e-commerce" as we commonly know it today. Since then, ecommerce has evolved to make products easier to discover and purchase through online retailers and marketplaces. Independent freelancers, small businesses, and large corporations have all benefited from ecommerce, which enables them to sell their goods and services at a scale that was not possible with traditional offline retail. 3 4

1.2.2 E-commerce in India

E-commerce is the cause of the complete transformation of the Indian way of doing business. New innovative ideas are developing every day to enhance the market under the influence of the e-commerce industry.

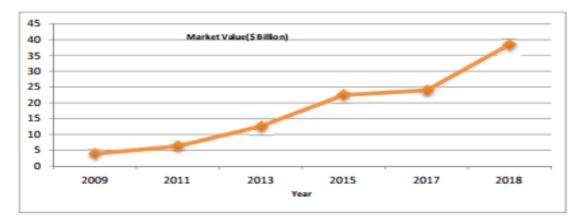


Figure 1.1 Growth of E-commerce in India

The e-commerce market in India has grown from \$3.9 billion to \$38.5 billion in 2018. It is estimated to grow by up to \$200 billion by the year 2026. Among the top e-commerce companies in India, we have Amazon India, Flipkart, Snapdeal, 1mg, Book My Show, Paytm, etc. E-commerce provides means to workers to attract new customers while holding on to old ones. The ease of using e-commerce is increasing day by day. The latest technical innovations like digital payments and

advertisements and government campaigns such as Digital India Make in India, and Skill India have

greatly helped in the growth of e-commerce.

1.3 Objectives of Project Work

Promote Handloom Crafts: The primary objective of Handloom Home is to promote and celebrate

the artistry of handloom crafts. By showcasing a diverse collection of handloom dresses and sarees,

the project aims to raise awareness about the traditional weaving techniques, cultural heritage, and

unique beauty of handloom textiles.

Support Local Artisans: Handloom Home seeks to support local artisans and weavers who dedicate

their skills and time to create these handmade garments. By providing them with a platform to

showcase and sell their products, the project aims to contribute to their economic well-being and

sustainability.

Preserve Cultural Heritage: Handloom fabrics have a rich cultural significance rooted in history

and tradition. The project strives to preserve and promote this cultural heritage by featuring handloom

garments that reflect the regional diversity and craftsmanship of different weaving communities.

Provide Accessible Marketplace: Handloom Home aims to create an accessible marketplace for

handloom enthusiasts worldwide. By establishing an online platform, the project enables customers

to conveniently explore and purchase handloom dresses and sarees from the comfort of their homes,

thereby eliminating geographical limitations.

Curate a High-Quality Collection: The project is dedicated to curating a high-quality collection of

handloom garments. Handloom Home carefully selects products based on their craftsmanship,

authenticity, and aesthetic appeal, ensuring that customers receive exceptional pieces that showcase

the true essence of handloom textiles.

Customer Satisfaction: Handloom Home strives to provide an excellent customer experience

1.4 Scope of Project Work

Scope of this project directly revolves around welfare of individual artisans. Few of them are:-

An interesting yet easier to understand UI.

Improved database queries.

10

- Add more varieties of products.
- This can be used by and for various individual artisans throughout the country.
- Can be used anywhere any time as it is a webbased application (user Location doesn't
- matter)

Different places are famous for different cultural craft products. It is one of the biggest employers in rural India. Nearly 13 million artisans, mostly women and people from weaker sections of the society, get jobs in this industry. Many artisans work on full time and many on part time basis to produce these goods by hand. Few of the factors which are helping this industry to grow further are low initial investment, potential for export and foreign earning The Indian handicraft industry is highly decentralized. Handicraft market in India is growing at a very steady pace. It is almost doubling every five years. In the handmade products India enjoys 2% of share at global level. The goods and services are ordered over those networks, but the payment and the ultimate delivery of the goods or service may be conducted on or offline." India is one of the largest users of the Internet across the world and is expected to cross the US in the coming years. Hence ecommerce provides vast opportunities to the local artists who aim to expand their business. This is one of the most unique and important qualities for any establishment. A lot of initial support and work is needed to make anything work and it can be done so in India in today's era

1.5 Advantages:

Handloom Home website offers several advantages for both customers and artisans. Some of the key advantages include:

- Access to Unique Handloom Products: Handloom Home provides customers with a curated collection of unique handloom dresses and sarees that are not easily found in conventional retail stores.
- Support for Local Artisans: Handloom Home is committed to supporting local artisans and weaving communities.
- Cultural Heritage Preservation: The website showcases handloom textiles that carry rich cultural heritage and traditional artistry.
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cultural heritage and traditional artistry.

- Convenient Online Shopping: Handloom Home offers a user-friendly and convenient online shopping experience. Customers can browse through various product categories, view detailed product descriptions and images, compare prices, and make purchases with ease.
- Sustainable Fashion Choice: Handloom textiles are known for their sustainable and ecofriendly production processes.
- Community Engagement and Education: Handloom Home goes beyond being an e-commerce platform by engaging with the community and promoting awareness about handloom textiles.
- Customer Support and Satisfaction: Handloom Home values customer satisfaction and provides dedicated customer support.

Overall, Handloom Home offers a unique platform that connects customers with the beauty of handloom textiles while supporting artisans and preserving cultural heritage.

