

Second year Mini Project Report

Submitted in partial fulfillment of the requirements of the degree
BACHELOR OF ENGINEERING IN COMPUTER ENGINEERING By

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Abstract

The rapid advance of digital technology has ushered in a new era for artisans and artists to display their creative skills and craftsmanship through online marketplaces. This abstract delves into the dynamic landscape of virtual platforms connecting creators of handmade crafts and artwork with a global audience.

In recent years, online marketplaces have emerged as robust hubs that bridge geographical divides between artisans and art enthusiasts. **Craftopia** website, which functions as an online marketplace for handmade crafts and artwork and doubles as a virtual gallery. The site boasts detailed product listings, high-resolution images, and comprehensive descriptions, effectively bridging the physical and digital realms, enabling users to engage with artworks on a profound level.

In essence, the website of an online marketplace for handmade crafts and artwork represents a harmonious fusion of artistic expression and technological innovation, revolutionizing the way artisans and artists connect with a worldwide audience.

Acknowledgment

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3.3.1	Algorithm process design	The project can be implemented by following the provided algorithm, guiding buyers through a step-by-step process from product search to payment completion.
3.5.1	Home Page	The Figure shows the implemented Home Page of the Website.
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1. Introduction

1.1 Introduction

The project aims to create an e-commerce platform for the seamless purchase of various handicraft products, like shawls, lac bangles, and paper machine items, via the Internet. This online store allows customers to browse the product catalog, add items to a shopping cart, and proceed to checkout, where they provide essential transaction details such as billing and shipping addresses, shipping preferences, and payment information. B2B model emphasizes the need for seamless online sales, including easy payments, hassle-free bookings, order modifications, timely deliveries, and secure product replacement, all while keeping costs low [1]. The paper by Dash (2011) investigates the preferences of buyers regarding product design when purchasing selected Indian handicrafts, with a focus on Orissa State. It can provide insights into the factors influencing buyers' choices in this specific handicraft market [4].

1.2 Motivation

India's crafts sector offers stable employment and income opportunities, curbing rural migration and fostering economic growth, with potential for international market expansion [2]. Crafts have a low environmental footprint and empower women, while investing in artisans benefits future generations. Additionally, Indian handicrafts preserve cultural diversity and promote pluralism [3].

1.3 Problem Statement and Objectives

Craftsmen on online marketplaces for handmade crafts face various problems like improper or blur images, language barriers and are unable to showcase their products due to lack of knowledge about online platforms. The study conducted by Batchelor and Webb in 2010 explores e-commerce possibilities for craft production in third-world countries. This DFID-funded project (R7782) focuses on researching viable options for utilizing online platforms to promote and sell crafts from these regions [6]. Our objective is to enhance artisan education and skills, ensuring that they can produce high-quality crafts.

1.4 Organization of the Project

- Chapter 1: Introduction to the project.
- Chapter 2: Literature survey.
- Chapter 3: Proposed system and conclusion.
- Chapter 4: Experiment results and future work.
- Chapter 5: References.

2. Literature Survey

2.1 Survey of Existing System

This survey seeks to assess the awareness and challenges surrounding the handloom and handicraft sector in India. Participants, including artisans and professionals in this field, are asked to provide insights into the perceived decline in traditional handloom and handicraft popularity, challenges faced by artisans, and factors influencing consumer behavior[2]. In 2010, Dananjaya and Gisijanto's paper analyzed the factors driving foreign tourists to buy wayang motif leather crafts in Bantul, Yogyakarta, and was presented at the Global Management Conference in Bali [5]. The study investigates what motivates tourists to purchase these handcrafted items [3][4]. Survey consists of few books, websites, research papers and articles [1]. We come to know about these platforms and their methodologies:

PLATFORMS	METHODOLOGIES
1. Etsy	i. Shop Setup and Listing Creation. ii. Keywords and Tags. iii. Seller Analytics. iv. Community Building.
2. Pinterest	i. Visual storytelling. ii. High quality imagery. iii. Group boards and collaborations. iv. Linking to External Online Stores.
3. Folksy	i. Custom Domain Integration. ii. Analytics and Reporting. iii. Shipping Options.

Table 2.1.1 Platforms and their methodologies

2.2 Limitation of Existing System or Research Gap

Pinterest is not a Sales Platform.

Limited Direct Revenue for Content Creators.

Limited Branding and Customization.

Etsy charges fees for listing products, transaction fees on sales, and payment processing fees.

2.3 Mini project Contribution:

This website will streamline the registration and booking process for users, making it a hassle-free experience.

Developing this platform will significantly reduce the reliance on paperwork for a handmade arts and crafts website.

3. Proposed System

3.1 Introduction

1. User Registration:

- New users can sign up by providing their personal information, such as name, email, and a secure password.
- Optionally, users can also add their shipping address for easy purchasing.

2. Shop Creation:

- Artisans and crafters can create their own shops within Craftopia by providing details about their brand and the types of handmade products they offer.

