# **RURAL ARTISANS MARKETING WEBSITE**

#### A PROJECT REPORT

Submitted by

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 $in\ partial\ fulfillment\ for\ the\ award\ of\ the\ degree$ 

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# RAJALAKSHMI ENGINEERING COLLEGE ANNA UNIVERSITY, CHENNAI

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# **BONAFIDE CERTIFICATE**

Certified that this thesis titled "RURAL ARTISANS MARKETING WEBSITE" is the bonafide work of "ADHARSHINI C (210701014), AMIRDHA M (210701026)" who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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#### **ABSTRACT**

Traditional handicrafts are very popular in rural India, but craftsmen often struggle to find customers and make a living. The Rural Artisans Marketing Website addresses this issue by empowering craftsmen and expanding their market reach. Featuring three distinct logins—administrator, seller, and buyer—the website facilitates seamless interaction and commerce. Its intuitive interface allows easy registration and login for both buyers and sellers. Rural artisans can manage their business ventures by displaying products, setting prices, and tracking inventory through their personalized dashboards, ensuring fair compensation for their skills. Buyers can explore a diverse range of traditional products, including pottery and handloom materials, with comprehensive listings and images to make informed purchases. The website's support for exhibitions allows artisans to personally showcase their goods, fostering direct communication with customers and enhancing awareness of traditional craftsmanship. Marketing strategies like sales and discounts further encourage product exploration and purchases. The admin dashboard ensures smooth operation by managing data and monitoring user activity. The Rural Artisans Marketing Website represents a significant step towards empowering rural craftsmen, promoting economic sustainability, and preserving cultural heritage. By leveraging technology, the platform aims to eliminate barriers and create opportunities for artisans to thrive in the digital age. Additionally, it fosters direct communication between buyers and artisans, enhancing the appreciation for traditional craftsmanship.

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# TABLE OF CONTENTS

CHAPTER NO.	TITLE	PAGE NO.
	ABSTRACT	iii
	LIST OF FIGURES	vii
	LIST OF TABLES	vii
1.	INTRODUCTION	1
	1.1 INTRODUCTION	1
	1.2 PROBLEM STATEMENT	2
	1.3 SCOPE OF WORK	2
	1.4 AIM AND OBJECTIVE	3
	1.5 RESOURCES	3
	1.6 MOTIVATION	4
2.	LITERATURE SURVEY	5
	2.1 SURVEY	5
	2.2 EXISTING SYSTEM	7
	2.3 PROPOSED SYSTEM	8
	2.4 ALGORITHM	9
3.	SYSTEM DESIGN	11
	3.1 GENERAL	11
	3.2 ARCHITECTURE DIAGRAM	11

	3.3 DEVELOPMENTAL ENVIRONMENT	12
	3.3.1 HARDWARE REQUIREMENT	12
	3.3.2 SOFTWARE REQUIREMENT	12
	<b>3.4</b> FLOW DIAGRAM	13
4.	PROJECT DESCRIPTION	14
	<b>4.1</b> METHODOLOGY	14
	4.2 MODULES	15
	4.2.1 USER AUTHENTICATION	15
	4.2.2 PRODUCT MANAGEMENT	16
	4.2.3 ORDER PROCESSING MODULE	17
	4.2.4 SEARCH & FILTERING MODULE	17
	4.2.5 EXHIBITION MANAGEMENT	18
5.	RESULT & DISCUSSION	19
	5.1 OUTPUT	19
	5.2 RESULT	25
6.	CONCLUSION & FUTURE	26
	ENHANCEMENT	
	6.1 CONCLUSION	26
	<b>6.2</b> FUTURE ENHANCEMENT	27
	APPENDIX	28
	DEFEDENCES	3/

# LIST OF FIGURES

FIGURE NO.	TITLE	PAGE NO.
3.2	SYSTEM ARCHITECTURE	11
3.4	FLOW DIAGRAM	13
5.1	HOME PAGE	19
5.2	ARTIST LOGIN PAGE	19
5.3	NEW CUSTOMER REGISTER	20
5.4	REGISTER LOGIN PAGE	20
5.5	HOME PAGE FOOTER	21
5.6	ART KIT	21
<b>5.7</b> EXHIBITION SHOWCASE		22
5.8	EXHIBITION DETAILS	22
5.9	ARTIST'S MARKET	23
5.10	PRODUCT DETAILS	23
5.11	HIRE LABOUR	24
5.12	DATABASE	24

# LIST OF TABLES

TABLE NO.	TITLE	PAGE NO.
4.3	HARDWARE REQUIREMENTS	12

#### **CHAPTER 1**

#### INTRODUCTION

#### 1.1 INTRODUCTION:

In India's rural areas, where customs are strongly ingrained and skill is highly valued, artisans are essential to maintain both the local economy and cultural legacy. Nevertheless, many rural artisans find it difficult to get their items into mainstream marketplaces and reach a larger audience, even in spite of their priceless contributions. The Rural Artisans Marketing Website serves as a beacon of hope, providing a digital platform intended to empower craftspeople and close the distance between regional handicrafts and global consumers. This website acts as a catalyst for both cultural preservation and economic advancement, with the goal of uplifting rural craftsmen and celebrating their rich traditions.

The mission of the Rural artists Marketing Website is to enable artists to take charge of their own lives and democratize market access. The website makes it incredibly easy for craftsmen to display their goods, establish prices, and keep track of their inventory owing to its user-friendly interfaces and efficient procedures. The website enables craftsmen to establish sustainable businesses and obtain reasonable rates for their craftsmanship by cutting out middlemen and putting them in direct contact with purchasers. The empowerment of craftsmen not only improves their financial status but also cultivates a feeling of pride in their customs and cultural background.

The Rural Artisans Marketing Website also acts as a structure to the revolutionary potential of technology in advancing inclusivity and encouraging community growth. By leveraging digital platforms to amplify the voices of rural artisans, the website creates opportunities for artisans to reach a global audience and gain recognition for their craftsmanship. The website creates an environment that is conducive to the flourishing of artists, the discovery of distinctive traditional products by customers, and the celebration and conservation of cultural heritage for future generations by means of elements including buyer-seller interactions, exhibition listings, and promotional tools.

#### 1.2 PROBLEM STATEMENT:

The challenge entails creating a website for promoting traditional products, supporting the livelihoods of rural artisans and pottery makers, fostering economic sustainability, and preserving cultural heritage. In rural areas, artisans possess rich skills and knowledge in crafting handmade goods, yet they often struggle to showcase their products to a broader audience and secure fair compensation for their craftsmanship. The primary objective is to create a user-friendly website that facilitates seamless interactions between artisans and buyers, enabling artisans to showcase their unique creations and buyers to discover and purchase traditional products directly from rural artisans.