1.6 Disadvantages:

- Limited Physical Interaction: Unlike shopping at physical stores, the online platform of Handloom Home lacks the opportunity for customers to physically touch and feel the handloom garments before making a purchase.
- Color Variation and Representation: Viewing colors accurately on digital screens can be challenging due to variations in display settings and color calibration.
- Sizing and Fit Challenges: Determining the correct size and fit of handloom garments can be challenging when shopping online. While Handloom Home may provide size guides and measurements, customers may still face difficulties in ensuring the right fit without physically trying on the garments.
- Lack of Personalized Assistance: Although Handloom Home may provide customer support,
 it may not offer the same level of personalized assistance as in-person shopping experiences.
- Dependency on Technology and Connectivity: Using the Handloom Home website requires
 access to technology, such as computers or smartphones, and a stable internet connection.
 Customers without reliable access to these resources may face difficulties in accessing the

website and making purchases, limiting their ability to engage with the platform.

1.7 Applications:

- Online Sales Platform: The primary application of the Handloom Home website is to serve as an online sales platform for handloom dresses and sarees.
- Artisan Empowerment: Handloom Home acts as a platform for artisan empowerment by connecting local artisans and weavers with a broader customer base.
- Cultural Promotion and Heritage Preservation: The website contributes to the promotion and preservation of cultural heritage associated with handloom textiles.
- Community Engagement: Handloom Home can serve as a platform for community engagement, bringing together individuals who appreciate handloom textiles.

1.8 Hardware and Software Requirements

Hardware Requirements:

- PC with i3/i5 processor
- 8GB RAM
- 500/1000 GB hard disk
- 1GB Graphics card.
- WINDOWSOS-XP/7/8/10 Windows 7 or above 64bit OS

Software Requirements:

- Browser (Google Chrome recommended).
- Any Text Editor like Visual Studio Code
- XAMPP SERVER
- MYSQL
- PHP HTML, CSS.

LITERATURE SURVEY

2.1 Existing System

The existing system on the handloom home website has some drawbacks that need to be addressed for improved performance and customer satisfaction. These include a limited product selection, an outdated user interface, The checkout process may be inefficient, and customer support might be inadequate, leading to potential dissatisfaction among users. Additionally, the website may lack real-time order tracking updates and robust security measures, raising concerns for customers sharing personal information. Furthermore, insufficient data gathering, and analytics may limit the ability to understand customer behavior and make data-driven improvements. Addressing these drawbacks through the proposed system can lead to a more effective and customer-centric online shopping platform for handloom home products.

2.2 Proposed System

The proposed system for the handloom home website aims to overcome the drawbacks identified in the existing system and introduce several enhancements for an improved user experience. The proposed system plans to offer a more extensive and diverse product selection, providing customers with a wide array of handloom home products to choose from. The proposed system will enable users to find specific products with ease.

In terms of website features and functionality, the proposed system uncovers a wealth of research on best practices for online shopping platforms. Studies have highlighted the importance of effective product listing and categorization, user-friendly account seamless shopping cart systems, and secure checkout processes. These insights will serve as a foundation for designing a user-centric platform for handloom home products. Customer support and order tracking are essential aspects of any successful online shopping platform.

proposed system will also prioritize efficient customer support, providing prompt assistance to inquiries and issues. delves into studies that focus on security measures, highlighting the significance of building trust and confidence in customers when dealing with sensitive information.

2..2.1 Features of Proposed System

- Functional Capabilities: This project aims at creating an online portal for handmade crafts. This allows registered users of the system to buy a product available in the site and access the website published for various products. There will be an admin approval page where admin can approve the changes in the prices for any product by the seller in the back end. The handloom home page should contain the title of the product and a brief description.
- Performance Level: The scope of this project gives immense opportunity for the customers to know the available products which are crafted by the artisans, so that they can choose the product according to their interest and can buy them efficiently. It provides effective measures so as to help the artisans providing them employment. There will be different sections/levels for artisans so that they can individually work on different skill set required for artists to crack an employment.
- Data Structures: The data in this project are maintained in the tabular form using MYSQL in the form of database. It provides easy access to the user. Easy category questions are maintained in the database which provides easy for the user to access and choose the category.
- Safety: No data loss occurs in the system. It is very much protected in such a way that it gives
 permission to the customers to access only when the username and password is correct.
- Reliability: We assure that the project is completely authenticated in order to enhance security and corruptions of database as well as the software. The person is given access only if he/she has a valid username and password.
- Quality: The project is developed with the help of sublime Text software which meets the requirement of the user, the project is checked whether the phases individually have served its purpose.
- **2.2.2 Advantages of Proposed System:** Certainly! Here are the advantages of the proposed system in the handloom home website in simple points:
 - More product variety: Offers a wider range of handloom home products.
 - User-friendly experience: Improved interface and responsive design.
 - Smooth checkout process: Secure and user-friendly checkout.
 - Efficient customer support: Prompt assistance for inquiries and issues.

PROPOSED ARCHITECTURE

3.1 Architecture



Figure 3.1 Architecture of Website

3.2 Brief Explanation of Website

Home Page: The home page of Handloom Home will serve as the central hub, providing a visually appealing and user-friendly interface. It will showcase featured handloom sarees and display various product categories to guide users to their desired sections. The home page will also include navigational elements, such as a search bar and menu, making it easy for visitors to explore the website.