3. Shopping Cart:

- Users can add products to their shopping cart, review them, and proceed to checkout when ready to make a purchase.

4. Secure Checkout:

- Craftopia ensures a secure and user-friendly checkout process where users can enter shipping information and payment details.

5. Payment Processing:

- The platform supports various payment methods, allowing users to complete transactions with ease.

Craftopia, as an online marketplace, aims to connect talented artisans and crafters with a global audience while providing an enjoyable and secure shopping experience for its users.

3.2 Architecture/ Framework

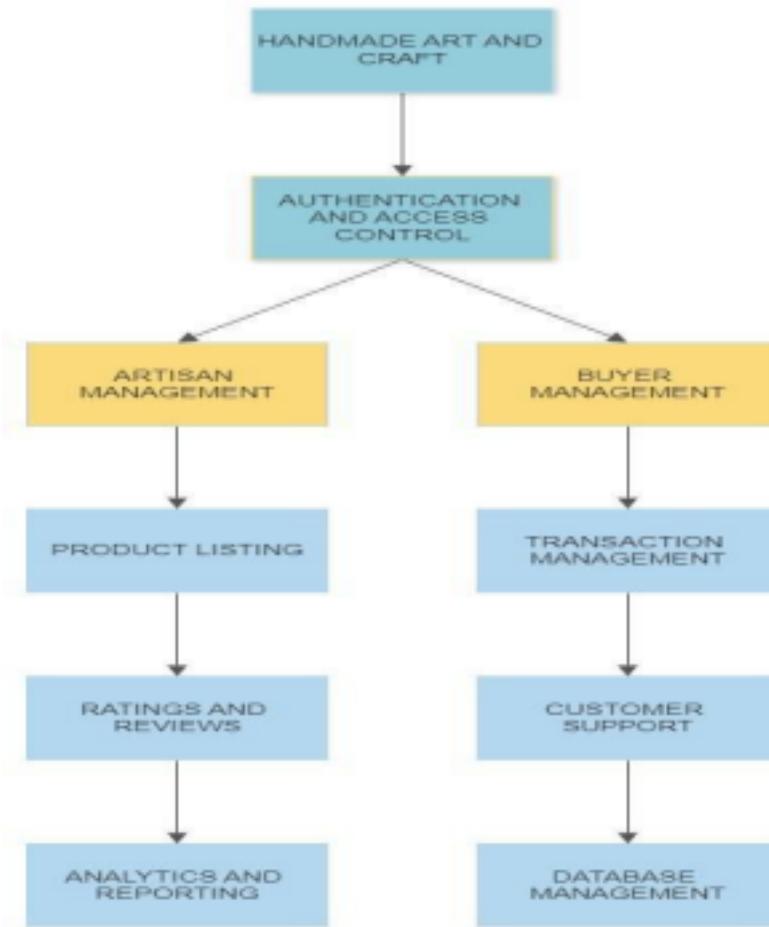


Fig 3.2.1 Architecture/ Framework

Our main project is divided into two parts: one for Artisan Management and the other for Buyer Management. Artisans can list their products on the website and check the reviews and ratings. They also have access to view their analytics. On the other side, buyers can make transactions and can purchase art and craft materials.

3.3 Algorithm and Process Design:



Fig 3.3.1 Algorithm and Process Design

This project can be implemented by following the above algorithm, which describes a step-by-step process for the buyer, from searching for a product to completing the payment.

3.4 Details of Hardware & Software

Hardware and software requirements for the project are as follows:

Sr.No	Requirements	Description
1. Hardware	i. Processor: Intel i3 or AMD equivalent ii. Disk Space: 4GB iii. RAM: 8GB	1. CPU: Adequate processing power for all tasks. 2. Disk Space: Enough storage for OS, apps, and basic data. 3. RAM: Supports multitasking and smooth performance.
2. Software	Frontend: Html Css : SQL Server Backend: PHP	HTML: Defines web page structure and content, including elements like headings, paragraphs, images, and links. CSS: Controls web page visual presentation, styling HTML elements with attributes like colors, fonts, layout, and responsiveness. PHP: Manages dynamic content, handling user requests, database interactions, and dynamic page generation.