#### 1.3 SCOPE OF WORK:

This project's scope of work includes creating and launching a comprehensive online marketplace designed especially to help rural craftsmen sell their handmade goods. This entails creating a user-friendly website that has features like product listing, cart management, payment methods, seller and buyer registration, and promotional tools. Furthermore, the scope encompasses the integration of exhibition management functions, enabling craftsmen to exhibit their products at actual events and establish connections with prospective customers. Scalability and sustainability will be taken into consideration during the platform's development to guarantee that it can support rural artisans' long-term economic empowerment and adapt to their changing demands. The project will include comprehensive training resources and support for artisans to help them navigate the online marketplace effectively. Continuous feedback mechanisms will also be implemented to regularly update and improve the platform based on user experiences and evolving needy. Usability, accessibility, and inclusivity will be prioritized throughout the project to make sure the platform successfully meets the various demands of both purchasers and rural artisans and includes implementing robust administrative functionalities to manage user data, monitor website activity, and ensure smooth operation of the platform and provide a user-friendly interface.

#### 1.4 AIM AND OBJECTIVE OF THE PROJECT:

This project's main goal is to empower rural artisans by giving them a specific online platform to promote and sell their handmade goods. Enhancing economic prospects for craftspeople, promoting cultural heritage preservation, and fostering sustainable growth within rural communities are the objectives of enabling direct engagement between purchasers and artisans. By building this platform, we hope to establish a vibrant market place that celebrates and maintains the rich customs and handicrafts of rural India while also serving as a conduit between craftsmen and a broader audience. This initiative has diverse objectives, all of which are intended to help rural craftsmen market their traditional goods more successfully by addressing the different obstacles they encounter. First and foremost, the initiative aims to provide an intuitive online platform that allows craftspeople to exhibit their goods and establish direct connections with consumers. Second, by giving craftsmen chances to boost sales and make money, the site hopes to improve economic sustainability. Furthermore, by establishing a marketplace that honours and promotes traditional craftsmanship, the project hopes to support the preservation of cultural heritage. In addition, the project aims to empower rural communities by giving craftspeople the resources and tools they need to prosper in the digital era.

#### 1.5 RESOURCES:

This project has been developed through widespread secondary research of accredited manuscripts, standard papers, business journals, white papers, analysts' information, and conference reviews. Significant resources are required to achieve an efficacious completion of this project.

The following prospectus details a list of resources that will play a primary role in the successful execution of our project:

To develop and operate the rural artisans marketing website effectively, various technical resources are essential. This includes hardware such as computers, servers, and networking equipment, along with software tools for web development, content

management, and database management. Additionally, acquiring a domain name and hosting services is crucial for establishing an online presence and ensuring website accessibility.

Unrestricted access to the university lab in order to gather a variety of literature including academic resources (for e.g. online programming examples, bulletins, publications, e-books, journals etc.), technical manuscripts, etc. software that will be required to perform our research.

#### 1.6 MOTIVATION:

The understanding of the vital contributions rural artisans make to India's cultural legacy and economic environment is what inspired the creation of the rural artisans marketing website. These craftsmen, who are frequently found in isolated locations, have extraordinary talent for creating traditional goods including handicrafts, handloom fabrics, and ceramics. Due to restricted access to markets, infrastructure, and technology, many rural craftsmen struggle to market their wares outside their local markets, despite their exceptional skill. By using digital technology to build a platform that enables rural craftsmen to exhibit their goods to a worldwide audience, this project aims to close this gap, opening up new economic opportunities and protecting India's unique cultural legacy. The initiative is also driven by a goal to empower marginalised craftsmen and advance sustainable economic development in rural communities. The project intends to level the playing field so that rural craftsmen may compete and prosper in the digital economy by giving them access to a dedicated online marketplace. This programme is in line with larger attempts to close the gap between rural and urban areas and encourage inclusive growth by utilising technology to link isolated communities with larger markets. Additionally, the project helps to preserve indigenous knowledge and cultural practices by fostering traditional craftsmanship and assisting artisan livelihoods, guaranteeing that future generations will be able to recognise and cherish India's rich cultural legacy. All these factors stood as major reason that inspired the creation of the rural artisans marketing website.

#### **CHAPTER 2**

#### LITERATURE SURVEY

#### 2.1 SURVEY

(Indrajit Ghosal, Bikram Prasad, 2019), "Inspiring Digitalization of Handicraft Market: An empirical approach" [14]. This system highly focuses on the development of handicraft/ handloom market in terms of offline and online market providing more profits to the artisans. Through an empirical approach, the researchers aim to understand the dynamics of both offline and online markets for handicrafts and handloom products, identifying opportunities and challenges for artisans in adapting to digital platforms. One key aspect of the study is its emphasis on the development of both offline and online markets for handicrafts. While traditional offline markets have long been the primary avenue for artisans to sell their products, the emergence of online platforms presents new opportunities for reaching a wider audience and increasing profits. By exploring the interplay between these two market channels, the researchers seek to uncover strategies for optimizing artisans' sales and maximizing their economic returns. The study also investigates the factors influencing artisans' adoption of digital platforms and their ability to leverage online channels effectively. This includes examining the role of digital literacy, access to technology, and infrastructure support in enabling artisans to participate in e-commerce. By understanding the barriers and enablers of digitalization, the researchers aim to provide insights into how policymakers, NGOs, and other stakeholders can support artisans in transitioning to online markets.

(Shahriare Satu, Niamat Ullah Akhund, Mohammad Abu Yousuf,2017), "Online Shopping Management System with Customer Multi-Language Supported Query handling AIML Chatbot" [15]. The project has an interactive chatbot system for the users to enquire about the products and also for the regular customer service. This innovative feature allows users to interact with the system in multiple languages, streamlining product inquiries and customer service interactions

By incorporating an interactive chatbot, the project aims to improve user engagement,

provide personalized assistance, and facilitate seamless communication between users and the online shopping management system.

(Rohit Yadav, Tripti Mahara,2017), "An Empirical Study of Consumers Intention to Purchase Wooden Handicraft Items Online: Using Extended Technology Acceptance Model"[5]. In their empirical study, Rohit Yadav and Tripti Mahara delve into the consumers' intentions to purchase wooden handicraft items online, employing an Extended Technology Acceptance Model (TAM). Their research underscores the potential of online shopping to attract a broader customer base and generate increased profits. By examining the factors influencing consumers' acceptance of online platforms for purchasing wooden handicraft items, the study contributes valuable insights to the field of e-commerce and consumer behavior. Rohit Yadav argue that as by online shopping more customers may be attached and profit can also be earned more.