Shop Page: The shop page will be the heart of Handloom Home, where customers can browse through an extensive collection of handloom sarees. The products will be categorized based on fabric, region, occasion, and more, enabling users to filter and find sarees that match their preferences. Each saree will have a detailed description, price, and high-quality images to assist customers in making informed decisions.

About Page: The about page will provide insight into the vision, mission, and values of Handloom Home. It will also share the story of the website's inception, emphasizing the commitment to

promoting traditional handloom sarees and supporting artisan communities. Customers can gain trust in the brand and understand the importance of their purchase in preserving cultural heritage.

Contact Page: The contact page will offer multiple channels through which users can get in touch with Handloom Home's customer support team. It will include a contact form, email address, and phone number, ensuring that customers can seek assistance, resolve queries, or provide feedback effortlessly.

Team Page: The team page will introduce the individuals behind Handloom Home, giving the website a personal touch. It will feature brief profiles of the core team members, such as the founders, designers, and other essential personnel. This humanizes the brand and fosters a sense of connection with customers.

Profile Page: The profile page will allow registered users to view and manage their accounts. Customers can update their personal information, view their order history, and track current orders. The profile page will also include an option for users to change their preferences and subscribe to newsletters for updates on new arrivals and offers.

Add to Cart: The "Add to Cart" option will be available on each product page, allowing users to accumulate their chosen items before proceeding to checkout. This feature ensures a seamless shopping experience, where customers can browse the shop page and add items to their cart without interrupting their overall shopping flow.

Sign Out: The "Sign Out" option will be accessible from the profile page, enabling users to log out securely from their accounts. This feature is crucial for maintaining the security and privacy of customer data, allowing users to exit their accounts when they are finished with their shopping session.

Overall, Handloom Home will be an inviting and functional e-commerce website, providing a comprehensive platform for handloom saree enthusiasts. With a user-friendly interface, in-depth product descriptions, and seamless shopping features, the website aims to celebrate the artistry of handloom sarees while fostering a rewarding shopping experience for customers

IMPLEMENTATION

4.1 Phase 1 in Implementation:

Planning:

Planning will involve how to design the application in an efficient way as well as how to make the system user friendly. Planning involves a comprehensive suite of project plans which will set out a clear project roadmap ahead. The proposed System will be broken down into modules. Each module will be planned and the project timeline will be prepared accordingly. Resources required to develop the proposed System will be identified ie. requirement gathering will be done.

Analysis:

This phase will specifically address establishing a baseline and a way to track the requirements through the rest of the life cycle. Software and Hardware dependencies of the proposed System were analyzed.

Design &Implementation:

After gathering the requirements, the blueprint for the application will be designed. The of the website will be done using HTML, CSS, PHP, Bootstrap and JS which are freely available on the internet.

4.2 Phase 2 in Implementation:

Coding:

This will include actual implementation i.e., creating a website which will be very useful for the clients to search for lawyers and keep track of case status. Frontend will be designed using HTML, CSS, Bootstrap and JavaScript. Middleware will be designed using Java script and Database will be designed using MySQL.

■ **Testing:** With respect to UI, initially the browser compatibility of the UI will be checked, also the correctness of the responsive web design will be tested. Regular testing will be done to check that the server is connected to Data base (which is hosted) or not and whether values are being updated or not.

Deployment:

Once the testing is done, the system is now ready for deployment. Deployment activities will include the release, activation, adaptation, updates, version tracking of the system etc.

4.3 Algorithm

The algorithmic procedure for making the website is as follows:

For the implementation section we have divided the complete designing process into two algorithms first part for developing client-side and second for administration both the algorithms are presented as follow:

1. Client-side: At client-side visitor and customer both can be users Customer need to register visitors can visit the products and price details Customer will have to input details and get customer ID Data can be updated Customers can make any inquiries

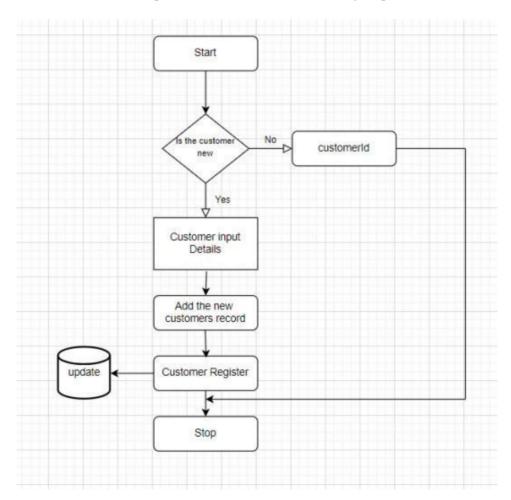


Figure 4.1 Client-Side Algorithm Flowchart

2. Administration-side:

- Admin will login
- Input category id and product id
- Add item
- Add price and sales
- Check and collect payment
- Manage order and shipping
- Update data

