

E-commerce for Artisans

A Project Report Submitted to



**Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal
Towards Partial Fulfillment for the Award of**

**Bachelor of Technology
(Computer Science and Engineering)**

Submitted By

**Under the Supervision of
Dr.Priyanka Jangde**

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EXAMINER APPROVAL

The Project entitled “ECommerce For Artisans” submitted by **Aayush Gupta (0827CS201006)**, **Akshat Singh Gour (0827CS201020)**, **Akshat Singh Rathore (0827CS201021)** and **Akshay Keswani (0827CS201022)** has been examined and is hereby approved towards partial fulfillment for the award of Bachelor of Technology degree in Computer Science & Engineering discipline, for which it has been submitted. It understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein, but approve the project only for the purpose for which it has been submitted.

(Internal Examiner)

Date:

(External Examiner)

Date:

GUIDE RECOMMENDATION

This is to certify that the work embodied in this project entitled “**Ecommerce For Artisans** ” submitted by **Aayush Gupta (0827CS201006)**, **Akshat Singh Gour (0827CS201020)**, **Akshat Singh Rathore (0827CS201021)** and **Akshay Keswani (0827CS201022)** is a satisfactory account of the bonafide work done under the supervision of **Dr. Priyanka Jangde** and are recommended towards partial fulfillment for the award of the Bachelor of Technology (**Computer Science & Engineering**) degree by **Rajiv Gandhi Proudyogiki Vishwavidhyalaya, Bhopal.**

(Project Guide)

(Project Coordinator)

STUDENTS' UNDERTAKING

This is to certify that a project entitled “**Ecommerce for Artisans**” has been developed by us under the supervision of **Dr. Priyanka Jangde**. The whole responsibility of work done in this project is ours. The sole intention of this work is only for practical learning and research. We further declare that to the best of our knowledge, this report does not contain any part of any work which has been submitted for the award of any degree either in this University or in any other University / Deemed University without proper citation and if the same work is found then we are liable for explanation to this.

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EXECUTIVE SUMMARY

This project is submitted to Rajiv Gandhi Proudyogiki Vishwavidhyalaya, Bhopal(MP), India for partial fulfillment of Bachelor of Technology in **Computer Science & Engineering** branch under the sagacious guidance and vigilant supervision of **Dr. Priyanka Jangde**. The project is a website. In the project, MERN Stack is used. In this project, an attempt has been made to highlight the role of E-commerce in the development of rural artisans in India by illustrating some efforts of Government and Non-Government agencies, Groups and Individuals in uplifting the socio-economic standard of the rural artisans through E-commerce.

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Chapter 1 . Introduction

Introduction

India is a country of great cultural heritage and India's cultural diversity provides plenty of remarkable art and craft products. Handicraft industry uses conventional manual methods instead of advanced technology for making various items.

This scenario is changing with the advent of E-commerce initiatives at government as well as at private or individual level. Unlike traditional commerce that is carried out physically with effort of a person to go & get products, ecommerce has made it easier for humans to reduce physical work and to save time.

In this project, an attempt has been made to highlight the role of E-commerce in the development of rural artisans in India by illustrating some efforts of Government and Non-Government agencies, Groups and Individuals in uplifting the socio-economic standard of the rural artisans through E-commerce.

1.1 Overview

To create a single page application for art enthusiasts including both artists and buyers. It will provide a platform for rural artisans to showcase their artwork to a wider audience and get them connected to more developed markets. It will host artworks of various kinds including paintings, sculptures, pottery and many more. It will also encourage more domestically made artwork and promote more 'Make in India'. This will make buying artwork more accessible to a normal art enthusiast. It will also promote a more artistic culture among the general populous .

1.2 Background and Motivation

Scenario is changing with the advent of E-commerce initiatives at government as well as at private or individual level. Unlike traditional commerce that is carried out physically with effort of a person to go & get products, ecommerce has made it easier for humans to reduce physical work and to save time. Motivation behind this is artisans will become self employed .Artisans will promote make in India Movement .

1.3 Problem Statement and Objectives

Development of a centralized platform with web-based portal for storing and sharing of information about artwork of artisans to reduce management cost and develop business relations. To develop a highly reactive single page website which will provide a user friendly interface for artisans to shows their work to a wider audience to help increase their customer base. The web portal will register artisans and they will be able to upload information about their

artwork along with the expected price. The system will store and share photographs and videos of such artworks. If a user likes a artwork they will be able to add it to their cart and if they want to will be able to buy whenever they want. There is no centralized platform for artisans to showcase their artwork and to sell them. Platforms which sell artworks has lack of categories in it. Many Indian Artworks are still not recognised. There is no exposure for underprivileged artisans. Underrepresentation of authentic Indian art. All these are the problem statement which we address in our project.

1.4 Scope of the Project

The scope of this project is to create a single page application for art enthusiasts including both artists and buyers. It will provide a platform for rural artisans to showcase their artwork to a wider audience and get them connected to more developed markets. It will host artworks of various kinds including paintings, sculptures, pottery and many more. It will also encourage more domestically made artwork and promote more 'Make in India'. This will make buying artwork more accessible to a normal art enthusiast. It will also promote a more artistic culture among the general populous .

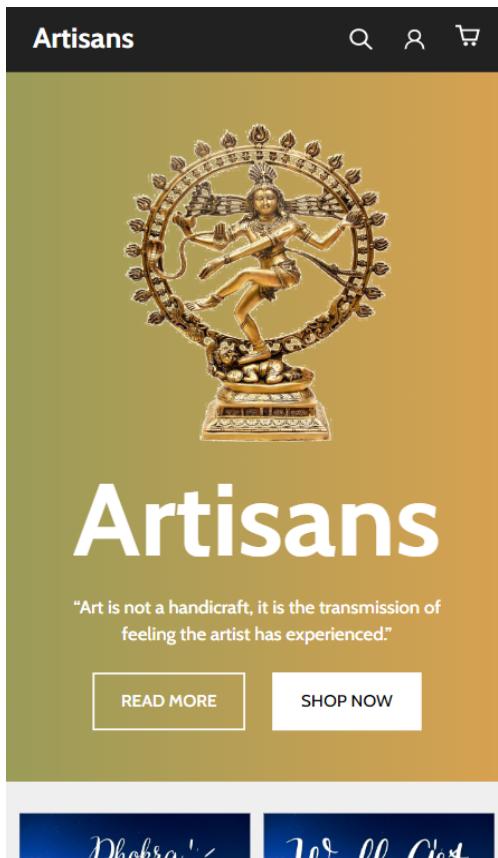


Figure 1 Mobile version

1.6 Report Structure

The project ‘Ecommerce for Artisans’ is primarily concerned with the underprivileged rural artisans and to promote the traditional Indian Art work. The entire project report is categorized into five chapters.

Chapter 1: Introduction- introduces the background of the problem followed by rationale for the project undertaken. The chapter describes the objectives, scope and applications of the project. Further, the chapter gives the details of team members and their contribution in development of the project which is then subsequently ended with a report outline.