(Renee Garett, Jason Chiu, Ly Zhang and Sean D. Young, 2016), "A Literature Review: Website Design and User Engagement" [6], propose that different organizations have different needs and thus seeks to implement web design for the maximization of their profit. Like, an online shopping website needs to fucus mainly on advertisement of their different products and make easy transactions along with security and attractive layouts. For instance, in the context of an online shopping website, the focus should primarily revolve around effective product advertisement, streamlined transaction processes, robust security measures, and visually appealing layouts. By aligning design elements with the objectives of the organization, such as promoting products and ensuring seamless user experiences, businesses can enhance user engagement and ultimately bolster their profitability. Moreover, the study emphasizes the importance of responsive design to ensure accessibility across various devices and platforms, catering to a diverse user base. By continuously analyzing user behavior and feedback, organizations can refine their web design strategies to better meet user needs.

(Punam Kumari and Rainu Nandal,2017), "A Research paper on website Development Optimization using Xampp/PHP" describe the need of adding more web developing languages in the platform so that people can choose whatever language they find more feasible.

(Ananya Chakrabot y.,2013), "Rationale of Handicraft on Women Employment in Rural Area: A case study on Jari workers" [16]. This paper highlights the socioeconomic condition of women associated with traditional jari kari and the need for organisations / Groups or formation of cooperative societies to help remote artisans reach the buyers, emphasizing the role of cooperative societies and organizations in bridging the gap between remote artisans and potential buyers. Through a case study approach, the paper underscores the importance of empowering women artisans and facilitating their access to markets for sustainable livelihoods.

(Rajiv Patel and Amisha Saha,2016), "E Commerce and rural handicrafts artisans"[2]. The study conducted by Rajiv Patel and Amisha Saha explores the intersection of ecommerce and rural handicraft artisans, focusing on the opportunities and challenges presented by digital platforms for artisans in rural areas. Through empirical research and analysis, the study aims to understand the impact of e-commerce on the livelihoods of rural artisans, as well as the potential for leveraging digital technology to promote and market their handicraft products. By shedding light on this important subject, the study contributes valuable insights to the field of rural development and e-commerce in the context of traditional crafts.

#### **2.2 EXISTING SYSTEM:**

At the moment, traditional means of selling handicrafts—local markets, intermediaries, sporadic exhibitions, word-of-mouth recommendations, and a small web presence—are the main sources of income for rural artisans. These approaches give artisans the chance to present their goods to a local audience and sometimes take part in offline events, but they also come with drawbacks like a narrow market reach, low profitability because of the middlemen's involvement, and little exposure to potential customers outside of their immediate area. Because of this, a lot of artisans

find it difficult to make a living that is sustainable and to utilise their craftsmanship to its fullest extent within the current framework.

#### 2.3 PROPOSED SYSTEM:

By using the power of digital technology and e-commerce, the proposed rural artisans marketing website seeks to transform the way craftsmen market and sell their handicraft products. Artists using the platform will be able to present their wide variety of items, establish customised seller accounts, and connect with a global buyer base. Users will be able to find and buy genuine handicrafts straight from craftsmen on the website thanks to its user-friendly search and browsing features, which eliminates the need for middlemen. Additionally, the website will make it easier for buyers and artists to communicate, giving artisans the chance to tell the tales behind their products and build deep relationships with clients. By providing a dedicated online marketplace tailored to the needs of rural artisans, the proposed system aims to empower artisans, expand their market reach, and promote economic sustainability in rural communities. The proposed system will also include features such as an exhibition management module, allowing artisans to participate in offline events and showcase their products to a wider audience. Through integration with event management platforms, artisans can easily register for exhibitions, manage stall bookings, and access information about upcoming events. This module will enhance artisans' visibility and opportunities for offline sales, complementing the online marketplace and providing a comprehensive platform for marketing and selling handicraft products. By embracing technology and innovation, the proposed system aims to transform the landscape of rural artisans' marketing, empowering artisans to thrive in the digital age while preserving and promoting traditional craftsmanship. Through these features, the proposed system not only facilitates sales but also fosters the growth and development of rural artisans as successful entrepreneurs. By embracing technology and innovation, the proposed system aims to transform the landscape of rural artisans' marketing, empowering artisans to thrive in the digital age while preserving and promoting traditional craftsmanship

#### 2.4 ALGORITHM:

The algorithms for the rural artisans marketing website enable crucial functions like user authentication, product management, and order processing, enhancing user experience and facilitating seamless transactions between artisans and buyers. They play a pivotal role in ensuring the platform's efficiency, security, and success, driving economic empowerment and cultural preservation in rural communities.

#### User Authentication:

The user authentication algorithm serves as the gateway to the rural artisans marketing website, ensuring secure access for registered users while safeguarding against unauthorized entry. Upon accessing the website, users are prompted to provide their login credentials, typically comprising a username or email and a password. The algorithm validates these credentials against stored user data in the system's database, verifying the user's identity. Upon successful authentication, the system grants access to the user, allowing them to explore the platform's features and functionalities. In cases of invalid or mismatched credentials, the algorithm denies access and prompts the user to re-enter their login information, thereby maintaining the integrity and security of the platform.

#### **Product Management:**

The product management algorithm empowers rural artisans to showcase their unique handicraft products effectively on the website. Artisans begin by creating individual accounts and logging into the platform, gaining access to a dedicated dashboard for product management. Within the dashboard, artisans can seamlessly upload product listings, providing comprehensive details such as product name, description, pricing, high-quality images, and categorization. The algorithm ensures that artisans have the flexibility to edit, update, or remove their listings as needed, thereby enabling them to maintain an up-to-date and visually appealing storefront for potential buyers. By streamlining the product management process, the algorithm empowers artisans to effectively market their creations and expand their reach in the online marketplace. The system offers optimization tips based on customer feedback and sales trends.

#### Order Processing:

The order processing algorithm facilitates seamless transactions between buyers and artisans, ensuring a smooth and efficient purchasing experience on the rural artisans marketing website. Upon selecting desired products, buyers can add items to their virtual shopping cart and proceed to checkout. The algorithm guides users through the checkout process, prompting them to provide necessary information such as shipping address, payment method, and billing details. Once the order is confirmed, the algorithm updates the inventory to reflect the purchased items, generates an order invoice for both the buyer and the artisan, and initiates the fulfillment process. Throughout this process, the algorithm prioritizes data accuracy and transaction security, safeguarding sensitive information and fostering trust between buyers and artisans in the online marketplace.

The rural artisans marketing website employs advanced algorithms to streamline user authentication, product management, and order processing, ensuring a secure and efficient user experience. The user authentication algorithm functions as a robust gatekeeper, verifying user credentials to grant access to registered users while blocking unauthorized attempts, thus maintaining the platform's integrity and security. This ensures that only legitimate users can explore the website's features and functionalities. The product management algorithm empowers rural artisans by providing them with a dedicated dashboard to manage their product listings. Artisans can create accounts, log in, and seamlessly upload detailed product information, including names, descriptions, pricing, high-quality images, and categories. The algorithm also offers flexibility for artisans to edit, update, or remove listings as necessary, keeping their storefronts current and visually appealing. Additionally, it provides optimization tips based on customer feedback and sales trends, aiding artisans in enhancing their listings and attracting more buyers. The order processing algorithm ensures seamless transactions, updating inventory, generating invoices, and prioritizing data security. Buyers securely manage shipping and payment details during checkout, enhancing user experience and supporting artisan marketing efforts.