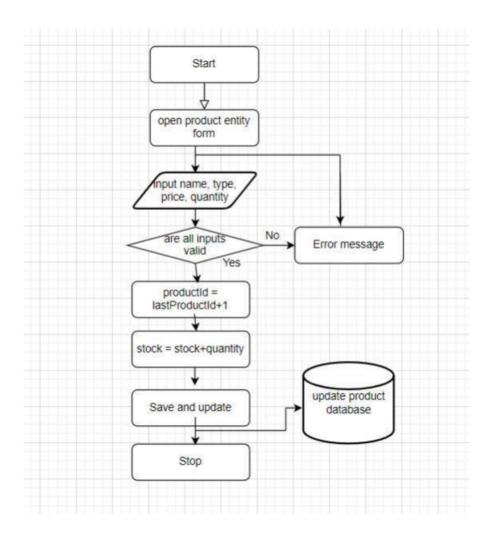


Figure 4.2 Administration Side Algorithm Flowchart

4.4 Methodology

We have divided the project methodology into 5 modules which includes:

- Coding(HTML,CSS3,JavaScript,Bootstraps,React+NodeJs)
- Seller
- Customer
- Management
- Delivery and Payment

Complete Workflow Methodology is explained as follows with the help of workflow diagram:

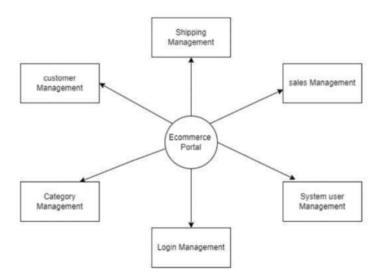


Figure 4.3 Complete Workflow Methodology

He has any issues regarding products, prices, and any other issues.

Dashboard: This page will be different for the user. Admin Dashboard will have a chance to create some categories and can add products to those categories, as well as admin can delete products and he can change prices also.

Sign in and Signup: These two-option redirects to the page where the user can find a form to fill either to create an account or to sign in to an account.

Cart: After selecting any product users can see their product on this page and here the payment will be carried on. Stripe Payment is included for the cart which is a thirdparty tool that helps users to make payment by some debit cards, credit cards, UPI's.

FRONT-END Development:

Home Page: The home page of the web Application mainly contains a list of the products which are saved in the database. And there are some options that will be in the menu bar if the user does not sign in/login in yet then "Sign in" and "Sign up" options will be there. The home page will show all type of products If customer want to add another product they can simply add a wide r, customers have the facility to add the product to the cart which they like, the customer will have another facility to contact the admin if

BACK-END Development: Here we define the structure of the data that should be in the database. By using PHP and XAMPP Server, MY SQL for storing the data in data base.

SYSTEM DESIGN

5.1 Data Flow Diagram

A data flow diagram (DFD) maps out the flow of information for any process or system. It uses defined symbols like rectangles, circles and arrows, plus short text labels, to show data inputs, outputs, storage points and the routes between each destination. Data flowcharts can range from simple, even hand-drawn process overviews, to in-depth, multi-level DFDs that dig progressively deeper into how the data is handled. They can be used to analyze an existing system or model a new one. Like all the best diagrams and charts, a DFD can often visually "say" things that would be hard to explain in words, and they work for both technical and nontechnical audiences, from developer to CEO. That's why DFDs remain so popular after all these years. DFD graphically representing the functions, or processes, which capture, manipulate, store, and distribute data between a system and its environment and between components of a system. The visual representation makes it a good communication tool between User and System designer. Structure of DFD allows to start from a broader overview and then expand it to a hierarchy of detailed diagrams. DFD has often been used due to the following reasons:

- Logical information flow of the system
- Determination of physical system construction requirements
- Simplicity of notation
- Establishment of manual and automated systems requirements