Chapter 2: Review of Literature- explores the work done in the area of Project undertaken and discusses the limitations of the existing system and highlights the issues and challenges of the project area. The chapter finally ends up with the requirement identification for present project work based on findings drawn from reviewed literature and end user interactions.

Chapter 3: Proposed System - starts with the project proposal based on requirement identified, followed by benefits of the project. The chapter also illustrates the software engineering paradigm used along with different design representations. The chapter also includes a block diagram and details of major modules of the project. Chapter also gives insights of different type of feasibility study carried out for the project undertaken. Later it gives details of the different deployment requirements for the developed project.

Chapter 4: Implementation - includes the details of different Technology/ Techniques/ Tools/ Programming Languages used in developing the Project. The chapter also includes the different user interfaces designed in the project along with their functionality. Further it discusses the experiment results along with testing of the project. The chapter ends with evaluation of the project on different parameters like accuracy and efficiency.

Chapter 5: Conclusion - Concludes with objective wise analysis of results and limitation of present work which is then followed by suggestions and recommendations for further improvement.

Chapter 2 . Review of Literature

Review of Literature

2.1 Preliminary Investigation

India is a nation with a rich cultural legacy, and the country's diverse cultures produce a wide variety of exquisite arts and crafts. Instead of using cutting-edge technology, the handicraft sector uses traditional manual processes to create a variety of goods. With the introduction of E-commerce efforts at the government level as well as at the private or individual level, this situation is changing. Ecommerce has made it simpler for people to eliminate physical work and to save time, in contrast to conventional commerce, which is carried out physically with a person's effort to travel and collect items. The goal of this project is to emphasize the contribution of e-commerce to the growth of rural artisans in India by showcasing some of the initiatives taken by government and non-government organizations, groups, and individuals to improve their socioeconomic standing.

2.1.1 Current System and its Limitations

There aren't many systems that are dedicated to serving Artisans. Some notable systems which are as follows:

1. Amazon



Amazon is guided by four principles: customer obsession rather than competitor focus, passion for invention, commitment to operational excellence, and long-term thinking. Amazon strives to be Earth's most customer-centric company, Earth's best employer, and Earth's safest place to work. Customer reviews, 1-Click shopping, personalized recommendations, Prime, Fulfillment by Amazon, AWS, Kindle Direct Publishing, Kindle, Career Choice, Fire tablets, Fire TV, Amazon Echo, Alexa, Just Walk Out technology, Amazon Studios, and The Climate Pledge are

some of the things pioneered by Amazon. visualization company and a real-time traffic analyzer, Google Maps was launched in February 2005. The service's front end utilizes JavaScript, XML, and Ajax. Google Maps offers an API that allows maps to be embedded on third-party websites, amazon has earned a reputation as a disruptor of well-established industries through technological innovation and "aggressive" reinvestment of profits into capital expenditures. As of 2023, it is the world's largest online retailer and marketplace, smart speaker provider, cloud computing service through AWS, live-streaming service through Twitch, and Internet company as measured by revenue and market share In 2021, it surpassed Walmart as the world's largest retailer outside of China, driven in large part by its paid subscription plan, Amazon Prime, which has over 200 million subscribers worldwide.

Advantages:

- You don't need your own Shop Software.
- Well established Amazon partner program for affiliates.
- Sell and buy anything from all categories.
- Over 240 million Amazon customers worldwide.

Disadvantages:

- Dependency of Amazon.
- Possibly limited opportunities to directly influence the display of a product.
- No specific category for artisans.
- Many machine made artworks are also sold.

Gaps identified:

Crowdsourcing is used to obtain the GPS-determined locations of a large number of cellphone users, from which live traffic maps are produced. Street View garnered much controversy after its release because of privacy concerns.

Reference link:

<https://www.amazon.in/>

2. Okhai



Okhai offers handcrafted apparel and lifestyle products created by rural artisans from across India. These artisans are gifted with the talent and traditional skills to craft exquisite designs in styles that are unique to their culture and heritage. Okhai products offer contemporary designs, all

reasonably priced. Proceeds from sales help these artisans help themselves – Okhai's mission is to encourage women from less privileged backgrounds to acquire new skills; to give them the self-confidence and self-esteem required to earn by their own industry and initiative; and to enable them to carry this newly discovered skill and confidence into the wider world. Okhai understands the rich culture and traditions that these rural communities are steeped in and translates this heritage into products by pairing traditional art with contemporary designs and modern processes.

As a brand, Okhai Handicrafts constitutes ladies' wear, men's wear, home décor products and accessories. Okhai products use mirror work, patchwork and embroidery created as a vibrant expression of the rural way of life, their rituals and their legends. The application generates revenue through hyperlocal advertising to an estimated 130 million users.

Advantages:

- Main focus on women upliftment.
- Around 470 families benefited from this rise in income levels.
- Supplies all over India.

Disadvantages:

- Does not include pottery work , sculptor etc.
- Reach to every artwork is not there.
- Mixed category of art works

Gaps identified:

Users suggest modifications and hazards which are promptly updated. These may not be accurate.

Reference link:

<https://okhai.org/>

3. Craftsvilla:



Craftsvilla is an Indian e-commerce website that brought for us the huge collection ethnic apparel, footwear, fashion jewelry and royal classic indigenous skill crafted home décor products.

Advantages:

- Finished artworks with finest quality.
- Reach to every artwork is not there.

Disadvantages:

- Does not include all categories of artworks.
- Does not include handmade artworks.

Reference link:

<https://www.craftsvilla.com/>

2.2 COMPARATIVE STUDY OF EXISTING SYSTEMS

Name	Features	Disadvantages
Amazon	-fast -easy to use -Sell and buy anything from all categories	-Dependency of Amazon. -No specific category for artisans. -Many machine made artworks are also sold
Okhai	-Women upliftment -470 families benefited -cheap artworks	-Does not include pottery work , sculptor etc. -Reach to every artwork not there. -Mixed category of art works .
Craftsvilla	-Mixed category of art works . -finest quality clothes -handmade	-not include all categories of artworks. -slow delivery -expensive raw materials

2.3 Requirement Identification

Significant work has been done in the field of web development ; however, it is not easy to achieve desired results. The review of literature leads to draw certain major findings which are as under :

- The study brought out that web development will be done and the research of frameworks,databases is done.Users and Artists(Seller) have to register

themselves on the site separately . Database is maintained to contain user's information including their delivery address and sellers information along with the items to be sold. Modifications are updated onto the database. Users can select their art piece and can add it to their cart. The project Handicrafts Online was developed by using Html, Sass, ReactJS, Stripe, Strapi and Javascript. The main aim of developing this project was to help the local artisans grow their businesses more and bring our traditional culture to light. Through our e-commerce website people can browse and view the local handicrafts made by our very own Indian Artisans and buy them at reasonable costs. We hope our project will provide a platform to all the local artists to display and sell their fine craftsmanship.

- Study on Artisans is done and study about the way to use it. Using MERN,Stripe and strape.
- The main aim of developing this project was to help the local artisans grow their businesses more and bring our traditional culture to light. Through our e-commerce website people can browse and view the local handicrafts made by our very own Indian Artisans and buy them at reasonable costs. We hope our project will provide a platform to all the local artists to display and sell their fine craftsmanship. We think in today's world and in this economy it's very important to support the local craftsmen and admire their fine art and so this e-commerce website will not only help them but also help people buy their fine art sitting at home and ordering at their ease instead of going to shop for them specially.