#### **CHAPTER 3**

#### **SYTEM DESIGN**

#### 3.1 GENERAL:

System design is the foundation of any software project, defining its architecture, functionality, and performance. System design, as it pertains to the marketing website for rural artisans, is organizing the platform's elements and structure to provide a smooth user experience. An outline of the website's structure and important factors, including database design, architecture, and user interface, are given in this part. Our goal is to create a website that supports economic sustainability, uplifts rural craftspeople, and protects cultural heritage through efficient system design.

#### 3.2 SYSTEM ARCHITECTURE DIAGRAM:

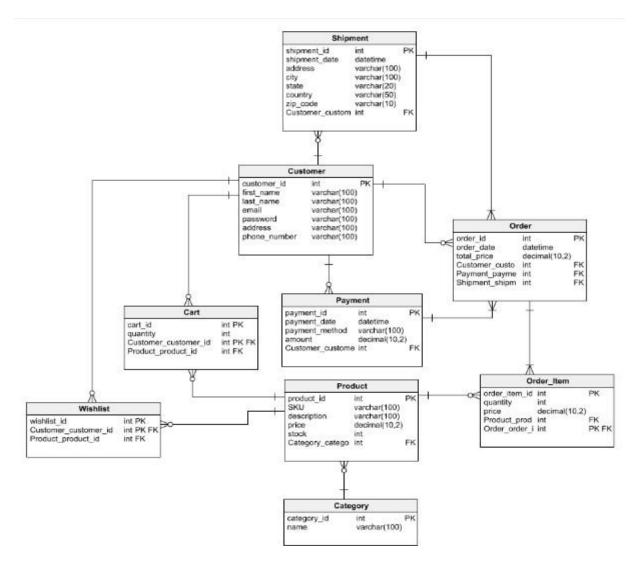


Fig 3.2 ARCHITECTURE DIAGRAM

# 3.3 DEVELOPMENTAL ENVIRONMENT: 3.3.1 HARDWARE REQUIREMENT:

The hardware requirements (Table 3.1) may serve as the basis for a contract for the system's implementation. It should therefore be a complete and consistent specification of the entire system. It is generally used by software engineers as the starting point for the system design.

COMPONENTS	SPECIFICATION
PROCESSOR	Intel Core i5
RAM	8 GB RAM
HARD DISK	512 GB
PROCESSOR SPEED	MINIMUM 1.1 GHz

**Table 3.1 Hardware Requirements** 

#### PC with

- I5 or above processor
- 8GB RAM
- Hard drive with at least 100GB of ROM
- Windows 7 or above 64-bit OS

#### **3.3.2 SOFTWARE REQUIREMENTS:**

The software requirements document is the specifications of the system. It should include both a definition and a specification of requirements. It is aset of what the system should rather be doing than focus on how it should be done. The software requirements provide a basis for creating the software requirements specification. It is useful in estimating the cost, planning team activities, performing tasks and tracking the team's progress throughout the development.

- Browser (Google Chrome recommended).
- Xampp
- Any Text Editor like Visual Studio Code
- Browser sync

#### **3.4 FLOW DIAGRAM:**

The flow diagram (as in Fig. 3.4) illustrates the process and interactions within the Rural Artisans Marketing Website. It provides a visual representation of the user journeys for administrators, sellers, and buyers.

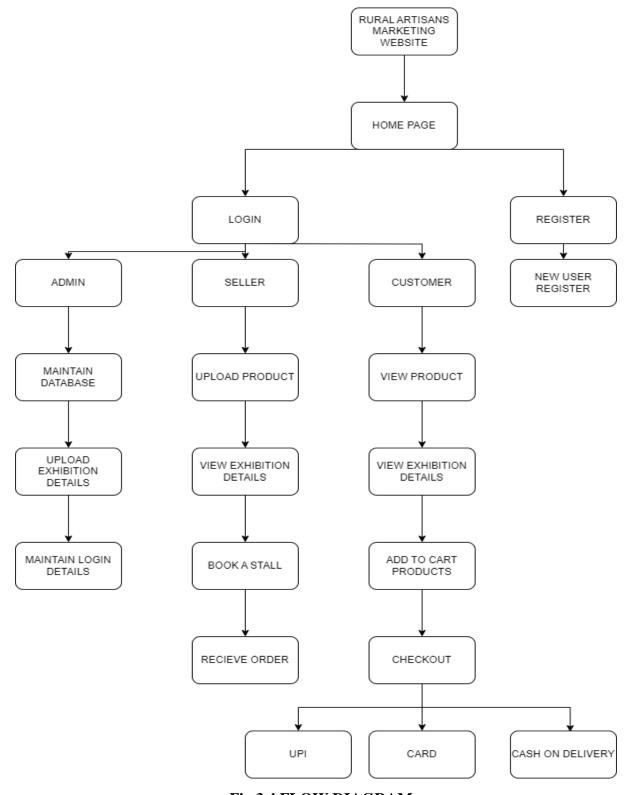


Fig 3.4 FLOW DIAGRAM

#### **CHAPTER 4**

#### PROJECT DESCRIPTION

#### 4.1 METHODOLOGY

The rural artisans marketing website project aims to create a dedicated online platform to empower rural artisans in marketing their traditional products and connect them directly with buyers. With the overarching purpose of supporting the livelihoods of rural artisans and promoting economic sustainability, this project seeks to address the challenges faced by artisans in accessing wider markets and maximizing their profit margins. Through the website, artisans will be able to showcase their craftsmanship and heritage, while buyers can discover and purchase authentic handmade products, fostering a deeper appreciation for traditional arts and culture.

Using a combination of front-end and back-end modules, the modular approach used in the construction of the marketing website for rural craftsmen ensures scalability, flexibility, and maintainability. The project is broken up into multiple major modules, each in charge of particular website functionality. With the usage of JavaScript frameworks HTML, CSS, and other technologies, the front-end module concentrates on user interaction and interface design. A smooth and simple user experience is ensured by this module, which includes features like product browsing, cart management, user registration, and checkout procedures.

The project is organised around several modules on the back end, each of which performs a different function, such as order processing, product administration, user authentication, and database interaction. Server-side programming languages such as PHP are used in the development of these modules. The application's client and server sides can connect and exchange data more easily when the back-end modules talk to the front-end. The project also includes database administration modules, which provide effective data storage, retrieval, and modification concerning users, products, orders, and other entities. Relational databases, such as PostgreSQL or

MySQL. A modular approach simplifies teamwork and promotes quick iteration and functional improvement by enabling the independent development, testing, and deployment of each module during the development process. Code quality and stability are ensured across modules by automating testing and deployment procedures through the use of continuous integration and deployment techniques. Frequent documentation procedures, version control, and code reviews all improve the project's transparency and maintainability. Through the implementation of a modular methodology customized to meet the unique needs and features of the marketing website for rural artists, our goal is to produce a stable, expandable, and user-focused platform that uplifts rural craftsmen, promotes economic sustainability, and safeguards cultural heritage.