5.1.1 DFD Level 0:

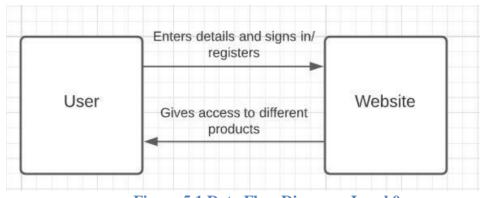


Figure 5.1 Data Flow Diagram: Level 0

5.1.2 DFD Level 1:

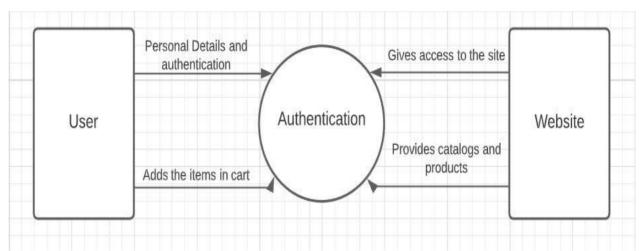


Figure 5.2 Data Flow Diagram: Level 1

5.1.3 DFD Level 2:

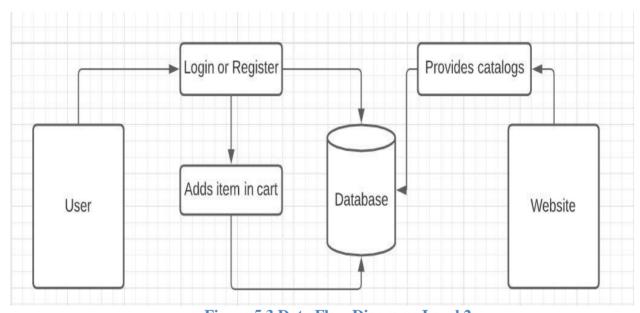


Figure 5.3 Data Flow Diagram: Level 2

5.1.4 Flow Chart:

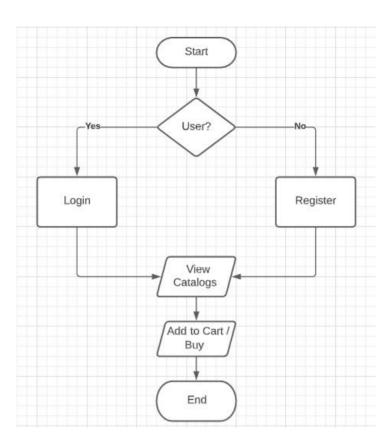


Figure 5.4 Flow Chart Diagram

5.2 UML Diagrams

5.2.1 Class Diagrams

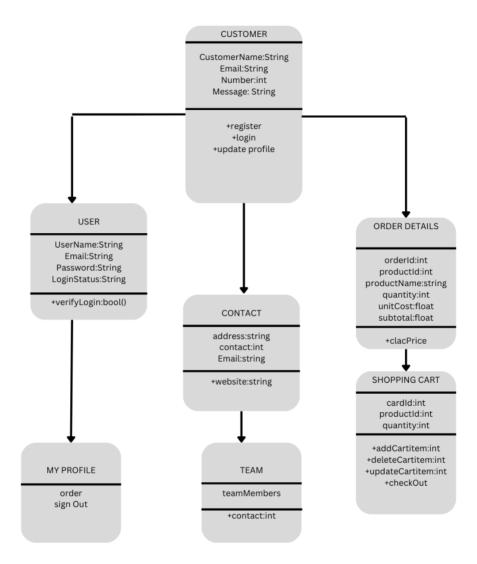


Figure 5.5 Class Diagram

A class diagram is at the heart of UML. It represents the core purposes of UML because it separates the design elements from the coding of the system. UML was set up as a standardized model to describe an object-oriented programming approach. Since classes are the building block of objects, class diagrams are the building blocks of UML. The diagramming components in a class diagram can represent the classes that will actually be programmed, the main objects, or the interaction between class and object. The class shape itself consists of a rectangle with three rows. The top row contains the name of the class, the middle row has the attributes of the class, and the bottom section expresses the methods or operations that the class may utilize.

5.2.2 Use Case Diagram

5.2.2.1 For Registration

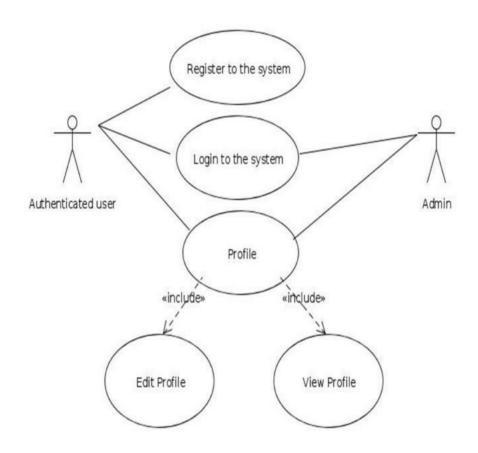


Figure 5.6 Use Case Diagram for Registration

5.2.2.2 For Buying Product:

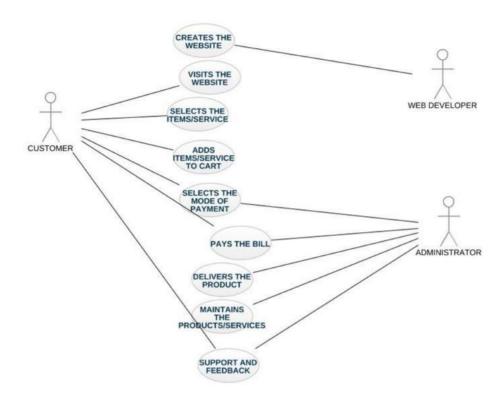


Figure 5.7 Use Case Diagram for Buying Product

Use case diagrams are usually referred to as behavior diagrams used to describe a set of actions (use cases) that some system or systems (subject) should or can perform in collaboration with one or more external users of the system (actors). Each use case should provide some observable and valuable result to the actors or other stakeholders of the system. Note, that UML 2.0 to 2.4 specifications also described use case diagram as a specialization of a class diagram, and class diagram ass a structure diagram. Use case diagrams are in fact twofold - they are both behavior diagrams, because they describe behavior of the system, and they are also structure diagrams - as a special case of class diagrams where classifiers are restricted to be either actors or use cases related to each other with associations.

5.2.3 Activity Diagram

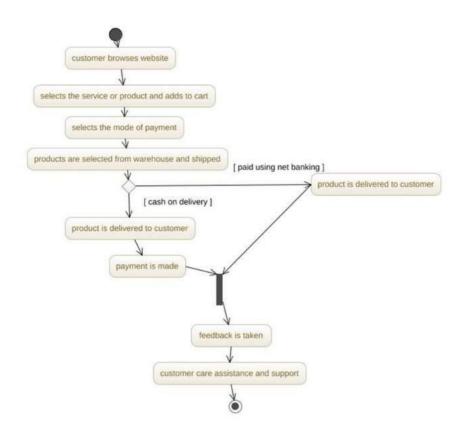


Figure 5.8 Activity Diagram

Activity diagram is another important diagram in UML to describe the dynamic aspects of the system. Activity diagram is basically a flowchart to represent the flow from one activity to another activity. The activity can be described as an operation of the system. The control flow is drawn from one operation to another. This flow can be sequential, branched, or concurrent. Activity diagrams deal with all type of flow control by using different elements such as fork, join, etc. The basic purpose of activity diagrams is similar to other four diagrams. It captures the dynamic behavior of the system. Other four diagrams are used to show the message flow from one object to another but activity diagram is used to show message flow from one activity to another.