2.4 Conclusion

This chapter reviews the literature surveys that have been done during the research work. The related work that has been proposed by many researchers has been discussed. After surveying the existing systems,finding out the advantages and disadvantages .We have decided to make e-commerce website using MERN technology which will include all the art categories and art lovers can buy them also they can purchase raw material for it..

Chapter 3 . Proposed System

Proposed System

3.1 Proposal

The proposal is the system will make it much easier for Art lovers to buy any artwork of any categoryDeveloping e-commerce web-Application for selling of finished arts projects as well as art material for consumers. The web-application will provide the artisans a platform to advertise their products and sell them directly to buyers cutting out the middleman. The website will host arts of various kind including Pottery, portrait, sculptures etc.Streamline the buying process and make it cheaper for the buyers.Simplify the inventory management and exporting process for the artisans.Make the whole process more flexible and user friendly. Easy availability for the buyers and artisans.

3.2 Benefits of Proposed System

The current project had a lot of challenges that are overcome by this system :

- **Easy to Use :** The user interface is so basic that it is very easy to understand and operate.
- **All Art Categories:** Art lovers can buy all the categories of art work they want.
- **Availability of Raw materials :** Buyers can also buy the raw materials which is used in making that artwork.

3.3 Block Diagram

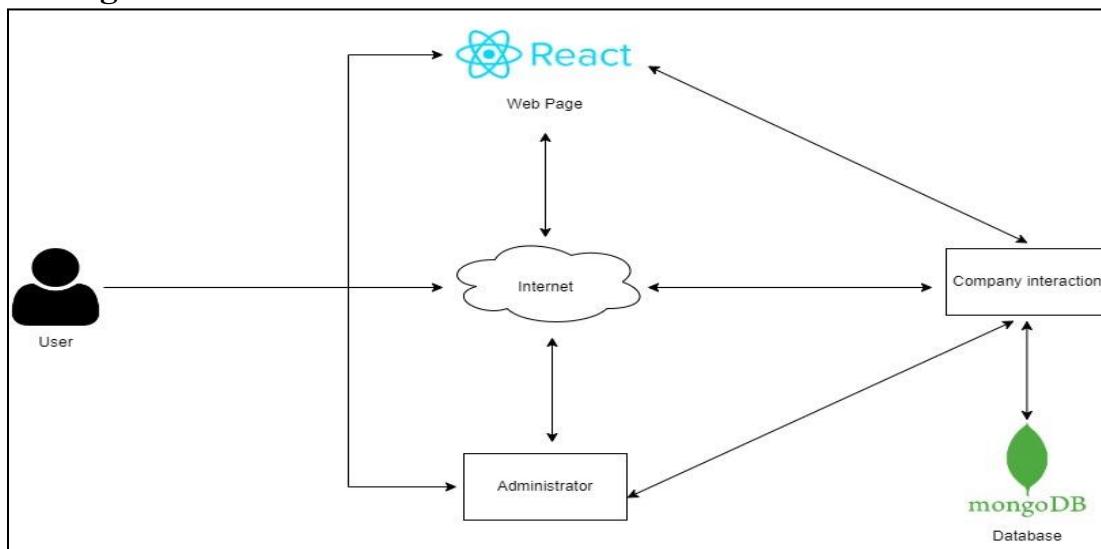


Figure 2 : Block diagram

Users and Artists(Seller) have to register themselves on the site separately . Database is maintained to contain user's information including their delivery address and sellers information along with the items to be sold. Modifications are updated onto the database. Users can select their art piece and can add it to their cart.

3.4 Design Representations

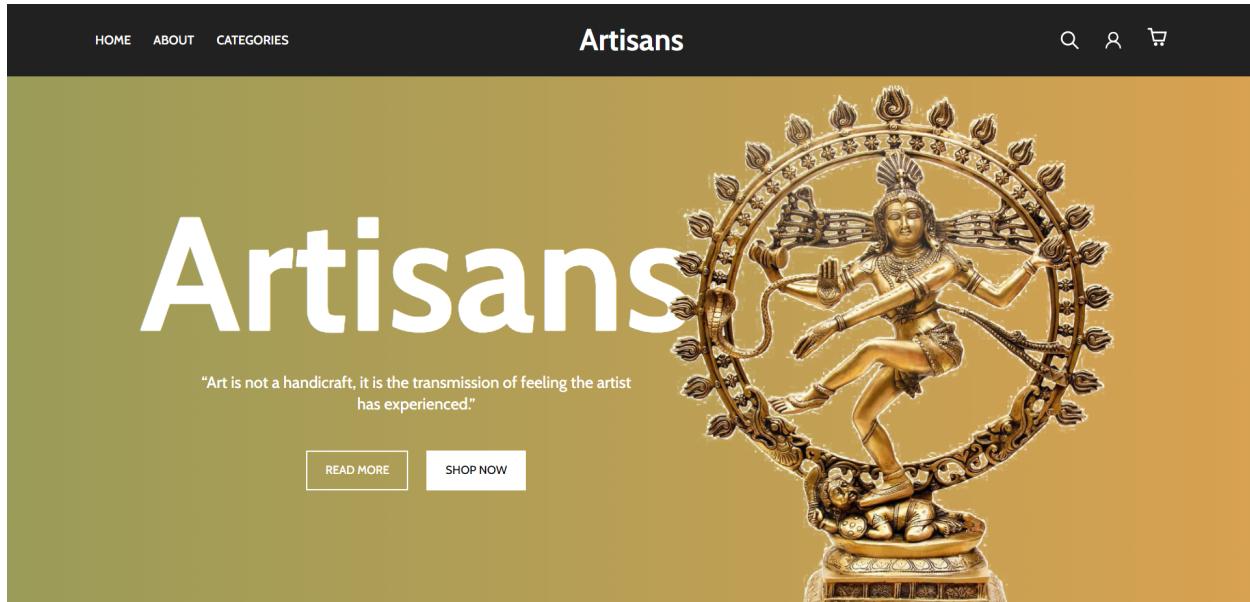


figure 3: Home page (frontend)

