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Limited Edition Digital Art Marketplaces and Scarcity

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ABSTRACT-

India, a country of great cultural heritage and India's cultural diversity in the form of art and craft. Products provides plenty of opportunities to the local artists. In today's world, most people are using technology for leading their lives and fulfilling their daily needs. In this generation most of us are using E-commerce websites for shopping clothes, groceries, and electronics. We will be developing one E-commerce web application by using MERN stack technology , featuring a react based front-end and a node.js powered back-end providing a seemless user experience. The system employs MongoDB for data storage and management , while strip is integrated as the payment gateway to ensure security and hassle free transaction .

The global expansion of e-commerce has transformed traditional marketplaces, offering artisans an unprecedented opportunity to showcase and sell their unique, handmade creations. "KALAKRITI" is a committed online retail website intended to connect conventional Indian craftspeople and a global public in order to protect and project India's deep handicraft culture. As distinct from commercial products made on an industrial scale, KALAKRITI provides solely original, hand-made products that underscore uniqueness, cultural importance, and workmanship. The site empowers rural and small-town community artisans by offering an organized marketplace with powerful digital tools for product showcase, marketing, and direct interaction with buyers. The distinguishing feature of KALAKRITI is how it achieves eliminating intermediaries, providing fair trade, and optimizing the profit margins of artisans and ensuring transparency in pricing and quality. The site provides user-friendly interface, secure payment facilities, multiple language support, and an engaging interface that bridges the buyer directly with the creators. Additionally, KALAKRITI encourages community building through online workshops, storytelling capability, and collaborative partnerships with design specialists to build a sustainable and dynamic ecosystem of artisans. As people are increasingly demanding sustainable and ethical products all over the world, KALAKRITI is a revolutionary model that not only preserves the traditional craft but also empowers local economies by providing artisans with a way to prosper in the digital era. The ultimate long-term aim of the platform is to establish a self-sustaining ecosystem where technology meets heritage, promoting innovation while upholding the integrity of handcrafted artistry. Through the application of a solid database system for inventory management and smooth logistics integration, KALAKRITI provides a smooth supply chain that is mutually beneficial to artisans and consumers. Overall, the project helps to preserve culture, stimulate economic growth, and deepen appreciation for handmade perfection in a fast-digitizing world.

Keywords—Kalakriti, Mern stack, JavaScript, Framework, Library, Performance Analysis, React.Js, MongoDB, Node.js, Express.Js

1. Introduction

In the last few years, e-commerce websites have become common in most industries, including the art industry. Artisans are those people who make handmade goods, including art, crafts, and jewellery. Artisans find it difficult to sell their products because there is not enough exposure and marketing available for them. E-commerce is an answer to all these difficulties by providing artisans with a place where they can promote and sell their products on the internet. Online websites have provided artists with the chance to expose and sell their work to a worldwide audience, opening new sources of revenue and new horizons. In this paper, we will talk about designing an e-commerce site for artists employing the MERN (MongoDB, Express, React, and Node) stack. The site will provide a simple-to-use platform for artists to sell their work online and will give buyers an easy means of finding and buying art.

The e-commerce industry in India has not yet fully embraced the handicrafts sector, which is the second largest employer in the country. This presents an opportunity to create a digital platform for handicraft sellers and artisans to promote and sell their products. With the current emphasis on "Make in India" products, this platform may be especially useful for local artisans. Moreover, by enabling individual artisans to apply directly to sell their products on the platform, they can directly gain financial benefits. This project is intended to offer a means for sellers to register and sell their products online to a large number of people.

For customers to access the platform, artisans just have to sign up and establish a profile in which they can post information regarding their crafts, such as images and descriptions. Through this, customers can shop and find numerous handmade goods. Beyond empowering single artisans, the online shop also offers a platform for small-scale producers to sell their handmade goods. This makes it possible for consumers to navigate and buy items straight from the creators, as opposed to using an intermediary. Generally, the objective of the online store is to provide a direct and easy means for artisans and small-scale manufacturers to sell their crafts, and to offer customers access to a variety of interesting and nicely produced products The Handicrafts E-commerce is a project that has been created to assist and empower local artisans. These craftsmen usually have middlemen carry out the sales and distribution of their work, but this can cost them a large chunk of their earnings in the form of commission.