Table 3.4.1 Hardware and Software Requirements

3.5 Experiment and Results

Homepage

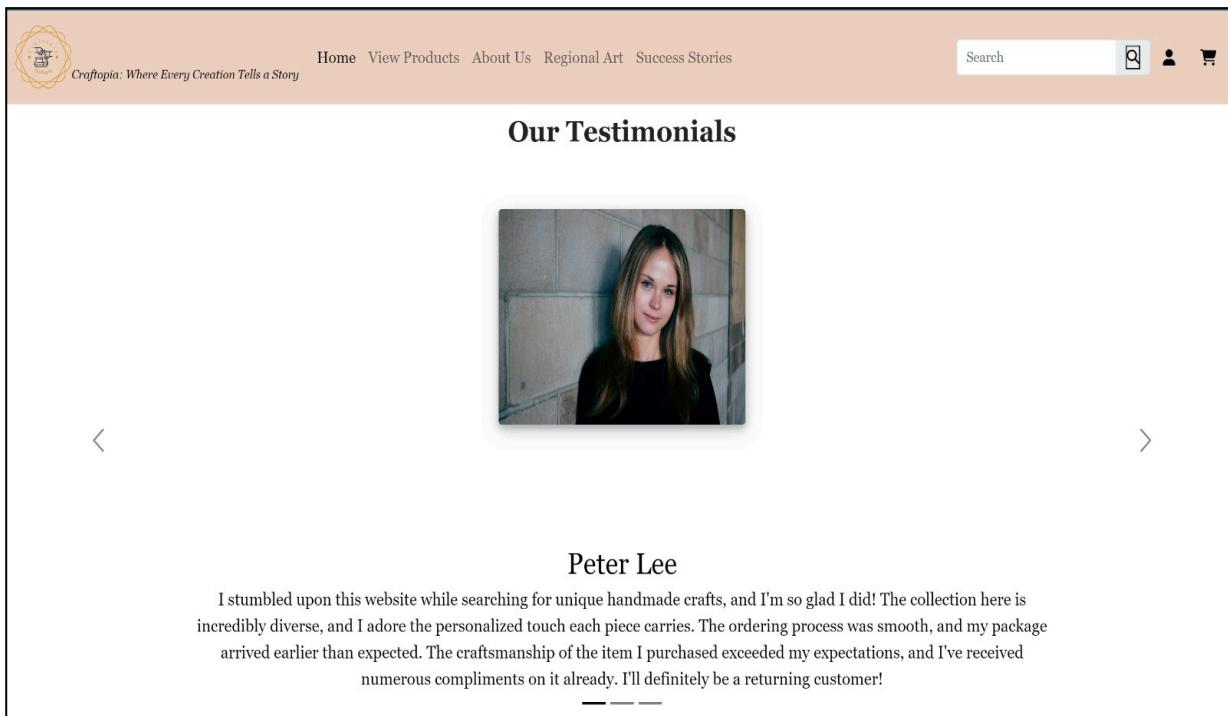
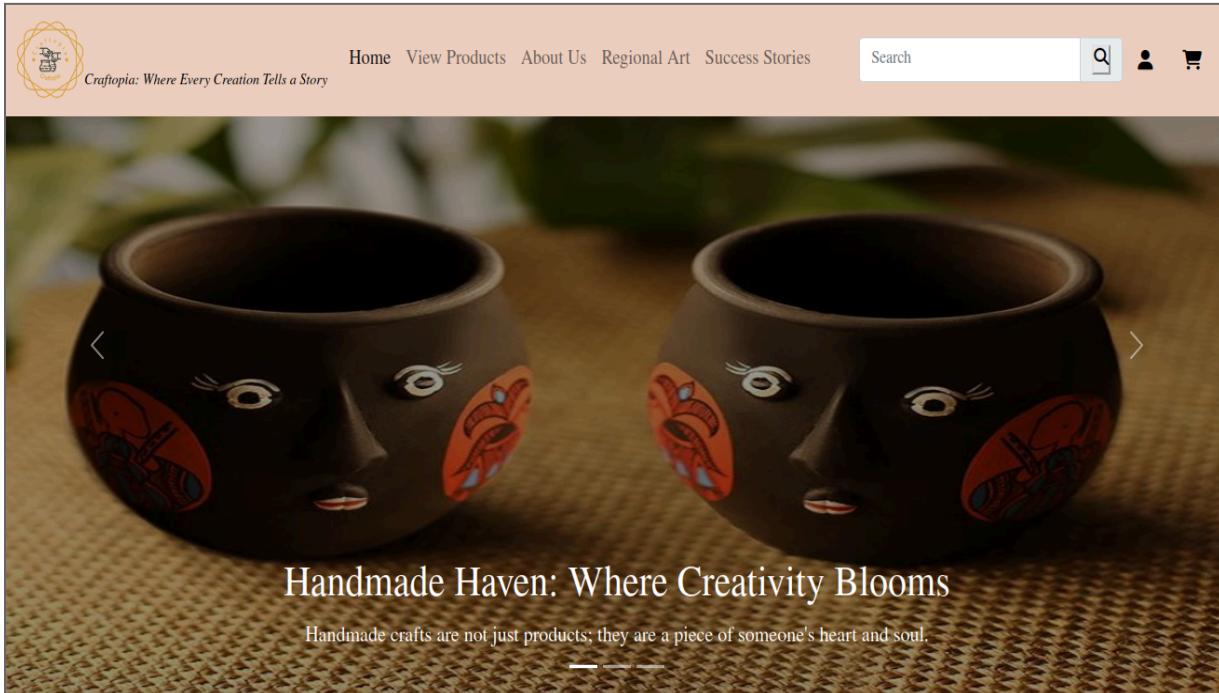
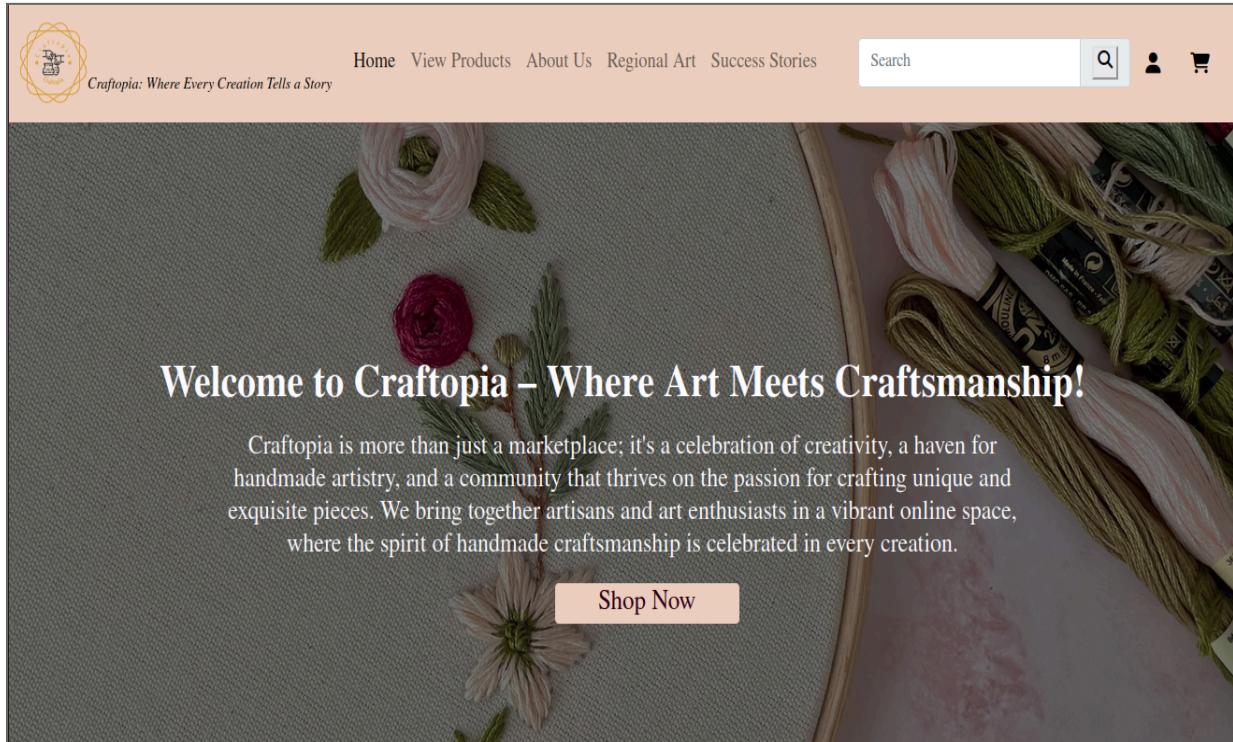