#### 4.2 MODULE DESCRIPTION

A detailed description of the main elements and features of the website for marketing rural artisans may be found in the module description section. Within the system, every module has a distinct function. These functions range from order processing and search capabilities to user authentication and product management. We can better comprehend and arrange the numerous elements and functionalities that add to the overall functionality and user experience of the website by segmenting the project into discrete modules. We want to ensure a thorough grasp of the project's scope and implementation by offering clarity on the system's architecture, functionalities, and interactions through in-depth explanations of each module.

#### **4.2.1 USER AUTHENTICATION MODULE:**

Since it controls user access and security, the User Authentication Module is essential to the website that promotes rural artisans. Users can create accounts (as in Fig. 5.3), safely log in (as in Fig. 5.4), and maintain their profiles with this module. Strong authentication techniques, such password hashing and session management, are integrated into it to guarantee data privacy and shield user accounts from unwanted

access. Through the efficient and effective implementation of this module, website may build user confidence while protecting their personal data, resulting in a seamless and safe user experience.

Description: This module handles user authentication and authorization processes, allowing artist to register, log in (as in Fig. 5.2), and manage their accounts securely. Functionalities:

- User registration and profile creation.
- Login/logout functionality with session management.

#### **4.2.2 PRODUCT MANAGEMENT MODULE:**

The core of the website is the Product Management Module, which makes it easier to create, arrange, and display the goods (as in Fig. 5.1) that rural craftsmen sell. Craftspeople can upload product listings with thorough descriptions, high-quality photos, and price details using this module. Administrators can filter and monitor product content, guaranteeing quality and uniformity throughout the platform. To facilitate product discovery and management, advanced features could include inventory tracking, tag management, and product categorization (as in Fig.3.2). The website can effectively present the wide range of items from rural craftsmen by centralizing product management functionalities inside this module. Administrators are also empowered with powerful content management options.

Description: This module facilitates the management of products listed on the website, including adding, editing, and removing products from the catalog.

#### **Functionalities:**

- Product creation with attributes such as name, description, category, price, and images.
- Editing and updating existing product information.
- Product categorization and tagging for easy browsing.

With this function this module facilitates the management of products listed on the website, including adding, editing, and removing products from the catalog.

#### **4.2.3 ORDER PROCESSING MODULE:**

The entire online product purchase process, from adding items to the cart to completing payment and order fulfilment, is automated by the Order Processing Module. It offers several payment methods, real-time order tracking, and a smooth checkout process for users (as in Fig. 3.2). The module creates invoices for both buyers and sellers, adjusts inventory levels, and maintains order details in the background. Secure transaction processing is ensured by integration with third-party payment gateways, and order status alerts inform consumers of the status of their purchases. Description: This module handles the processing of orders placed by users, including order placement, payment processing, and order fulfilment and processes effectively. Functionalities:

- Cart management for adding/removing products and calculating total order value.
- Checkout process with multiple payment options (e.g., PayPal, credit/debit cards, cash on delivery).
- Order tracking and status updates for users.

#### 4.2.4 SEARCH AND FILTERING MODULE:

By providing simple search and filtering features, the Search and Filtering Module improves user navigation and product discovery (as in Fig. 5.9). Even for enormous product catalogues, this module provides accurate and pertinent search results in real-time by utilizing sophisticated search algorithms and indexing techniques. To locate exactly what they're looking for, users can hone their search queries using a variety of criteria, including category, price range, and user ratings (as in Fig.5.10). To improve the user experience even more, the module offers capabilities like search result sorting and autocomplete suggestions. This module boosts engagement and conversion rates by enabling visitors to identify things of interest fast, which is what makes the website successful as a marketplace for rural artisans. The Search and Filtering Module makes

it easier for users to navigate and find products by providing simple search and filtering features.

Description: This module enables users to search for products based on specific criteria and apply filters to refine search results.

#### Functionalities:

- Keyword-based search functionality with autocomplete suggestions.
- Filter options based on product attributes (e.g., category, price range, ratings).
- Sorting options to arrange search results based on relevance, price, or popularity.

#### 4.2.5 EXHIBITION MANAGEMENT MODULE:

The Exhibition Management Module makes it easier for rural craftsmen to participate in live events and exhibitions, expanding their reach beyond the internet sphere. Artists have the ability to peruse forthcoming exhibits (as in Fig. 5.7), get information about events (as in Fig. 5.8), and reserve booths to present their goods to a larger customer base. The module simplifies the exhibition management process for both organizers and attendees by managing the logistics of stall allocation. This module facilitates the connection between rural craftsmen and customers in various settings, hence promoting community participation and economic progress. This ensures efficient event coordination and maximizes participation opportunities, ultimately fostering community engagement and economic growth.

Description: This module provides functionality related to managing and participating in exhibitions, allowing artisans to showcase their products in physical events.

#### **Functionalities:**

- Exhibition listing with details such as location, date, and organizer information.
- Stall booking and registration for artisans interested in participating in exhibitions. Exhibition browsing and information viewing for users.