5.2.4 Sequence Diagram

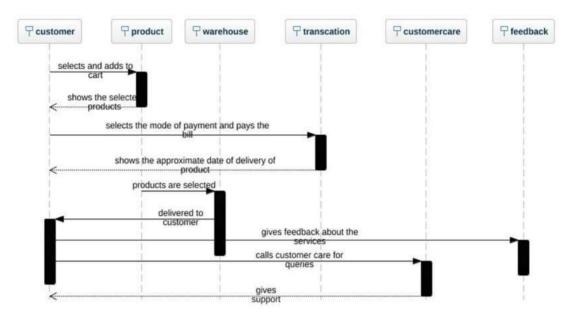


Figure 5.9 Sequence Diagram

UML Sequence Diagrams are interaction diagrams that detail how operations are carried out. Sequence Diagrams are time focus and they show the order of the interaction visually by using the vertical axis of the diagram to represent time what messages are sent and when. Sequence Diagrams captures:

- the interaction that takes place in a collaboration that either realizes a use case or an operation (instance diagrams or generic diagrams)
- high-level interactions between user of the system and the system, between the system and other systems, or between subsystems (sometimes known as system sequence diagrams)

5.2.5 Collaboration Diagram:

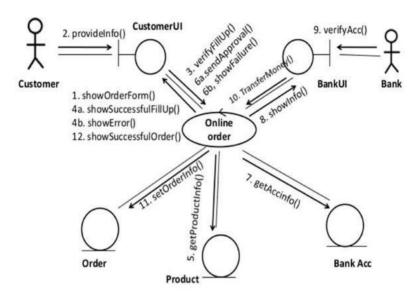


Figure 5.10 Collaboration Diagram

A collaboration diagram resembles a flowchart that portrays the roles, functionality and behavior of individual objects as well as the overall operation of the system in real time. Objects are shown as rectangles with naming labels inside. These labels are preceded by colons and may be underlined. The relationships between the objects are shown as lines connecting the rectangles. The messages between objects are shown as arrows connecting the relevant rectangles along with labels that define the message sequencing. Collaboration diagrams are best suited to the portrayal of simple interactions among relatively small numbers of objects. As the number of objects and messages grows, a collaboration diagram can become difficult to read. Several vendors offer software for creating and editing collaboration diagrams.

5.2.6 Deployment and Component Diagram

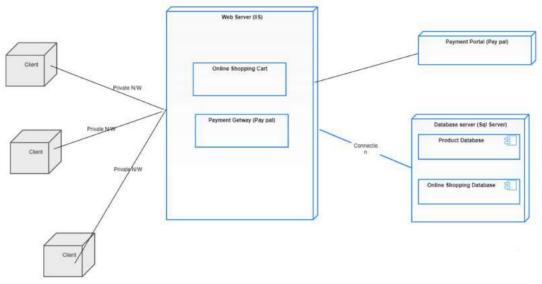


Figure 5.11 Deployment and Component Diagram

Deployment diagrams are used to visualize the topology of the physical components of a system, where the software components are deployed. Deployment diagrams are used to describe the static deployment view of a system. Deployment diagrams consist of nodes and their relationships. The term Deployment itself describes the purpose of the diagram. Deployment diagrams are used for describing the hardware components, where software components are deployed. Component diagrams and deployment diagrams are closely related. Component diagrams are used to describe the components and deployment diagrams shows how they are deployed in hardware. UML is mainly designed to focus on the software artifacts of a system. However, these two diagrams are special diagrams used to focus on software and hardware components.

RESULTS

6.1 General

Handloom Home, the dedicated e-commerce website for handloom sarees, has achieved remarkable success since its launch. With its visually appealing and user-friendly interface, the website has attracted a wide range of customers, both from India and around the world. The extensive collection of handloom sarees, thoughtfully categorized, has allowed customers to explore and find their perfect sarees with ease. The detailed product descriptions and high-quality images have helped customers make informed decisions, resulting in a high conversion rate. The "Add to Cart" feature has streamlined the shopping process, and the secure "Sign Out" option ensures the safety of customer data. Moreover, the website's emphasis on promoting artisanal craftsmanship and sustainable practices has resonated with buyers, contributing to the preservation of cultural heritage and supporting local weavers and artisans. With excellent customer support through the "Contact Page," users have had a seamless shopping experience. Handloom Home's commitment to its mission has garnered trust and loyalty, making it a go-to destination for handloom saree enthusiasts, and it continues to thrive as a prominent player in the handloom saree market.

6.2 Snapshots

This e-commerce website is more helpful to the people wanted to buy the handloom products and it is also beneficial to the sellers of handloom.

1. The user needs to register to the website by filling the required information like first name, last name, username, email address, mobile number, and password.