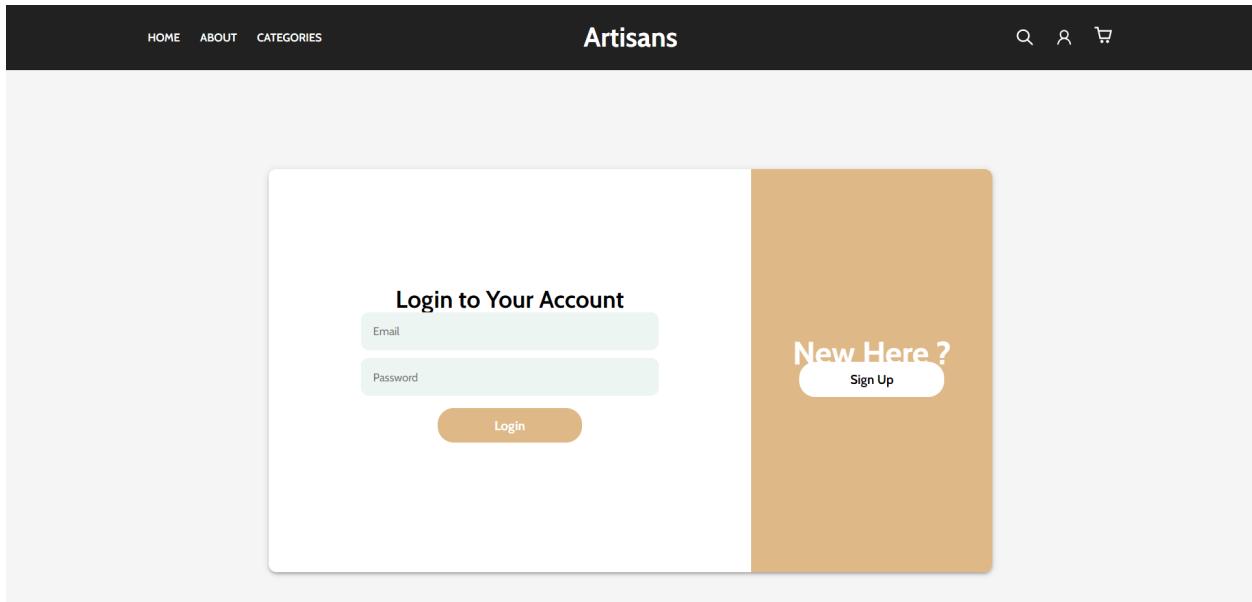


Figure 4 : Login page

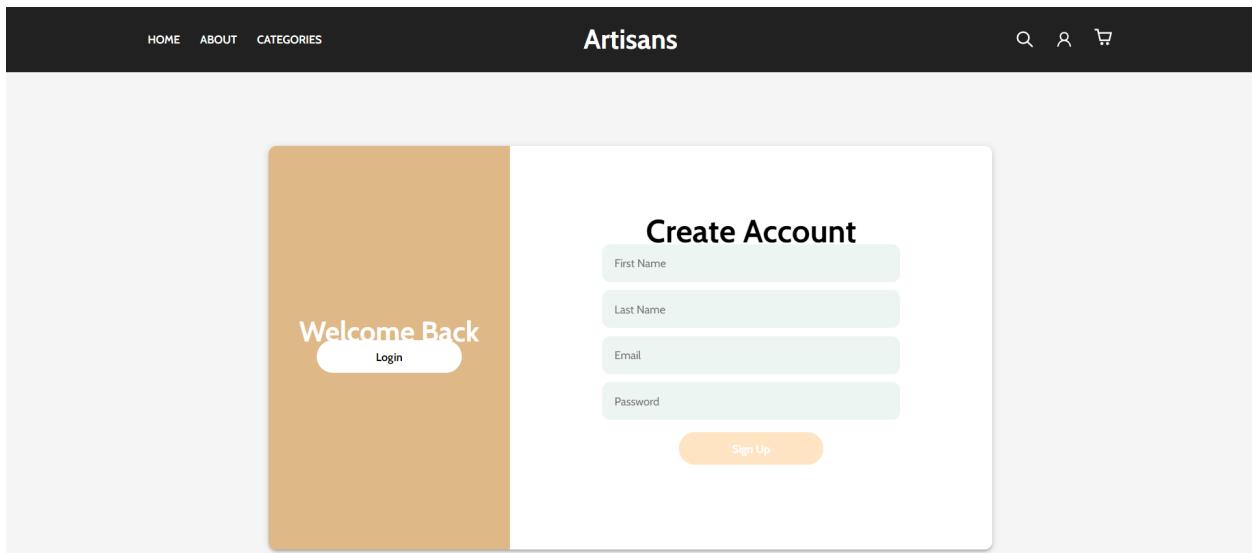


Figure 5 Account Creation Page

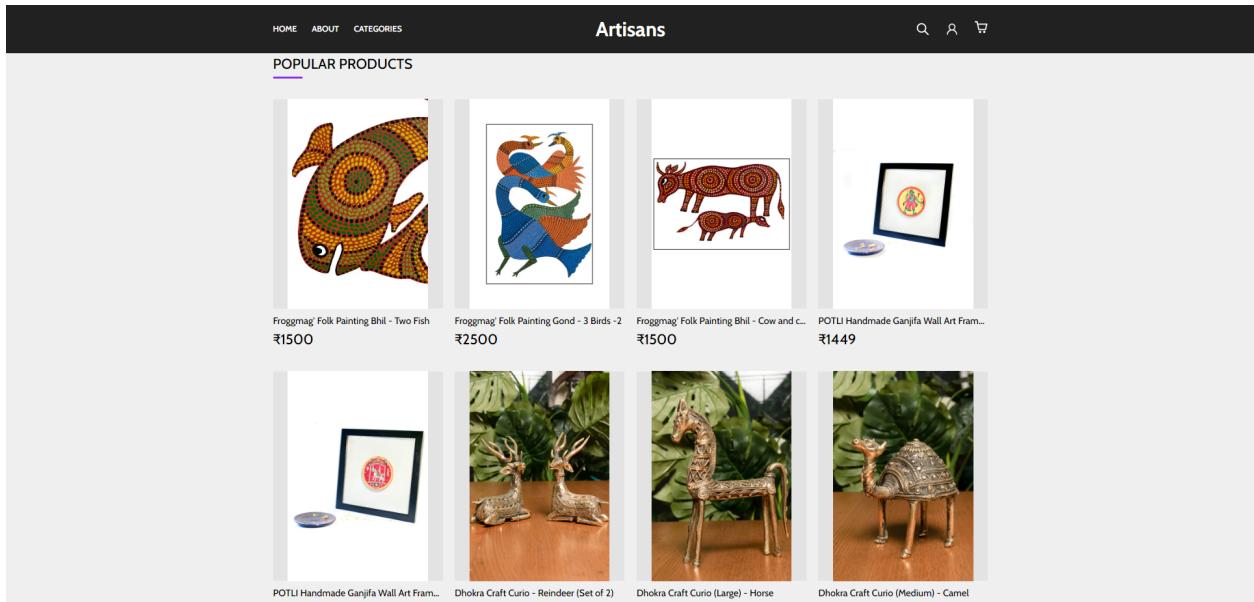


Figure 6 : Products page

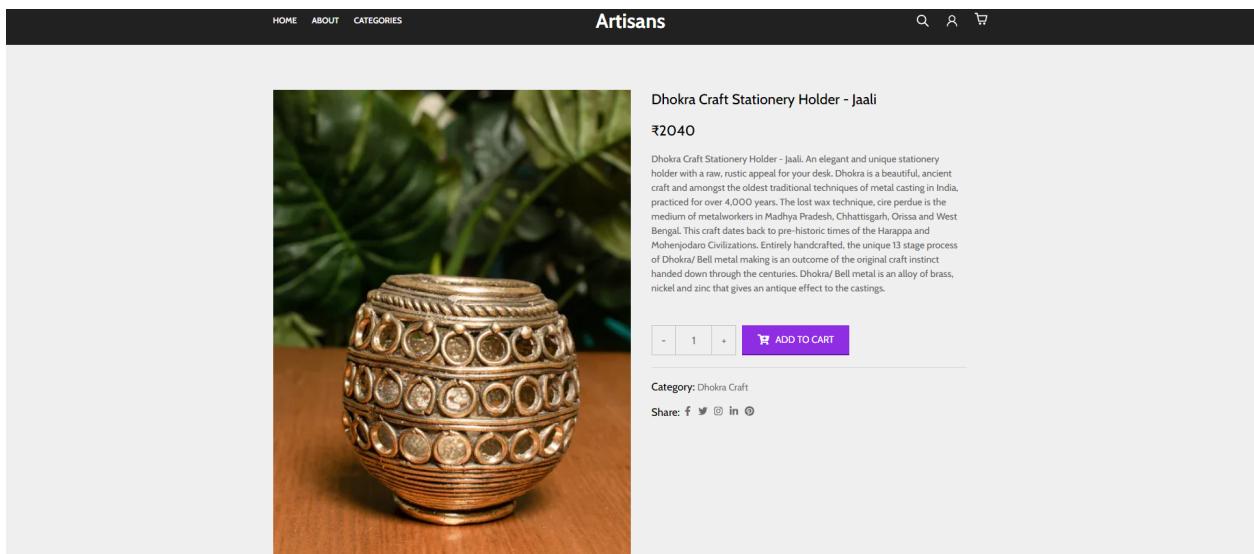


Figure 7: Product Description

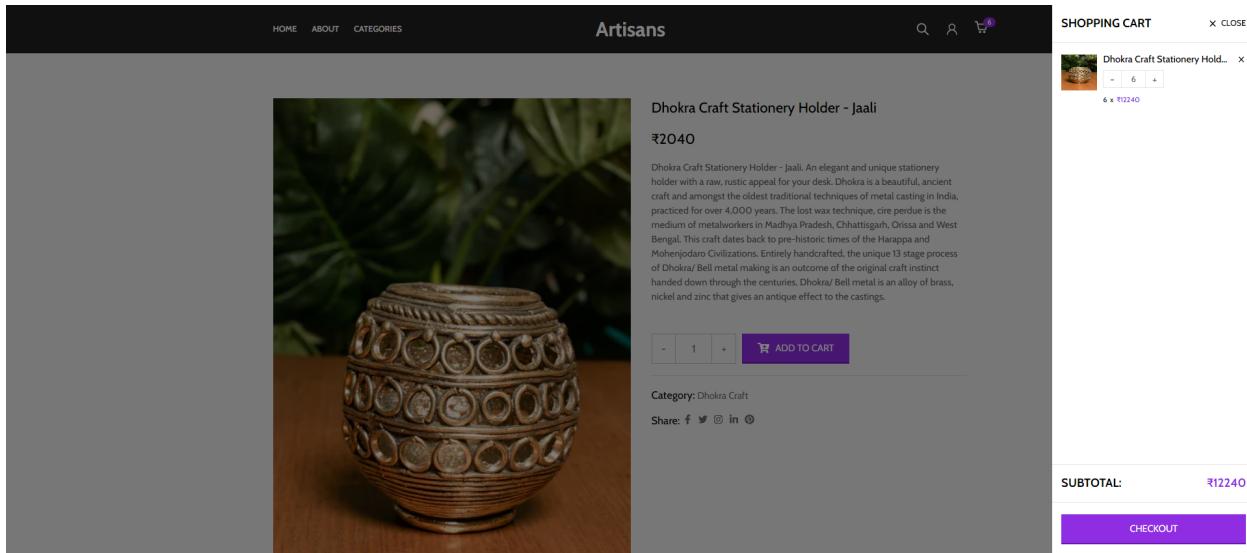


Figure 8 : Cart page

3.5 Diagrams

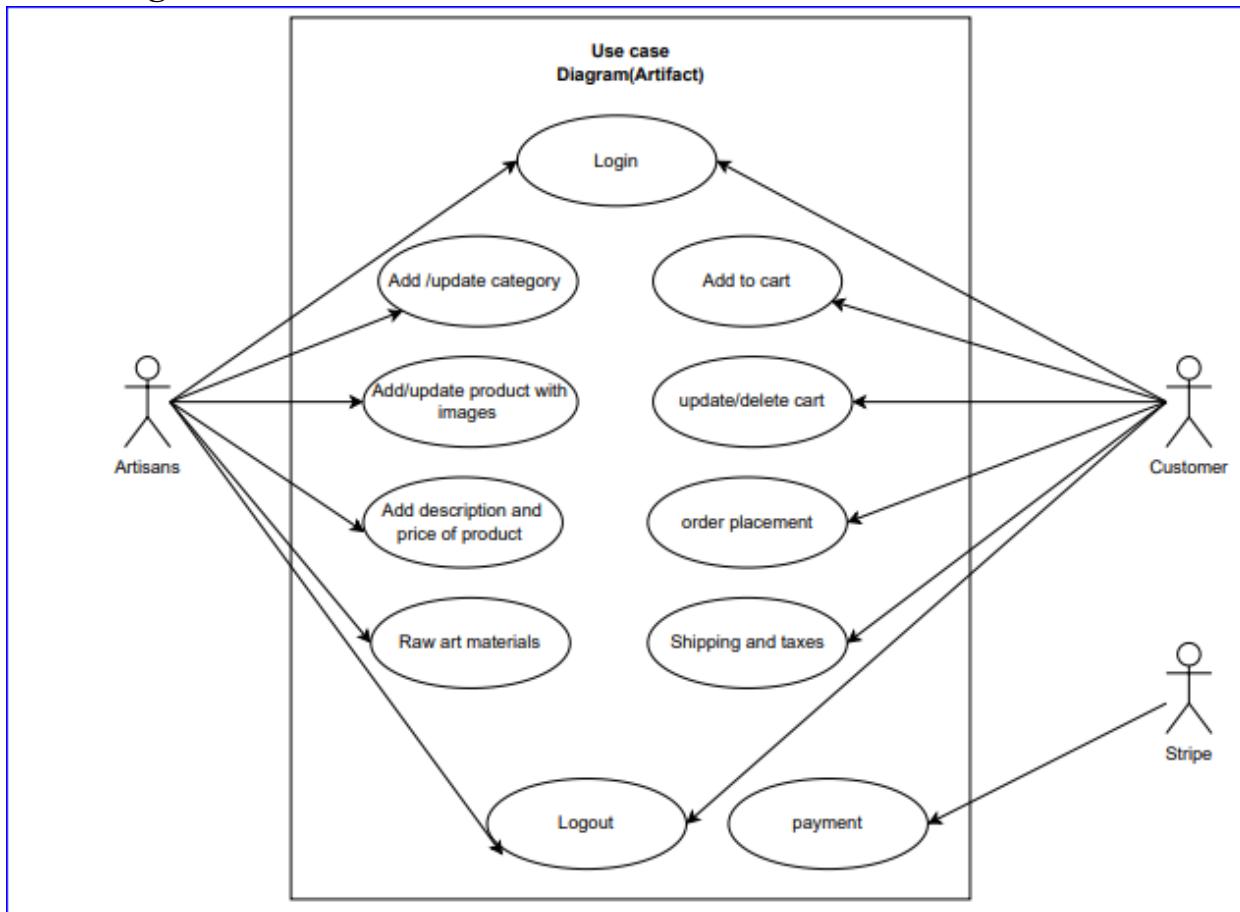


Figure 9: use case diagram

A use case is a methodology used in system analysis to identify, clarify and organize system requirements. The use case is made up of a