The online store's digital platform enables artisans to cut out the middleman and sell their goods directly to customers. This allows them to exhibit their talents and skills to more people, in addition to maintaining a larger proportion of the proceeds from their sales. Aside from offering a venue for solo artisans to sell their handicrafts, the online shop also accommodates small-scale producers who make handmade goods. Through the offering of a direct link between such producers and customers, the online shop ensures that these producers and artisans can make a reasonable and rightful profit for their goods. In general, the primary aim of this project is to assist artisans by providing them with a platform through which they can present their abilities and market their own work directly to consumers, the web shop seeks to empower these artisans and enable them to gain the acknowledgement .

2. Problem Statement

The artisans who produce handmade goods generally struggle to sell their goods online because they lack technical knowledge and resources. There is a requirement for a platform that allows artisans to sell and market their products online, without the necessity to care about the technicalities of creating an e-commerce site. Offering a single platform to all artist to create, promote and trade excellent quality handicrafts and merchandise.

3. Technologies Used

A . MERN Stack

MERN stack is short for four popular technologies - MongoDB, Express, React, and Node. MERN stack is widely used for developing web applications and offers a solid and scalable platform for web application development. MongoDB is a No-SQL database specially designed to keep data in J SON-like documents. MongoDB is primarily used to develop scalable and dynamic databases, and hence most suitable for web applications. Express is a widely used web application framework for Node.js that offers a high-quality set of features to develop web applications.mExpress supports the creation of web applications through offering a variety of tools and features that include middleware, routing, and templating engines. React is a JavaScript library for creating user interfaces. React offers a component-based approach which allow you to build reusable UI components, which can be used in many places of the application.

NodeJs is a JavaScript runtime developed on top of the Chrome V8 JavaScript engine. NodeJs provides a set of features that allow web app development, supporting an embedded HTTP server and an extensible, module-based model of handling dependency.

B. Advantages of MERN

1. Full-stack javascript
2. 2) Fast development
3. 3) Scalability
4. 4) Community support

4 . Methodology

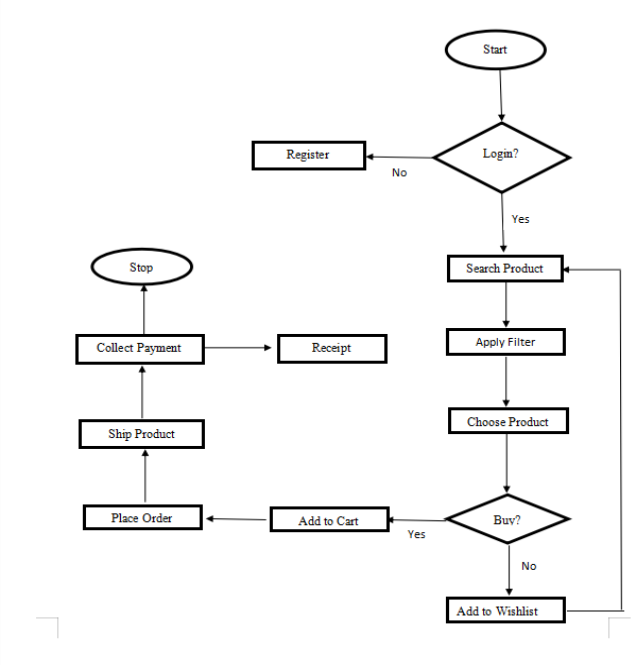
The system was designed with aspects such as seamless user experience, secure payment, and increased connectivity in mind.

The architecture pattern was applied to design the platform, comprising a Model (manages data logic), View (which presents information from the model to the user), and Controller (manages the flow of data to the database).

The system is segmented into two categories: one for buyers and another for sellers. Buyers can select items they wish to purchase from a large variety of choices, make safe payments, place orders. on the other hand, can have the option of editing product details and seeing all orders, and also mark them as delivered once they have been delivered.

Access to the seller's section is allowed only to confirmed and registered businesses on the site. Login/registration module, a payment module, and an order module are some of the other components

Fig.ER Diagram



Our main aim is to help local artisans build their businesses and boost their profits using our e-commerce platform. We value the necessity to provide these artisans an opportunity to sell and market their handmade products to a wider market, and we hope to make it as easy as possible for them to do so through the use of new technologies. By supporting these artisans and allowing them to access more customers online, we aspire to be a contributor to the success and growth of the artisan community in India.this project will be planned with the objective of bridging the gap between the consumers and the producers of India.

A. Demand Forecasting

It is one of the biggest e-commerce challenges to predict demand for a product.