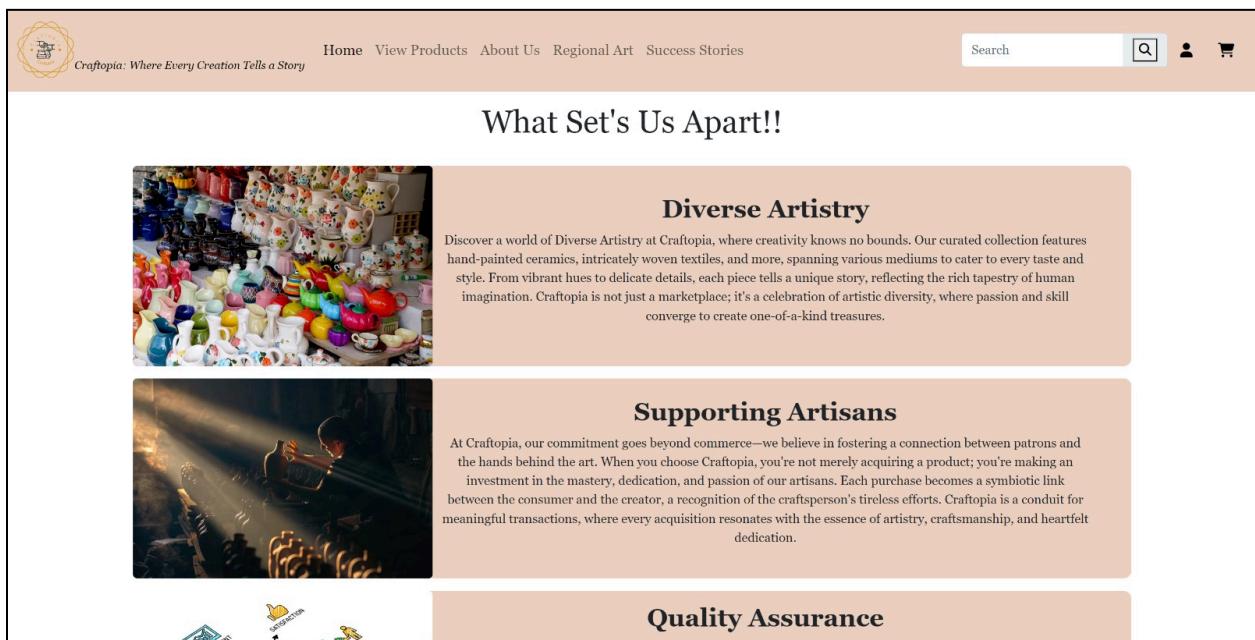
Fig 3.5.1 Homepage

Craftopia's homepage showcases diverse handmade crafts, regional art insights, and testimonials, fostering cultural appreciation and user trust. With intuitive navigation and visually engaging displays, it invites users to explore further.

ABOUT US PAGE:



The screenshot shows the Craftopia 'About Us' page. At the top, there is a header bar with the Craftopia logo, a search bar, and user icons. Below the header is a large, dark photograph of a piece of embroidery with pink and purple flowers and green leaves. To the right of the embroidery, several skeins of colorful yarn in shades of pink, yellow, and green are visible. In the center of the page, the text 'Welcome to Craftopia – Where Art Meets Craftsmanship!' is displayed in a large, bold, white font. Below this, a paragraph of text describes Craftopia as a celebration of creativity and craftsmanship. A prominent 'Shop Now' button is located in the center of the page. The overall design is clean and focuses on the beauty of handmade crafts.



The screenshot shows the 'What Sets Us Apart!' section of the Craftopia 'About Us' page. The top part features a banner with the text 'What Set's Us Apart!!'. Below this, there are three main sections: 'Diverse Artistry' (with an image of various hand-painted ceramics), 'Supporting Artisans' (with an image of a person working in a workshop), and 'Quality Assurance' (with small icons representing quality). Each section contains descriptive text about Craftopia's commitment to craftsmanship and its artisans. The overall layout is organized and highlights the unique aspects of the platform.

Fig 3.5.2 About Us Page

Craftopia's "About Us" page highlights its dedication to showcasing diverse art, supporting artisans, ensuring top-notch quality, and offering personalized options. They also prioritize sustainability, making it a place where you can find unique handmade treasures while feeling good about your choices.

VIEW PRODUCTS PAGE:

The screenshot shows the 'Our Products' section of the Craftopia website. At the top, there is a navigation bar with links to Home, View Products, About Us, Regional Art, Success Stories, a search bar, and user icons. Below the navigation, the title 'Our Products' is displayed in a large, bold font. Underneath, a category 'HOME DECOR' is shown. On the left, there are dropdown filters for Availability, Price Range, and Product Types. Three product cards are displayed: 'Metal Ganesha Wall Hanging' (Rs. 400), 'Cat Memorial Suncatcher' (Rs. 550), and 'Dream Catcher' (Rs. 479). Each card includes a small image, the price, and a 'View Product' button with a heart icon.

Fig 3.5.3 View Products Page

Here, users are immersed in a curated collection of handmade crafts, presented with detailed product listings enriched by captivating images and informative descriptions. With intuitive filtering and sorting options, users can easily find products that resonate with their preferences.

BUY NOW & ADD TO CART OPTIONS

The screenshot shows a product page for the 'Metal Ganesha Wall Hanging'. The page includes a product description, an image of the wall hanging, the product name 'Metal Ganesha Wall Hanging', the SKU 'HI1610', the price 'Rs. 400.00', and a 'Special Instruction (optional)' checkbox. Below the price, there are links for 'Add To Wishlist', 'Delivery & Returns', and 'Offers'. At the bottom, there is a green 'ADD TO CART' button with a quantity selector (showing 1) and a 'Proceed To Checkout' button with a note that all payment methods are supported. There are also icons for various payment gateways.

Fig 3.5.4 Add to cart

Users are empowered to make seamless purchasing decisions with options to directly buy items or add them to their shopping cart for later consideration. This streamlined process enhances user convenience and encourages smooth transactions.

REGIONAL ART PAGE:

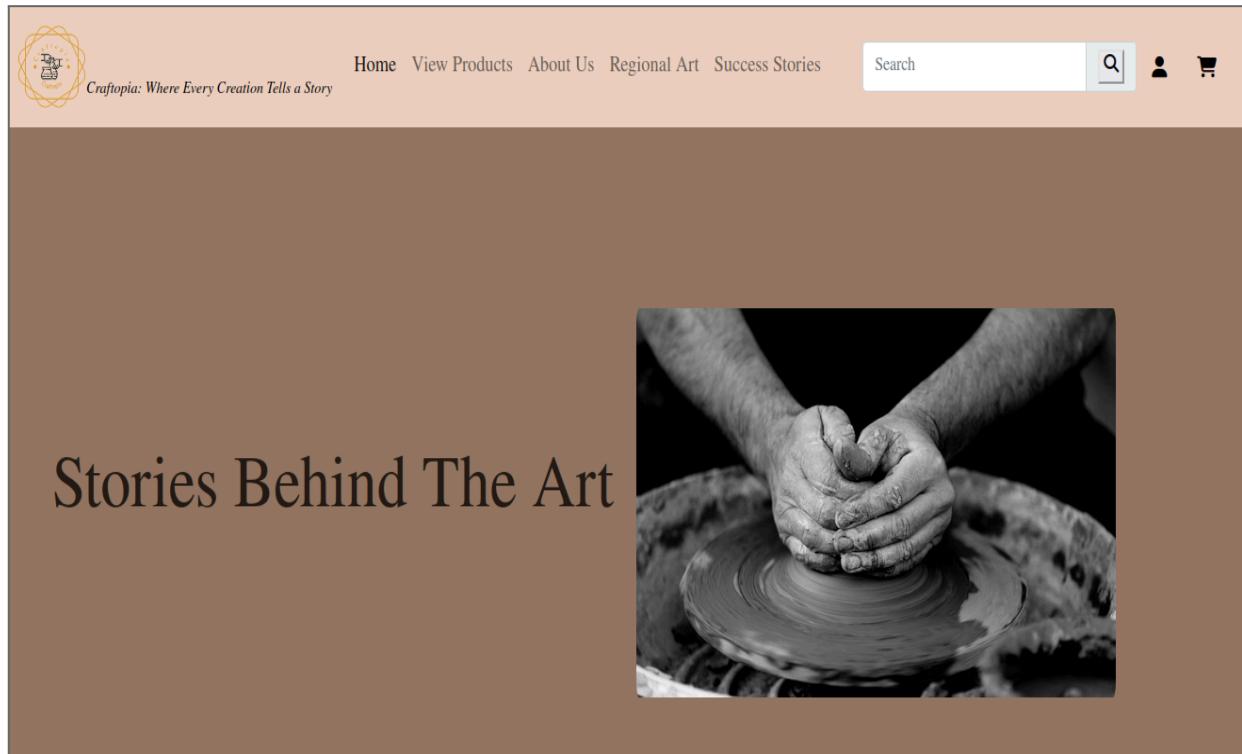
The screenshot shows the Craftopia website's regional arts page. At the top, there's a navigation bar with links for Home, View Products, About Us, Regional Art, and Success Stories. To the right of the navigation is a search bar, a user icon, and a shopping cart icon. The main title 'REGIONAL ARTS' is centered above three grid items. Each grid item contains an image, a title, a descriptive paragraph, and a 'Explore Crafts' button.

- Maharashtra Artwork:** Maharashtra, a state in western India, has a rich cultural heritage, including a vibrant tradition in the arts. Maharashtra's arts reflect a blend of tradition and modernity, contributing significantly to India's cultural landscape.
- Bihar Artwork:** Bihar's rich legacy as an ancient civilization fostered a unique painting tradition, evolving over centuries. The Gupta era marked a pivotal moment, shaping Bihar's distinct artistic identity.⁷
- Punjab Artwork:** Punjab's art and craftwork tell the story of a cultural legacy steeped in tradition. Renowned for its intricate Phulkari embroidery and basket weaving, these crafts reflect the region's creative spirit.

Fig 3.5.5 Regional Arts

Celebrating cultural diversity, this page showcases art and craft items unique to specific regions, highlighting the richness of craftsmanship from various cultural backgrounds. It offers users an enriching experience, fostering appreciation for traditional art forms.

STORIES SUCCESS PAGE:



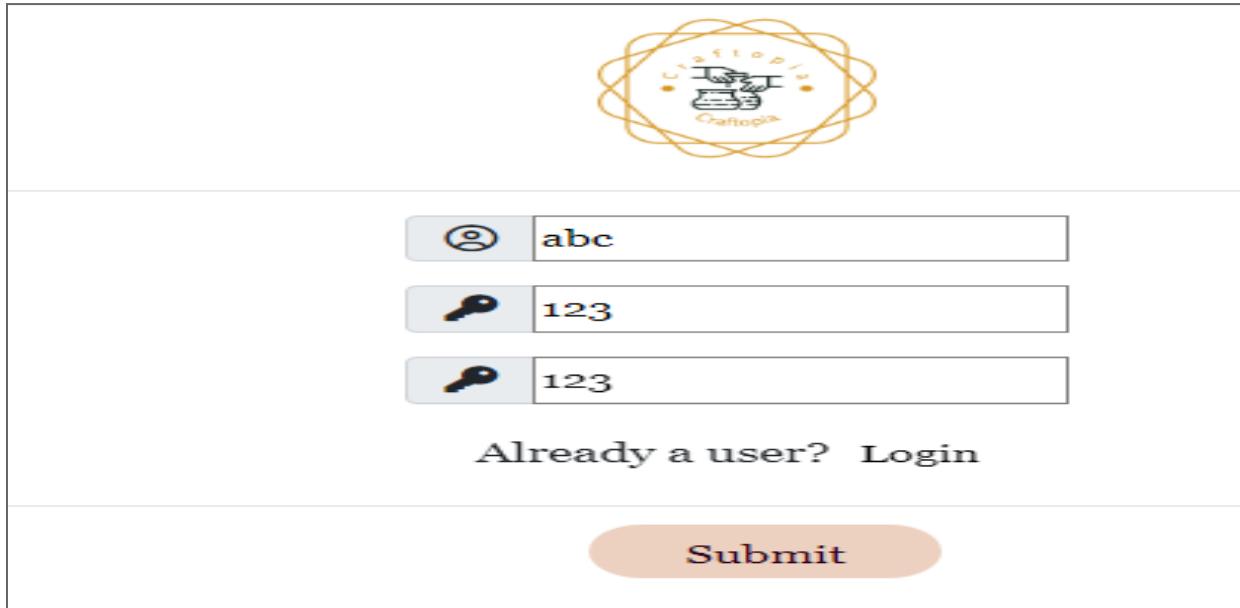
Craftopia, the ultimate destination for handcrafted marvels! Within our dynamic marketplace, we take pride in honoring the diverse spectrum of Indian arts and crafts. Here, adept artisans breathe life into their cultural heritage, channeling passion into every intricately fashioned masterpiece. Join us on a captivating journey through the realms of creativity, where tradition meets innovation, and every creation not only showcases artisanal skill but also tells a compelling and unique story.

Crafting Legacies: Unveiling the Untold Stories of Regional Artisans

Maharashtra's handmade art is a captivating saga woven into the fabric of its culture. The intricate Paithani silk sarees embody generations of skill, narrating stories of tradition and timeless elegance. Warli art, a rural masterpiece, paints vivid tales of village life and folklore on canvas, showcasing the state's deep-rooted heritage. Bidriware from Bidar exemplifies metal mastery with silver inlay, reflecting historical influences and regional finesse. Kolhapuri chappals stride through time with their unique design, embodying centuries-old shoemaking traditions. Pandharpur turmeric, a golden symbol of the land, tells an agricultural story, transcending culinary boundaries to become a cultural icon. Maharashtra's handmade art is not merely craft; it's a living chronicle, where every piece encapsulates the legacy, craftsmanship, and vibrant narratives that define the state's artistic richness.

Fig 3.5.6 Success Stories Page

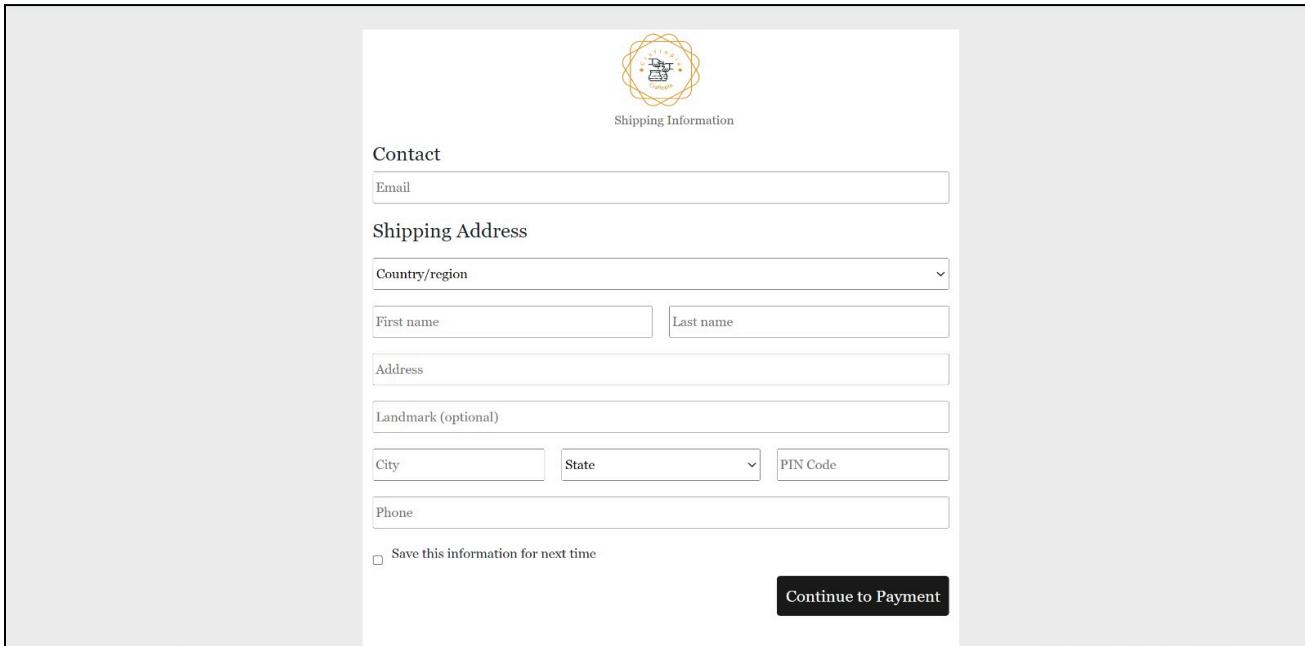
Craftopia's "Success Stories" page narrates the rich cultural heritage of Indian arts and crafts, spotlighting each region's unique handmade traditions. From Maharashtra's Paithani silk sarees to Karnataka's Mysore silk weaving, it honors artisans and their masterpieces, inviting visitors on a journey of cultural exploration and appreciation.