set of possible sequences of interactions between systems and users in a particular environment and related to a particular goal. The method creates a document that describes all the steps taken by a user to complete an activity. According to the use case diagram proprietors will register themselves by giving the required details and their info will be stored in the database, after registration they can login their account and can update their details, upload pictures etc. Users can directly search for the place where they want to visit and information of the place will display along with the accessibility status, pictures etc. User can find the direction for the place from bing maps.

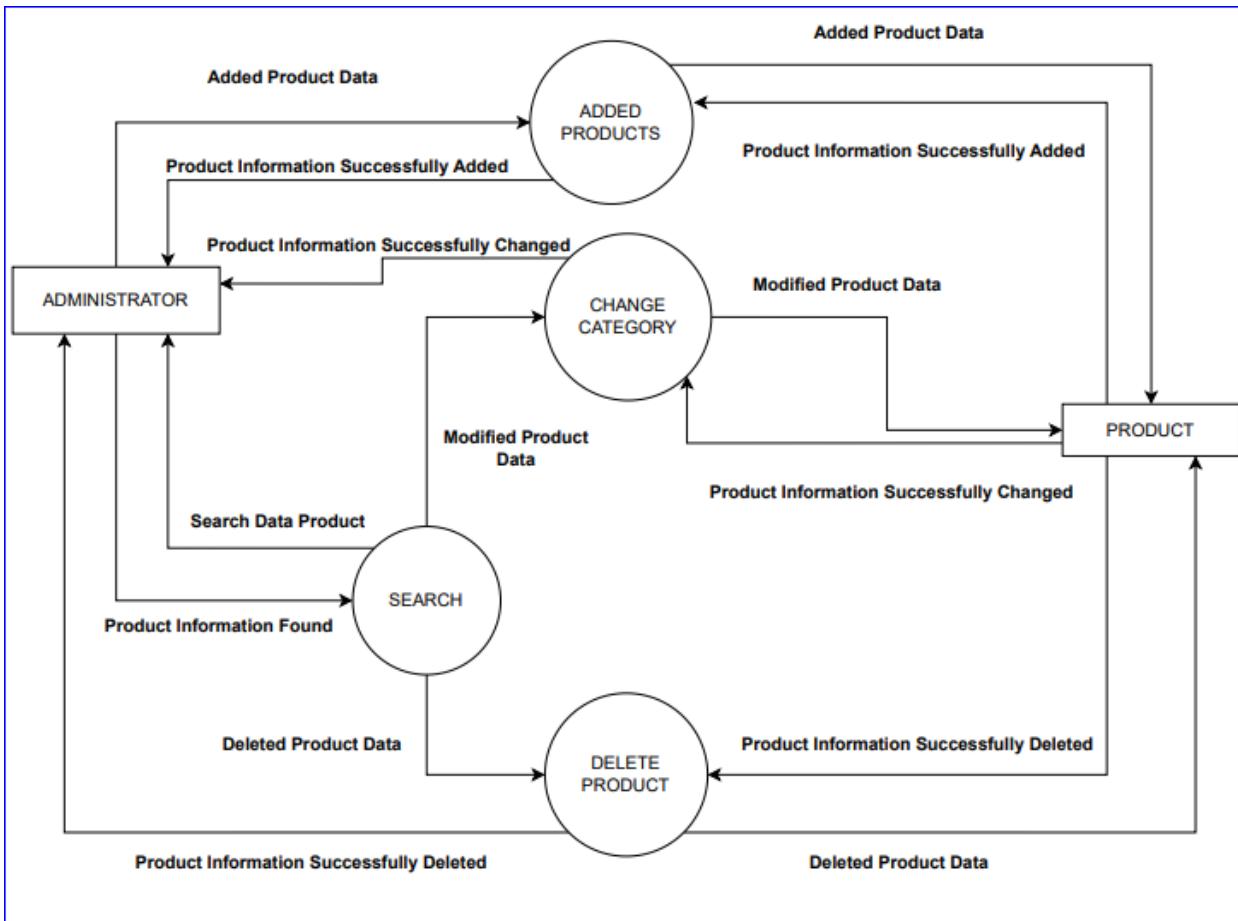


Figure 10 : Data flow

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 According to the DFD

level 0 diagram, the user will input the destination in our map system (bing map) from the database user will get the accessibility information of the destination and he/she will get the route for the destination. DFD level 0 diagram shows the interaction between the database, administrator and the user.