By examination of past data including various product characteristics such as category, brand, price, launch date, and past demand. By analyzing this information, it is possible to predict more precisely future demand for this product.

B. Price Forecasting

Previously, product pricing has been done based on methods such as considering competition and the maximum retail price (MRP).

C. Product Recommendation

Recommendation generation refers to the process of identifying ways of recommending products to users based on their history and interests. A common approach is to Suggest products that other users who share similar characteristics have bought or have shown interest in. Recommendations can be in the form of referring to products that are often bought together or suggesting products for a given user based on their history.

5 . Review

This e-commerce is more convenient to the individuals intended to purchase the goods and it is also useful to the sellers of handicrafts.

Fig. 1 The user must register to the website by completing the information required such as first name, last name, username, email,address, mobile number, and password.

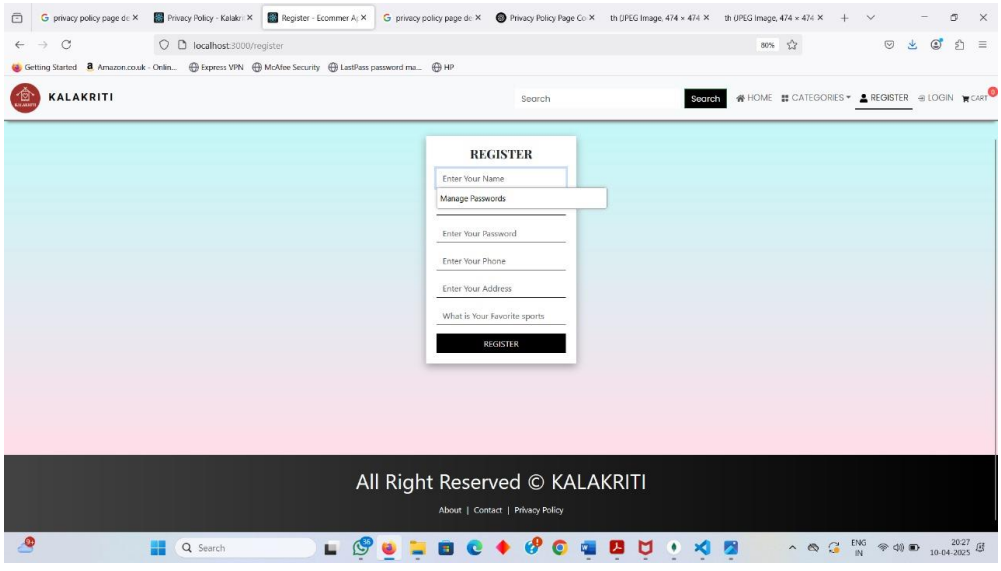


Fig. 2 Go to the login page. If the user is already a member, he can directly login using the credentials .

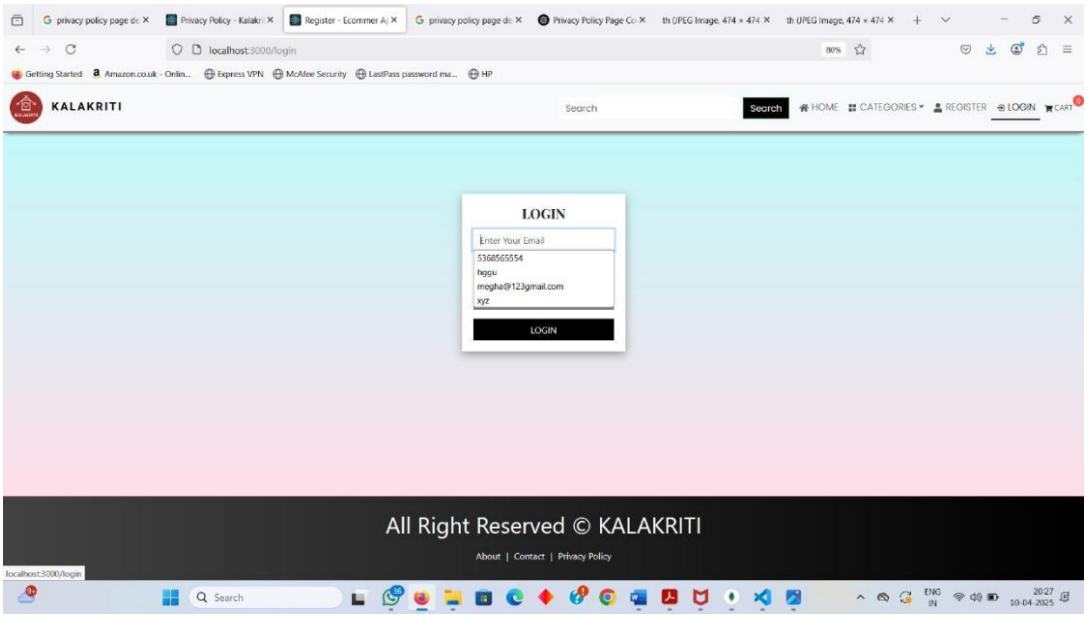


Fig. 3 After logging in user can see the home page where he or she can find the handicraft products to buy.