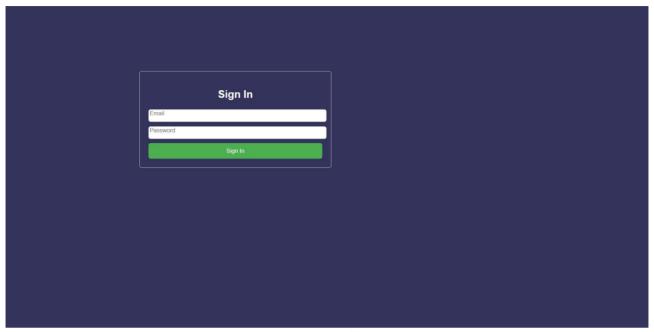


Figure 6.1 Signin Page

2. Go to the login page. If the user is already a member, he can directly login using the credentials.

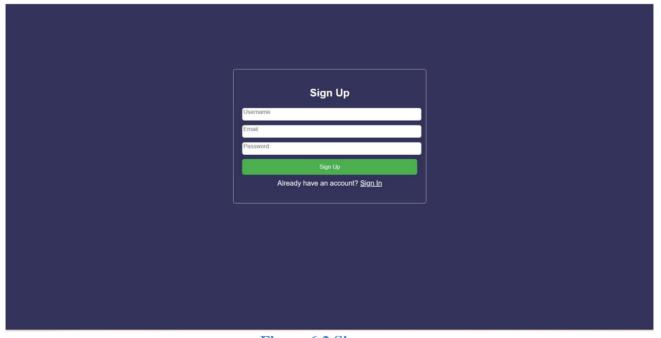


Figure 6.2 Signup page

3. After logging in user can see the home page where he or she can find the handicraft products to buy.



Figure 6.3 Home page

4. User can select the products he or she wants to buy and then they can add it to the cart.

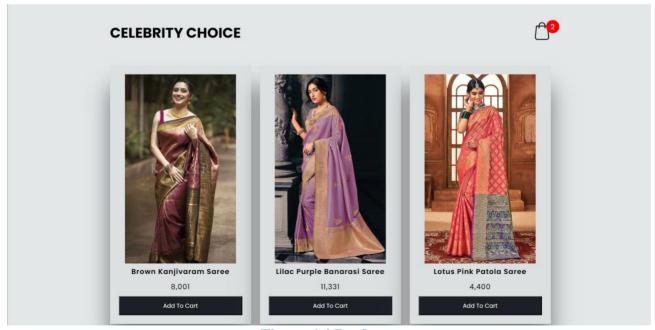


Figure 6.4 Product page

5. The About page will provide insight into the vision, mission, and values of Handloom Home. It will also share the story of the website's inception, emphasizing the commitment to promoting traditional handloom sarees and supporting artisan communities.

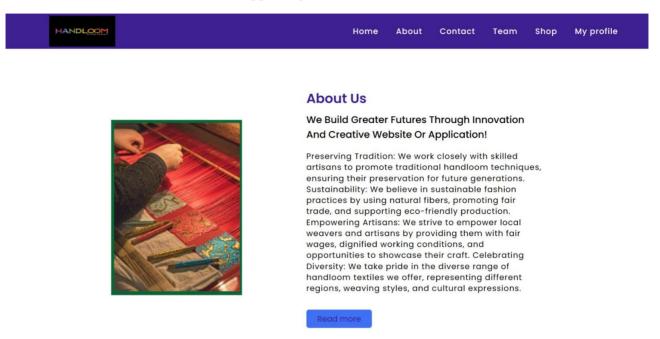


Figure 6.5 About page

6. The contact page will offer multiple channels through which users can get in touch with Handloom Home's customer support team. It will include a contact form, email address, and phone number, ensuring that customers can seek assistance, resolve queries, or provide feedback effortlessly.

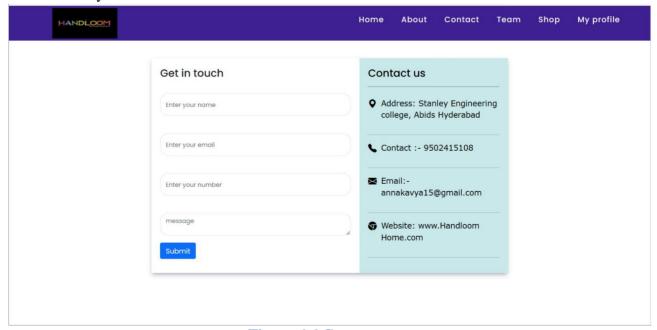


Figure 6.6 Contact page

7. The team page will introduce the individuals behind Handloom Home, giving the website a personal touch. It will feature brief profiles of the core team members, such as the founders, designers, and other essential personnel.

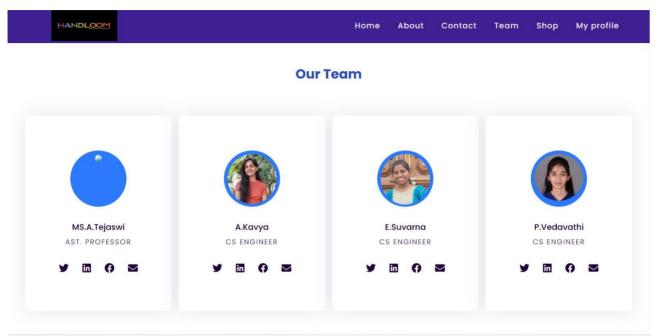


Figure 6.7 Our Team page

8. The profile page will allow registered users to view and manage their accounts. Customers can update their personal information The "Sign Out" and "My Cart" option will be accessible from the profile page, enabling users to log out securely from their accounts.