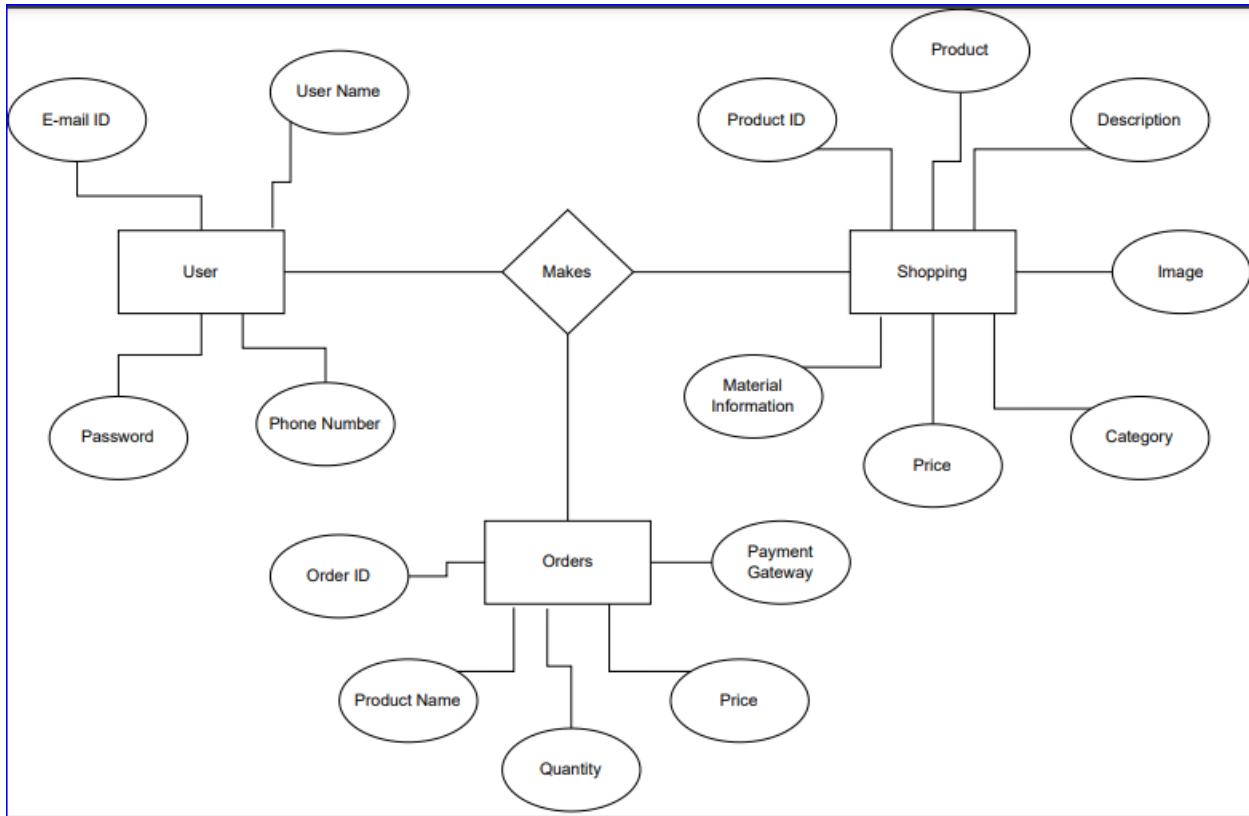


Figure 11 : ER Diagram

ER Diagram stands for Entity Relationship Diagram, also known as ERD is a diagram that displays the relationship of entity sets stored in a database. In other words, ER diagrams help to explain the logical structure of databases. ER diagrams are created based on three basic concepts: entities, attributes and relationships. ER Diagrams contain different symbols that use rectangles to represent entities, ovals to define attributes and diamond shapes to represent relationships. This ER diagram has 3 entities: Shopping, Orders and Users. User has a user id, password and phone numbers. Users and Artists(Seller) have to register themselves on the site separately. Database is maintained to contain user's information including their delivery address and sellers information along with the items to be sold. Modifications are updated onto the database. Users can select their art piece and can add it to their cart.

Chapter 4 . Implementation

Implementation

The Artisans website is designed in such a way that the disabled Users and Artists(Seller) have to register themselves on the site separately . Database is maintained to contain user's information including their delivery address and sellers information along with the items to be sold. Modifications are updated onto the database. Users can select their art piece and can add it to their cart.

4.1 Technology Used

4.1.1 MERN



MERN Stack is a Javascript Stack that is used for easier and faster deployment of full-stack web applications. MERN Stack comprises 4 technologies namely: **MongoDB**, **Express**, **React** and **Node.js**. It is designed to make the development process smoother and easier. Each of these 4 powerful technologies provides an end-to-end framework for the developers to work in and each of these technologies play a big part in the development of web applications.

MongoDB -

MongoDB is an open-source document database built on a horizontal scale-out architecture that uses a flexible schema for storing data. Founded in 2007, MongoDB has a worldwide following in the developer community.

Instead of storing data in tables of rows or columns like SQL databases, each record in a MongoDB database is a document described in BSON, a binary representation of the data. Applications can then retrieve this information in a JSON format.

ExpressJS-

Express.js, or simply Express, is a back end web application framework for building RESTful APIs with Node.js, released as free and open-source software under the MIT License. It is designed for building web applications and APIs. It has been called the de facto standard server framework for Node.js.

ReactJS-

React (also known as React.js or ReactJS) is a free and open-source front-end JavaScript library for building user interfaces based on UI components. It is maintained by Meta (formerly Facebook) and a community of individual developers and companies. React can be used as a base in the development of single-page, mobile, or server-rendered applications with frameworks like Next.js. However, React is only concerned with state management and rendering that state to the DOM, so creating React applications usually requires the use of additional libraries for routing, as well as certain client-side functionality.

NodeJS-

Node.js is a cross-platform, open-source server environment that can run on Windows, Linux, Unix, macOS, and more. Node.js is a back-end JavaScript runtime environment, runs on the V8 JavaScript Engine, and executes JavaScript code outside a web browser.

Node.js lets developers use JavaScript to write command line tools and for server-side scripting. The functionality of running scripts server-side produces dynamic web page content before the page is sent to the user's web browser.

4.1.1 Site Structure

HTML

HTML stands for Hyper Text Markup Language. It is the standard markup language for creating web pages. It describes the structure of a web page. HTML consists of a series of elements. HTML elements tell the browser how to display the content.

Sass:

Sass consists of two syntaxes. The original syntax, called "the indented syntax," uses a syntax similar to Html. It uses indentation to separate code blocks and newline characters to separate rules. The newer syntax, SCSS (Sassy CSS), uses block formatting like that of CSS. It uses braces to denote code blocks and semicolons to separate rules within a block. The indented syntax and SCSS files are traditionally given the extensions .

Javascript

JS or Javascript is used to program the behavior of web pages. JS libraries and frameworks make website and application development easier with wide-ranging features and functionalities. In this project, JS will be mainly used in the front-end for client-side validation.

Strapi:

Strapi is a company offering an open-source headless content management system (CMS). Incorporated in France in 2016, Strapi is now headquartered in San Francisco with a remote workforce. A Node.js-based, back-end only CMS, Strapi aims to give developers the freedom to use their favorite tools while making it easier for editors to manage their content. Typical use cases include static websites, mobile apps, e-commerce, editorial, and corporate websites.

Key Strapi features include the following:

- Open source (the codebase is published on GitHub under a standard MIT license)
- Self-hosted
- Customizable
- Extensible by design

Stripe:

The Stripe plugin for WooCommerce allows you to accept payments directly on your store for web and mobile. With Stripe, customers stay on your store during checkout instead of being redirected to an externally hosted checkout page, which has been proven to lead to higher conversion rates.

Stripe is a simple way to accept payments online. Stripe has no setup fees, no monthly fees, and no hidden costs. Hundreds of thousands of businesses—ranging from startups to Fortune 500 companies—rely on Stripe's software tools to securely accept payments and expand globally.

4.2 Testing

Testing is the process of evaluation of a system to detect differences between given input and expected output and also to assess the features of the system. Testing assesses the quality of the product. It is a process that is done during the development process. Tests can be conducted based on two approaches –

- Functionality testing
- Implementation testing

The testing method used here is Black Box Testing. It is carried out to test functionality of the program. It is also called ‘Behavioral’ testing. The tester in this case, has a set of input values and respective desired results. On providing input, if the output matches with the desired results, the program is tested ‘ok’, and problematic otherwise.

Everything in this project is tested, testing was also done while making this project simultaneously and after making the project.

4.2.1 Test cases

A test case is a specification of the inputs, execution conditions, testing procedure, and expected results that define a single test to be executed to achieve a particular software testing objective, such as to exercise a particular program path or to verify compliance with a specific requirement.