#### **CHAPTER 5**

#### **RESULTS AND DISCUSSIONS**

#### **OUTPUT:**



Fig 5.1 HOME PAGE

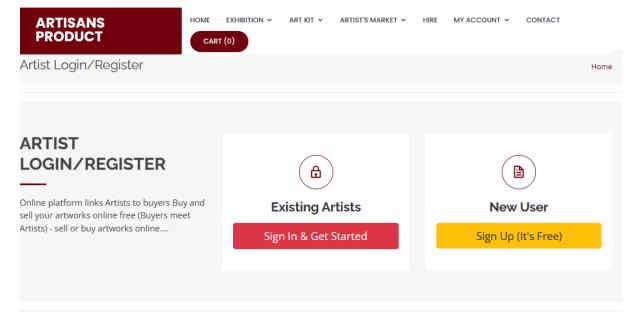


Fig 5.2 ARTIST LOGIN PAGE

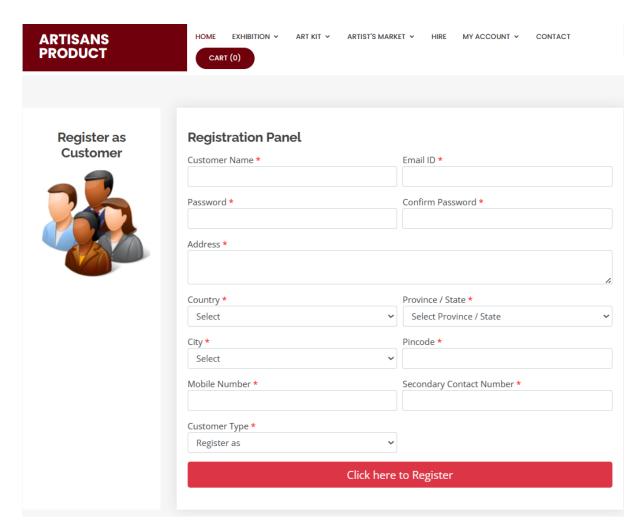


Fig 5.3 NEW CUSTOMER REGISTER

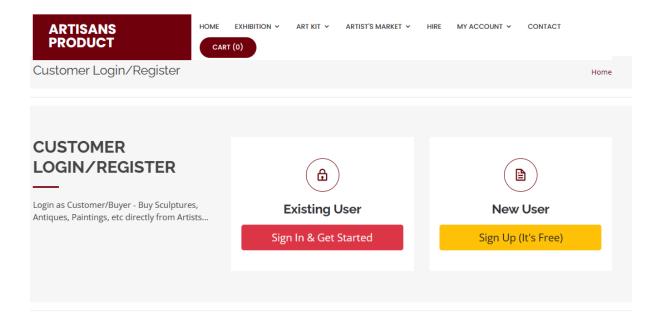


Fig5.4 CUSTOMER LOG-IN PAGE

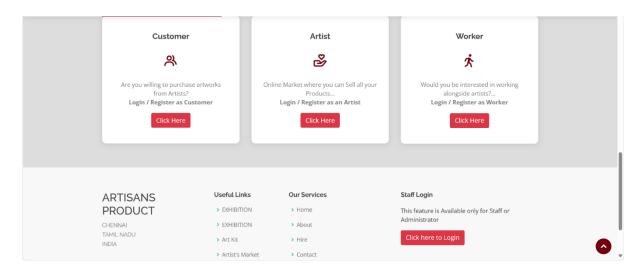


Fig 5.5 HOME PAGE FOOTER

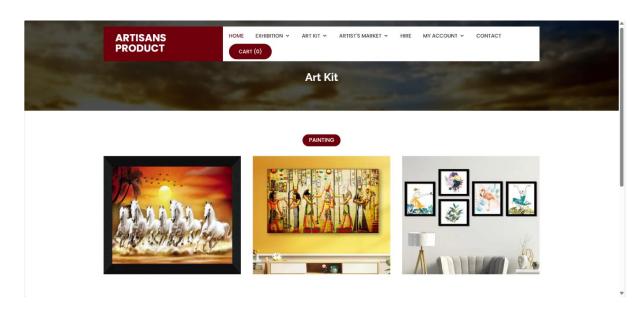
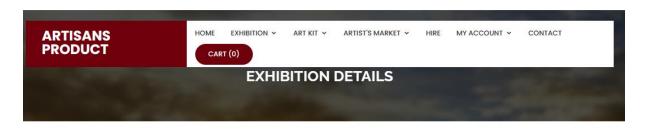