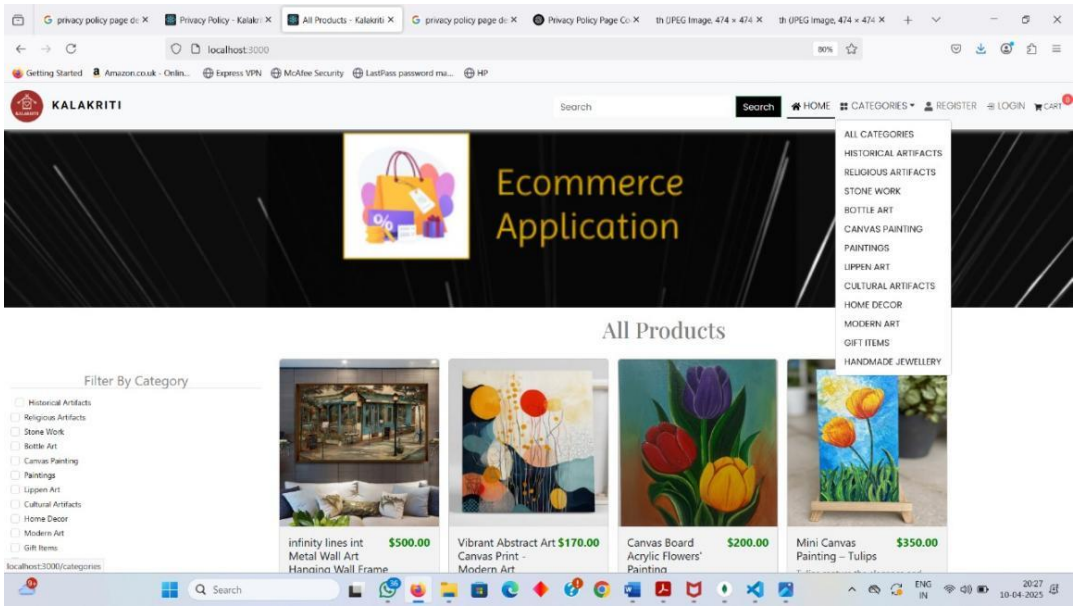


Fig. 4 User can select the products he or she wants to buy and then they can add it to the cart. They can also give reviews .

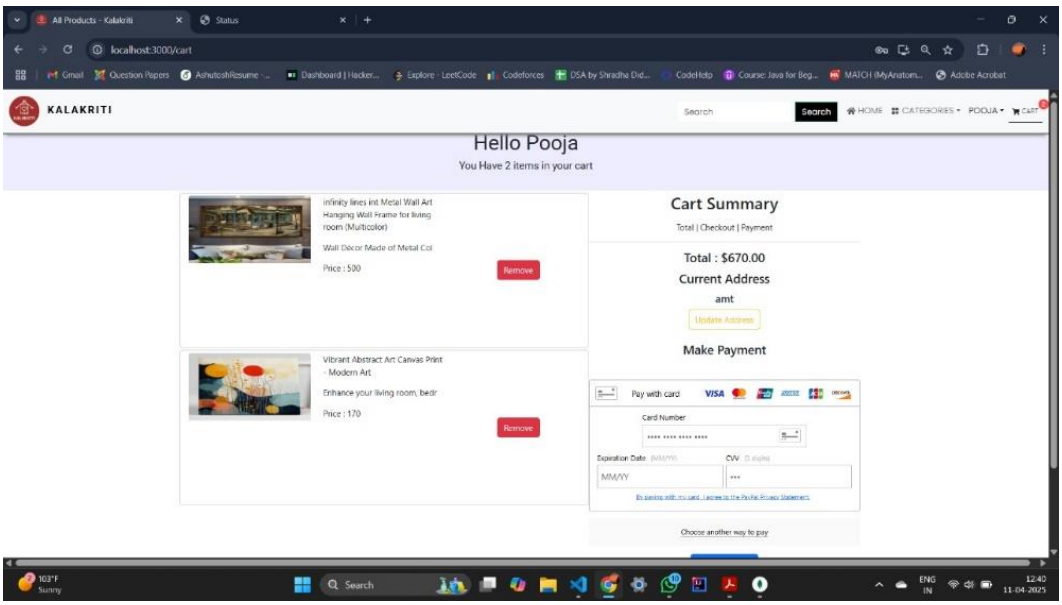


Fig. 5 After buying the product user can checkout.