Test cases for this project:

- **Test cases for Registration form**

1. Verify that the Registration form contains Username, First Name, Last Name, Password, Confirm Password, Email Id, Phone number, Enterprise name, Location, Verify that tab functionality is working properly or not
2. Verify that Enter/Tab key works as a substitute for the Submit button
3. Verify that all the fields such as Username, First Name, Last Name, Password and other fields have a valid placeholder.
4. Verify that the labels float upward when the text field is in focus or filled (In case of floating label)
5. Verify that all the required/mandatory fields are marked with * against the field
6. Verify that clicking on submit button after entering all the mandatory fields, submits the data to the server
7. Verify that the system generates a validation message when clicking on submit button without filling all the mandatory fields.
8. Verify that entering blank spaces on mandatory fields lead to validation error
9. Verify that clicking on submit button by leaving optional fields, submits the data to the server without any validation error
10. Verify that system generates a validation message when entering existing username
11. Verify that the validation of all the fields are as per business requirement.
12. Verify that the validation of email field by entering incorrect email id
13. Verify that the password is in encrypted form when entered
14. Verify whether the password and confirm password are same or not.

- **Test Cases for Login form**

1. Verify if a user will be able to login with a valid username and valid password.
2. Verify if a user cannot login with a valid username and an invalid password.
3. Verify the login page for both, when the field is blank and Submit button is clicked.
4. Verify the messages for invalid login.
5. Verify if the data in password field is either visible as an asterisk or bullet signs.
6. Verify if the 'Enter' key of the keyboard is working correctly on the login page.
7. Verify the time taken to log in with a valid username and password.
8. Verify the login page and all its controls in different browsers.

- **Test Cases For Upload features form**

1. Verify if a artisans will be able to upload pictures.

2. Verify if all fields are working properly.

- **Test Cases for Layout page GUI**

1. Testing the size, position, width, height of the elements.
2. Testing of the error messages that are getting displayed.
3. Testing the different sections of the screen.
4. Testing of the font whether it is readable or not.
5. Testing of the screen in different resolutions with the help of zooming in and zooming out like 640 x 480, 600×800, etc.
6. Testing the alignment of the texts and other elements like icons, buttons, etc. are in the proper place or not.
7. Testing the colors of the fonts.
8. Testing the colors of the error messages, warning messages.
9. Testing whether the image has good clarity or not.
10. Testing the alignment of the images.
11. Testing of the spelling.
12. The user must not get frustrated while using the system interface.
13. Testing whether the interface is attractive or not.
14. Testing of the scrollbars according to the size of the page if any.
15. Testing of the disabled fields if any.
16. Testing of the size of the images.
17. Testing of the headings whether it is properly aligned or not.
18. Testing of the color of the hyperlink.

4.2.2 Test Results

Test Cases	Executed	Passed	Pending	Performance (positive/negative)
Registration form	100%	100%	0	Positive
Login form	100%	100%	0	Positive
Upload Artworks	100%	100%	0	Positive
Home page	100%	99%	1%	Negative
Payment gateways	100%	100%	0	Positive

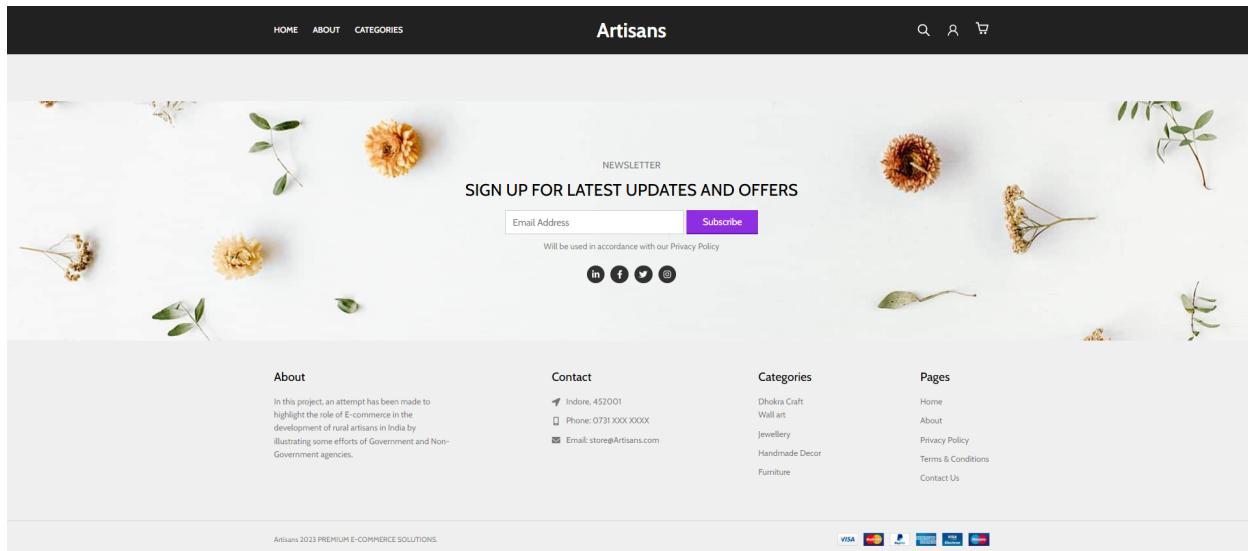


Figure10. About us



Figure11. Validation field

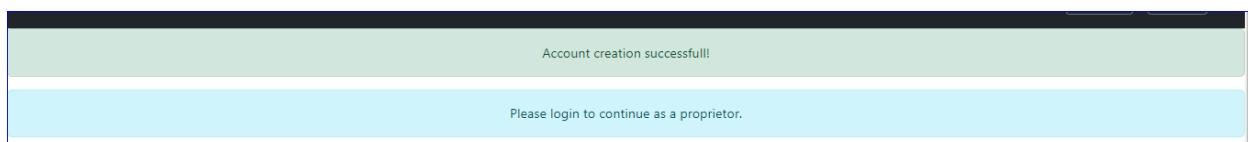


Figure12. Colour-coded Flash Messages

Chapter 5.Conclusion

Conclusion

The rural artisans do not get the exposure they deserve and are not very well connected to the wider market of the nation. A normal art lover is not able to buy artwork due to various reasons mainly because of poor access to the market. Local & individual artisans can benefit with the exposure to digital platform. Online retailing removes the need for a middle-man to facilitate the sales. Portal enables sellers to register to sell their products online. Right marketing will help to reach wider customer bases. Digital platforms are easy to maintain and cater to a variety of people. True skills of artisans would be showcased to earn them the respect that they rightfully deserve. Financial benefit would be marginally better as compared to selling via a middle-man. Shift of emphasis towards "Made in India" products can help gain the required traction.

5.1 Limitations

- Product Suitability.
- It is not possible for people to physically examine the product in eCommerce. In many cases, the original product may not match the picture or specifications in the eCommerce site. This absence of 'touch and feel' creates a discouraging effect.
- Huge Technological Cost.
- Last but not the least; a lot of money needs to be invested to build up the technical infrastructure needed to run an eCommerce business. Moreover, they need to be upgraded to keep abreast with the changing technology.

5.2 Suggestion and Recommendations for Future Work

- Delivery Should be fast (within 7 days all India)
 - Reach to Artisans Should be there.
 - Should be more informative.
 - Assistance to the artisans who don't know how to use this site.
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Guide Interaction Sheet