Fig 5.6 ART KIT





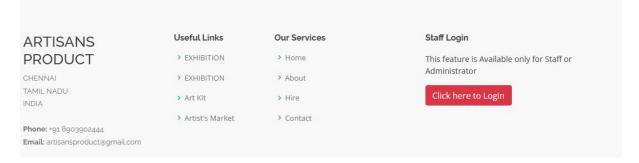


Fig 5.7 EXHIBITION SHOWCASE



Fig 5.8 EXHIBITION DETAILS

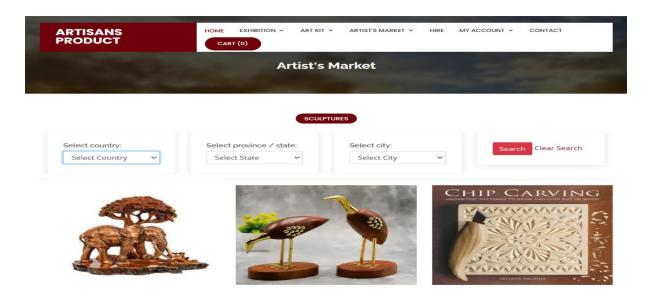


Fig 5.9 ARTIST'S MARKET

\

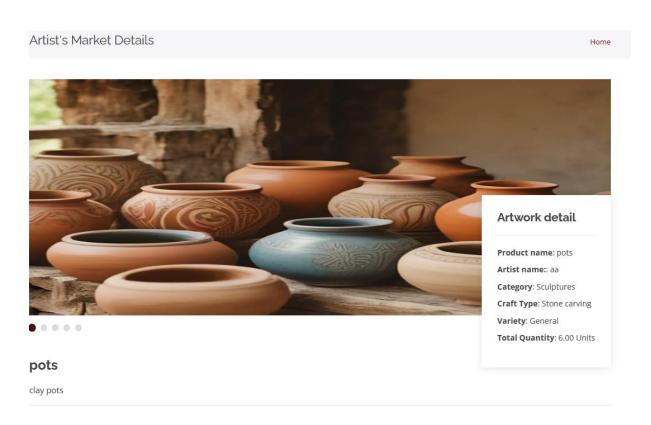


Fig 5.10 PRODUCT DETAILS

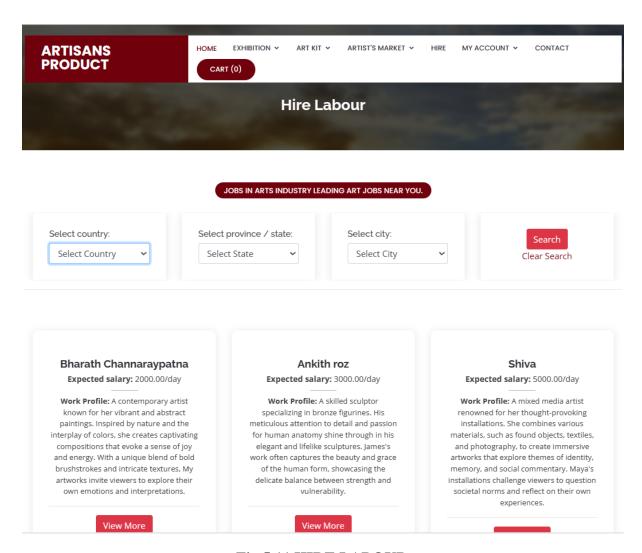


Fig 5.11 HIRE LABOUR

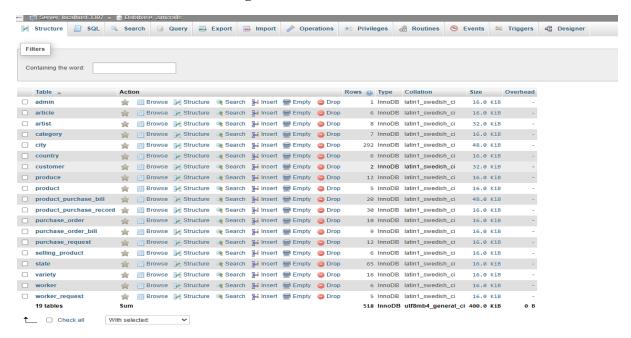


Fig 5.12 DATABASE

#### **RESULT:**

Our rural artisans marketing website project's outcomes show how important features that are necessary for empowering craftspeople and promoting online commerce have been implemented successfully. Users can safely register, log in, and access customised dashboards as buyers or sellers through user authentication procedures. Craftspeople are able to effectively oversee their product listings, presenting a wide variety of their handcrafted goods to prospective customers. The user experience is improved by the user-friendly interface, which makes it easy to navigate and engage with the platform. The order processing technology also guarantees seamless transactions, making it simple for customers to browse, buy, and check out. Together with its eye-catching design, the website's functionality makes for a favourable user experience that effectively promotes interaction and the products of rural craftsmen. All things considered, the outcomes demonstrate the accomplishment of our project's goals, giving rural craftspeople the opportunity to exhibit their work and increase their online market share. Moreover, the successful implementation of features such as user authentication and product management has significantly contributed to the empowerment of rural craftspeople and the promotion of their handmade products. With the ability to seamlessly oversee their product listings and engage with potential customers, artisans can effectively showcase their unique craftsmanship to a global audience. The user-friendly interface enhances user experience, facilitating smooth navigation and interaction with the platform. Additionally, the streamlined order processing technology ensures hassle-free transactions, further enhancing the convenience and satisfaction of buyers. Coupled with its visually appealing design, the website's functionality fosters a positive user experience, encouraging increased interaction and patronage of rural craftsmen's products. In conclusion, the project's outcomes not only fulfil its objectives but also provide a platform for rural artisans to expand their market reach and thrive in the digital landscape. Furthermore, the order processing enhances the overall user experience, promoting increased engagement and patronage of rural artisans' products.

#### **CHAPTER 6**

#### CONCLUSION AND FUTURE ENHANCEMENT

#### 6.1 CONCLUSION

In conclusion, the development of the rural artisans marketing website represents a pivotal milestone in the intersection of technology, entrepreneurship, and cultural preservation. Through the utilisation of digital platforms, we have established a channel for rural craftsmen to present their age-old workmanship to a worldwide audience, surpassing geographical limitations and conventional market restrictions. The internet acts as a market for actual goods, but it also gives artisans—who have long been neglected and marginalised by mainstream commerce—hope and empowerment. The projects motive to delivering a seamless and user-friendly experience for both craftsmen and purchasers is reflected in the website's modular architecture and user-centric design. Through the prioritisation of user privacy, security, and accessibility, our efforts have been directed at establishing a digital ecosystem that cultivates mutual respect, trust, and transparency among all parties involved. Moreover, the rural artisans marketing website is not just a commercial venture but a catalyst for social change and economic development in rural areas. It acts as a medium for the promotion and preservation of traditional arts and culture, enhancing society's fabric with the distinctive histories and legacies of rural communities. We are enabling artisans to take charge of their lives, cut out oppressive middlemen, and reinvest in their communities by giving them a fair and equitable platform to sell their goods directly to customers. As we reflect on the journey thus far, we recognize that our work is far from complete. The rural artisans marketing website is not merely a destination but a starting point for a broader movement towards inclusive economic growth and cultural revitalization. We remain committed to continuously iterating, innovating, and collaborating with stakeholders to ensure that the website remains relevant, impactful, and sustainable in the long run. Together, we can build a future where rural artisans thrive, traditions endure, and communities flourish in harmony with the digital age.

#### **6.2 FUTURE ENHANCEMENT**

Looking ahead, there are several exciting opportunities for enhancing the rural artisans marketing website, ensuring its continued relevance and impact in the digital marketplace. One area for future enhancement is the automation of exhibition information display. By integrating with event management platforms and leveraging APIs, the website can dynamically update exhibition listings, venue details, and stall availability in real-time. This automation streamlines the process for both artisans and event organizers, ensuring accurate and up-to-date information for users interested in participating or attending exhibitions. Additionally, features such as automated notifications for upcoming events and reminders for stall booking deadlines can further enhance user engagement and participation in offline events. Another compelling avenue for future enhancement is the incorporation of custom designing using augmented reality (AR) and virtual reality (VR) technologies. By integrating AR/VR capabilities into the website, users can visualize products in a virtual environment, experiencing them in immersive detail before making a purchase. Artisans can showcase their products in interactive 3D models, allowing buyers to explore intricate details, textures, and colour variations in real-time. Customization options such as personalized engraving, embroidery, or colour selection can be seamlessly integrated into the AR/VR experience, empowering buyers to create bespoke products that reflect their unique preferences and tastes. Furthermore, the integration of AR/VR technologies opens up new possibilities for experiential marketing and storytelling, enabling artisans to narrate the journey behind each product and the cultural significance embedded within. Through immersive virtual tours of artisan workshops, storytelling sessions, and interactive demonstrations, users can gain deeper insights into the craftsmanship and heritage behind each product, fostering a deeper appreciation for traditional arts and culture. In conclusion, by embracing advancements in technology such as automation and AR/VR, the rural artisans marketing website can evolve into a cutting-edge platform that not only connects artisans with buyers but also immerses users in of cultural experiences.