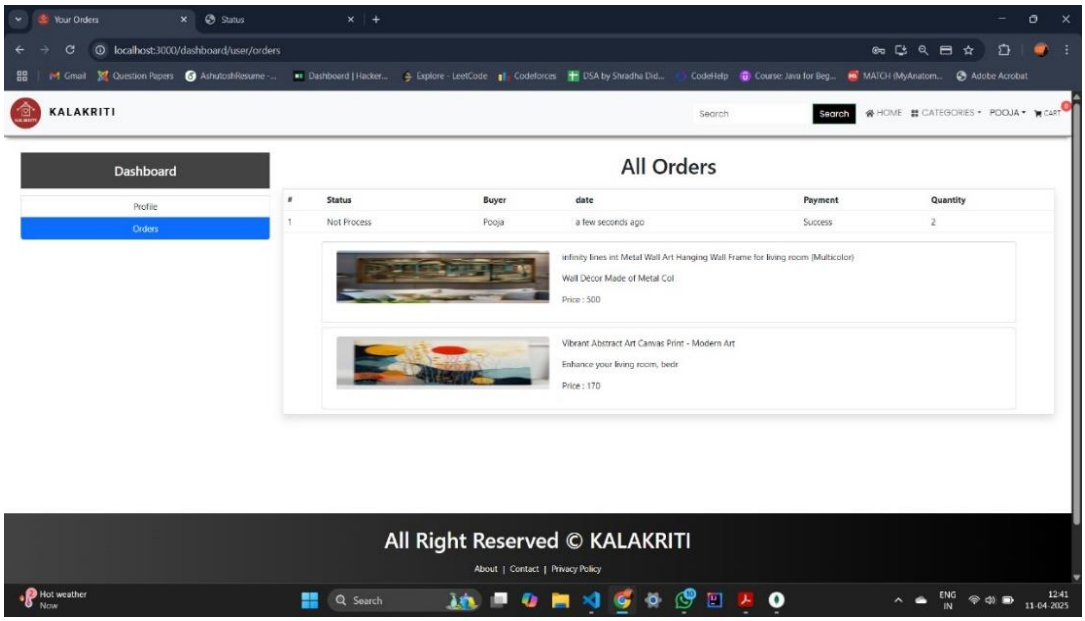
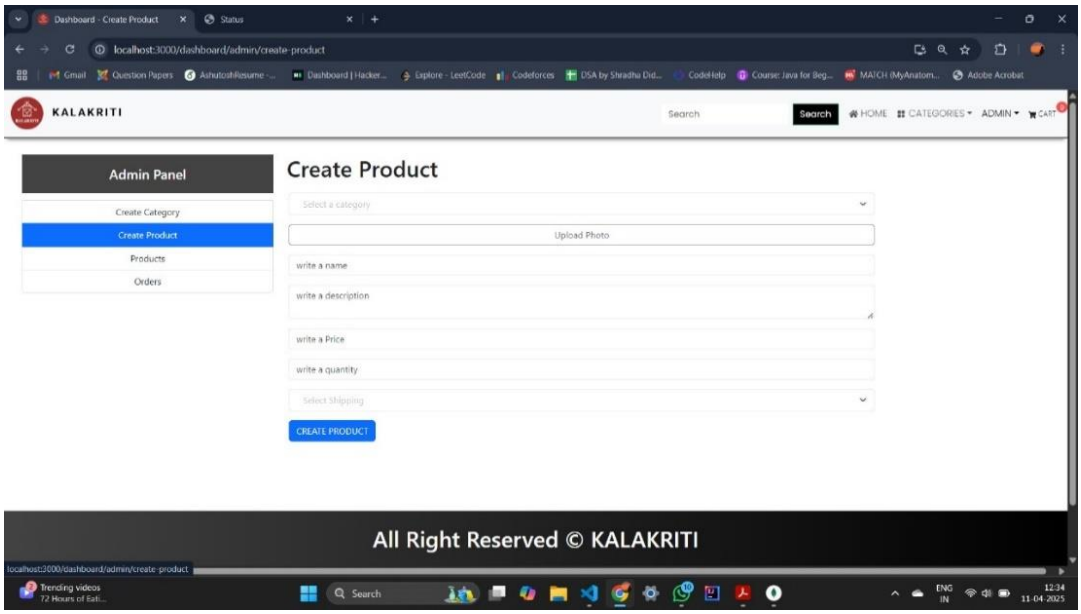


Fig. 6 Admin can login and upload the Handicraft products when required or when new products are available.