LOGIN FORM:


The login form for Craftopia features a central logo with the word "Craftopia" and a stylized robot icon. Below the logo are three input fields: two for email and one for password. The email fields have icons of eyes and padlocks. The password field has a key icon. Below the inputs is a link to log in if already a user. A large orange "Submit" button is at the bottom.

Fig 3.5.7 Login Form

Providing a secure gateway for users to access their accounts, the login form grants users personalized access to features such as order history, saved addresses, and preferences. It ensures a seamless and personalized user experience.

PAYMENT FORM:


The payment form for Craftopia includes sections for shipping information, contact details, and shipping address. It features dropdown menus for country/region and state, and input fields for first name, last name, address, landmark, city, state, PIN code, and phone number. A checkbox allows saving information for next time, and a "Continue to Payment" button concludes the process.

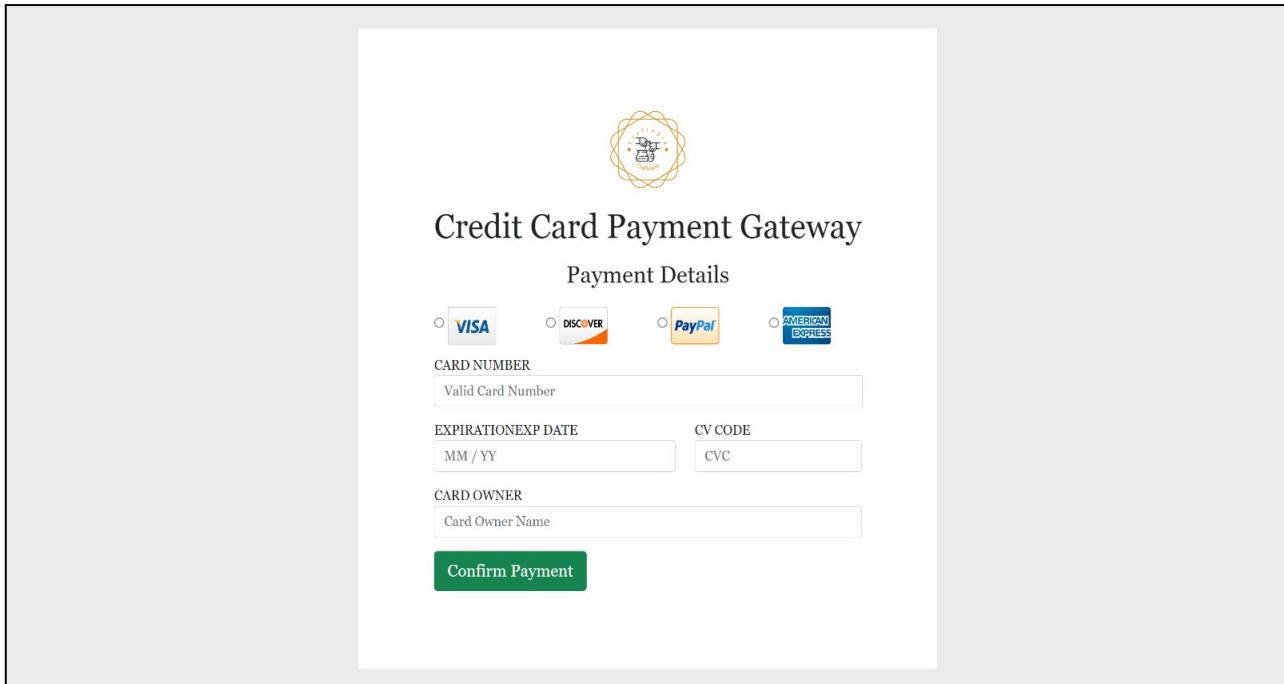


Fig 3.5.8 Payment Form

Craftopia's Payment Form ensures secure and smooth transactions, where users can confidently input their payment details. With this feature, users can finalize purchases without worries, boosting trust and satisfaction.

3.6 Conclusion and Future Work

In summary, this website has some cool features that make it easy for artists to show their crafts and for people who love crafts to find and buy them. It's kind of like a crafty online store. There's a search bar that helps you find what you want, and when people leave reviews, the website sorts them into good and bad ones. It's simple to use as it uses CRUD Methodology and you can see if stuff is available and how much it costs right away. So, it's a nice place for crafty folks to hang out!

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