#### **APPENDIX**

#### **SAMPLE CODE**

```
<?php
include("header.php");
if(!isset($_SESSION['adminid']))
{
      echo "<script>window.location='adminloginpanel.php'; </script>";
}
if($_SESSION['randnumber'] == $_POST['randnumber'])
{
      if(isset($_POST['submit']))
      {
            if(isset($_GET['editid']))
            {
                  $sql ="UPDATE admin SET
`admin_name`='$_POST[adminname]', `login_id`='$_POST[loginid]',
`password`='$_POST[password]', `status`='$_POST[status]' where
admin_id='$_GET[editid]'";
                  if(!mysqli_query($con,$sql))
                  {
                        echo "Error in mysqli query";
                  }
                  else
                  {
                        echo "<script>alert('Admin record updated
successfully...');</script>";
            }
            else
```

```
{
                  $sql="INSERT INTO `admin`(`admin_id`, `admin_name`,
`login_id`,`password`,`status`) VALUES
(",'$_POST[adminname]','$_POST[loginid]','$_POST[password]','$_POST[status]')"
                  if(!mysqli_query($con,$sql))
                  {
                        echo "Error in mysqli query". mysqli_error($con);
                  }
                  else
                  {
                        echo "<script>alert('Admin record inserted
successfully...');</script>";
            }
      }
}
$randnumber = rand();
$_SESSION['randnumber'] = $randnumber;
if(isset($_GET['editid']))
{
      $sql = "SELECT * FROM admin WHERE admin_id='$_GET[editid]'";
      $qsql = mysqli_query($con,$sql);
      $rsedit = mysqli_fetch_array($qsql);
}
?>
 <main id="main">
```

```
<!-- ===== Cta Section ====== -->
  <section id="cta" class="cta">
   <div class="container">
    <div class="text-center" data-aos="zoom-in">
            <br>><br>>
      <h3>Admin</h3>
    </div>
   </div>
  </section><!-- End Cta Section -->
  <!-- ===== Contact Section ====== -->
  <section id="contact" class="contact">
   <div class="container">
    <div class="row">
      <div class="col-lg-12" data-aos="fade-up" data-aos-delay="100">
       <div class="info mt-4">
            <center><h4>Enter Admin Detail...</h4></center><hr>
<form method="POST" action="" name="frmadminreg" onSubmit="return</pre>
validateadminreg()">
<input type="hidden" name="randnumber" value="<?php echo $randnumber; ?>"
<div class="form-row">
      <div class="col-md-12 form-group">
            Confirm Password <font color="#FF0000">*</font>
       <input type="Password" name="cpassword" id="cpassword" value="<?php</pre>
echo $rsedit['password']; ?>" class="form-control" >
      </div>
      <div class="col-md-12 form-group">
      Status <font color="#FF0000">*</font>
       <select name="status" id="status" class="form-control">
```

```
<option value="">Select Status</option>
             <?php
             $arr= array("Active","Inactive");
             foreach($arr as $val)
              {
                    if($rsedit['status'] == $val)
                    {
                    echo "<option value='$val' selected >$val</option>";
</div>
<hr>>
<button type="submit" name="submit" id="submit" class="btn btn-danger btn-lg
btn-block" >Submit</button>
</form>
       </div>
             </div>
     </div>
            return false;
      }
      else if(document.frmadminreg.loginid.value == "")
      {
            alert("Login ID should not be empty..");
            document.frmadminreg.loginid.focus();
            return false;
      else if(!document.frmadminreg.loginid.value.match(alphaExp))
      {
            alert("Kindly enter Valid Login ID.");
```

```
return false;
      else if(document.frmadminreg.password.value == "")
      {
            alert("Password should not be empty..");
            document.frmadminreg.password.focus();
            return false;
      else if(document.frmadminreg.password.value.length < 8)
      {
            alert("Password length should be more than 8 characters...");
            document.frmadminreg.password.focus();
            return false;
      }
      else if(document.frmadminreg.password.value.length > 16)
            alert("Password length should be less than 16 characters...");
            document.frmadminreg.password.focus();
            return false;
      else if(document.frmadminreg.cpassword.value == "")
      {
            alert("Confirm password should not be empty..");
            document.frmadminreg.cpassword.focus();
            return false;
      else if(document.frmadminreg.password.value !=
document.frmadminreg.cpassword.value)
```

document.frmadminreg.loginid.focus();

```
{
    alert("Password and confirm password not matching...");
    document.frmadminreg.password.focus();
    return false;
}
else
{
return true;
}
}
</script>
```

#### REFERENCES

- [1] Shankar Nayak Bhukya, M. Chaitanya, N Sri Nidhi and N.S Tanuja, "Detecting False Users in Online Rating & Secure Reputation", International Journal of Computer science & Engineering, 2017.
- [2] Rajiv Patel and Amisha Saha, "E Commerce and rural handicrafts artisans", Journal of Voice of Research, Vol 2, pp.99–110, 2016.
- [3] Dilip Kumar and Rajeev PV, "Marketing Challenges of Handicraft Retailers in changing environment", International Journal of Business, Economics and Management, Vol-4, pp. 22-23, 2014. ICMAICT 2020Journal of Physics: Conference Series 1804 (2021) 012079IOP Publishingdoi:10.1088/1742-6596/1804/1/01207910 [4] Gaitri Kumari, Abhaya Ranjan Srivastava, "Role of e-tailing in boosting the Indian Handicraft Industry", International Journal of marketing & Financial Management, Vol.4, pp. 27-36, June 2016.
- [5] Rohit Yadav, Tripti Mahara, "An Empirical Study of Consumers Intention to Purchase Wooden Handicraft Items Online: Using Extended Technology Acceptance Model", Journal of Global Business Preview, July 3, 2017.
- [6] Renee Garett, Jason Chiu, Ly Zhang and Sean D. Young, "A Literature Review: Website Design and User Engagement", International Journal of Communication Media Technology, 2016.
- [7] Punam Kumari and Rainu Nandal, "A Research paper on website Development Optimization using Xampp/PHP", International Journal of Advanced Research in Computer Science, 2017.
- [8] Ch. Rajesh and KSV Krishna Srikanth, "Research on HTML5 in Web Development", International Journal of Computer Science and Information Technologies, Vol. 5 (2) pp. 2408-2412,2014.
- [9] Tannistha Pal and Aman Verma," An Educational Website on Vocational courses for Govt. Vacancies", Elsevier SSRN Digital Library, 2020.
- [10] Chen Ping, "A Visual Communication Design Method for E-Commerce Websites," International Conference on Smart Grid and Electrical Automation

- (ICSGEA), Xiangtan, China, 2019, pp. 538-542, 2019.
- [11] Alla Moreva, Vitaly Kompaniets and Natalia Lyz, "Development and Oculographic Research of the Website Design Concept for Inclusive Education," Ural Symposium on Biomedical Engineering, Radio electronics and Information Technology (USBEREIT), Yekaterinburg, Russia,pp. 276-279,2019.
- [12] Lingfang Huang, Li Zhu, Xiaodie Zhou and Junying Liu, "Research on Website Traffic Statistics System," 2020 12th International Conference on Measuring Technology and Mechatronics Automation (ICMTMA), Phuket, Thailand, pp. 957-961, 2020.
- [13] Prajaks Jitngernmadan and Prawit Boonmee, "Key Factors of Usability of Science and Technology Faculties' Website: Marketing Purpose," 4th International Conference on Information Technology (InCIT), Bangkok, Thailand, pp. 289-293, 2019.
- [14] Indrajit Ghosal, Bikram Prasad, "Inspiring Digitalization of Handicraft Market: An empirical approach", Parikalpana KIIT Journal of Management (Vol. 15, Dec. 2019)
- [15] Shahriare Satu, Niamat Ullah Akhund, Mohammad Abu Yousuf, "Online Shopping Management System with Customer Multi-Language Supported Query handling AIML Chatbot", In Proceedings of 2nd Student Conference on Science and Engineering (SCSE), 2017.
- [16] Ananya Chakrabot y., "Rationale of Handicraft on Women Employment in Rural Area: A case study on Jari workers", Volume 4, Issue 2, Year 2013.