6. Conclusion

A online website is a website where consumers purchase products that are made by hand directly from producers via the internet.
Compared to so many other online stores dealing with electronic gadgets, clothing, footwear, furniture, and household appliances, this type of website particularly specializes in hand-crafted goods. It offers direct access between consumers and producers, allowing consumers to find and buy large quantities of hand-made products from one source. Such a location is beneficial to both consumers and craftsmen because it provides easy access to handmade items and is a lucrative point of sale for weavers. The online platform gives a direct connection between handloom purchasers and craftsmen.with their rural basis, are employed by various user groups such as weavers, retailers.
The building of the e-commerce website KALAKRITI has been achieved successfully, and it has fulfilled all their requirements imposed by the stakeholders. The implementation of the front-end, back-end has been done with care to create a smooth and user-friendly experience for customers. Besides, there has been extensive testing carried out, the test results have confirmed that the system works fine and efficiently.
In short, the successful production of KALAKRITI has demonstrated our team's capacity to releasing cutting-edge
e-commerce solutions. But there is always room for improvement, and future work can include adding new features and
integrating with additional payment gateways. We also plan to continue to track and improve the performance of the system to maintain its reliability and efficiency for our users.

In short, the employment of KALAKRITI has resulted in the creation of a trail blazing e-commerce website that allows the creation of sustainability of handicraft and handloom Indian industry, giving direct employment to local artists market link to consumers and to the country's cultural heritage.

7. REFERENCES

[1] Gupta, A. (2014). E-commerce: Role Of E Commerce In Today's Business. International Journal of Computing and Corporate Research, 4(1), 1-6.

[2] IBEF. (2022). E-commerce in India: Market size, growth rate, and key drivers. Retrieved from https://www.ibef.org/industry/e-commerce presentation.

[3] Ullah, S. E., Alauddin, T., & Zaman, H. U.(2016, January). Developing an e-commerce website. In Krishna4 , D.Venkata Sai Kumar5 , B. Uma Rani6. ECommerce Website For Handloom. International Journal of Research Publication Reviews Journal homepage: www.ijrpr.com ISSN 2582-7421/May 2022.

[4] https://www.investindia.gov.in/sector/textilesapparel/handlooms-handicrafts

[5] King, D. N., & King, D. N. (2004). Introduction to e-commerce. Prentice Hall. [9] Nemat, R. (2011). Taking a look at different types of ecommerce. World Applied Programming, 1(2), 100-104.

[6] Gunasekaran, A., Marri, H., McGaughey, R., &Nebhwani, M. (2002). E-commerce and its impact on operations management. International Journal Of Production Economics, 185-197.

[7] Amisha Shah, Rajev Patel, “E-COMMERCE AND RURAL HANDICRAFT ARTISANS”, December 2016

[8] A. Rajapaksha, N. Maduranga, and K. Hettiarachchi, \"Development of a Web-Based E-commerce Platform for Artisans using MERN Stack,\" in 2021 International Conference on Advances in Computing, Communication and Networking(ICACCN), Sri Lanka, 2021, pp1-6,doi:10.1109/ICACCN52513.2021.9525232.

[9] H. Raj, N. Kumar, and M. Rana, \"Development of E-commerce Website for Artisans using MERN Stack,\" in 2021 International Conference on Power, Control, Communication and Computational Technologies (ICPCCCT), Tamil Nadu, India, 2021, pp. 238-243, doi: 10.1109/ICPCCCT51662.2021.9376571.

[10] K. Mishra, M. V. Rao, and K. Mishra, \"MERN Stack-based E-commerce Website for Handicrafts,\" 2021 International Conference on Emerging Trends in Information Technology and Engineering (ic-ETITE), Hyderabad, India, 2021, pp. 1-5,doi: 10.1109/ETITE51708.2021.9461557.