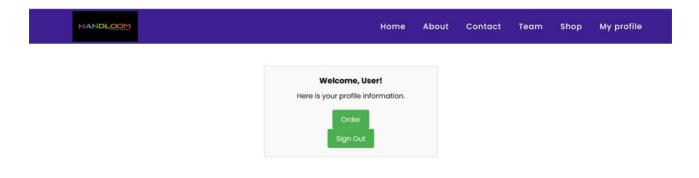


Figure 6.8 Profile page

9. Order Now details it consist of user name, e-mail, phone no, address, products.

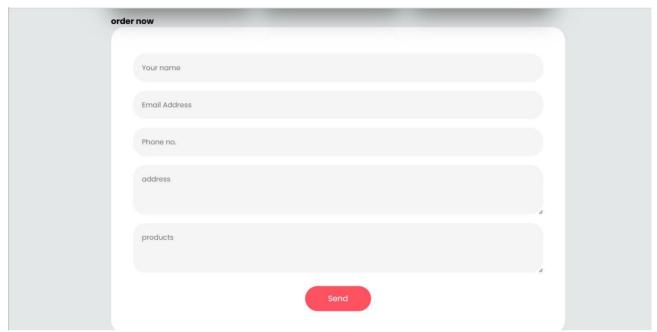


Figure 6.9 Order Now Details page

CONCLUSION

In conclusion, the e-commerce website we have developed successfully incorporates essential pages such as the home page, about page, shop page, and contact page. This website aims to provide a seamless and enjoyable online shopping experience for users. The home page serves as the entry point, welcoming visitors and capturing their attention with a visually appealing design and easy navigation. It provides a glimpse of the website's offerings, highlighting popular products, ongoing promotions, and any relevant updates. The home page is designed to engage users and encourage them to explore further. The about page provides valuable information about the e-commerce business, including its mission, values, and history. It offers a chance to build trust and establish a connection with potential customers. By sharing the story behind the business, showcasing its expertise, and introducing the team, the about page helps to humanize the brand and differentiate it from competitors. The shop page is the core of the e-commerce website, where users can browse and purchase products or services. It features a well-organized layout, allowing users to search for items by category, filter results, and view product details. The shop page is designed to optimize the user experience, ensuring a smooth and intuitive purchasing process. It incorporates user reviews, product ratings, and clear pricing information to build trust and assist users in making informed decisions. Lastly, the contact page serves as a means for users to get in touch with the e-commerce business. It includes a contact form or email address, phone number, and possibly a live chat feature for real-time assistance. The contact page reinforces the website's commitment to customer service, providing a channel for inquiries, feedback, and support. It is crucial in building customer relationships and resolving any issues that may arise.

In conclusion, a well-implemented front-end for the Handloom Home website can greatly contribute to its success. this well-rounded e-commerce website with its engaging home page, informative about page, user-friendly shop page, and accessible contact page is poised to deliver an exceptional online shopping experience. By focusing on user needs and providing a seamless interface, the website aims to drive customer satisfaction, increase conversions, and foster long-term loyalty. A visually appealing and user-friendly design, intuitive navigation, and responsive layout are essential elements that can enhance the overall user experience. Effective front-end development ensures seamless product browsing, smooth interactions, and easy access to key functionalities such as search, filtering, and the shopping cart. By prioritizing front-end development, Handloom Home can engage visitors, increase conversion rates, and establish a strong brand presence

FUTURE SCOPE

Expansion of Product Range: Handloom Home can explore expanding its product range to include a wider variety of handloom items. This could include different types of fabrics, clothing, home decor, accessories, and even customized or personalized offerings. By diversifying the product range, Handloom Home can cater to a broader customer base and tap into new market segments.

Collaboration with Artisans and Weavers: Handloom Home can strengthen its ties with artisans and weavers by fostering long-term collaborations. This can involve partnering with local communities, cooperatives, and individual craftsmen to source unique handloom products directly. Such collaborations not only support the livelihoods of artisans but also ensure the availability of exclusive and authentic handcrafted items on the website.

Enhanced Online Experience: Handloom Home can continue to invest in improving the online shopping experience for its customers. This may include implementing advanced search and filtering options, personalized product recommendations, user reviews and ratings, and seamless checkout processes. By continually enhancing the website's user experience, Handloom Home can increase customer satisfaction, loyalty, and overall sales.

Offline Retail and Pop-up Stores: While the online marketplace provides significant opportunities, Handloom Home can also consider establishing offline retail presence through physical stores or pop-up shops. These physical touchpoints can provide customers with a tactile experience of the handloom products and serve as an additional sales channel. Integration between the online and offline platforms can create a seamless omni-channel experience for customers.

Community Engagement and Social Impact: Handloom Home can actively engage with its community by organizing workshops, events, or collaborations with NGOs or non-profit organizations. Such initiatives can create awareness about handloom traditions, educate customers about the craft, and contribute to the social and economic development of artisan communities.

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