

# E-Commerce for Artisans Aided with Signal Processing

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**Abstract:-**

*In India, there are many millions of people who are skilled and knowledgeable in the creation of traditional handicrafts. The Indian handicrafts industry is very labor-intensive and decentralised. It provides the largest employment opportunities after textiles and agriculture. The sector has made a considerable economic contribution to the nation, but it has not yet earned the credit it merits. Craftsmen are solely dependent on the centre person for the sale of the goods. As a result, the strategy becomes one-dimensional, which hurts sales and hides the proud artisans' talents. Internet marketing has the potential to solve the problem that craftsmen are facing for the better.*

**I. Introduction**

The commitment and labour of individual artists and craftsmen were taken into consideration when developing the web-based platform Online Handicrafts Store. The intention is to use cutting-edge technology to help craftsmen showcase their work and connect with more people. This tactic lowers the expense of hiring a middleman while allowing sellers to raise their profit margin. Sellers can easily register for the site and display their knowledge to the globe.

Through the portal, which serves as a virtual store, users may buy a selection of handcrafted goods manufactured to their specifications by knowledgeable artists and independent manufacturers. The website is hip and very functional to meet the needs of a contemporary customer. The head asserts that the information displayed on the entry is directly over it. Artists register to become sellers and give details about their goods to the administrator who controls the data on the back end.

**II. Problem Statement**

The majority of gifted experts fail to sell their goods or demonstrate their skill on stage. To reach a larger audience, local artists hire a middleman, which further diminishes their profit margin. Another concern is the veracity of a design or product that has not been registered. Low publicity inevitably leads to low demand. Skilled craftspeople are losing ground to low-quality manufacturers due to the latter's considerably stronger market presence.

With the aid of an online web application for selling handcrafted goods online, these problems can be solved.

**III. Literature Survey and Proposed Work**

Our initiative, "E- COMMERCE FOR ARTISANS AIDED WITH SIGNAL PROCESSING" aims to create a web application that will help individual artisans sell their distinctive products online via our plat form. A website called "E-COMMERCE FOR ARTISANS AIDED WITH SIGNAL PROCESSING" will collaborate with buyers and sellers to offer superior online services that increase consumer happiness. Through the programme, customers can now purchase genuine, high-quality handicrafts from regional artists. Users have the option to register, sell their homemade goods, or purchase items from the catalogue.

Year	Paper Name	Author	Key Findings
Dec 2019	Inspiring Digitalization of Handicraft Market: An empirical	Indrajit Ghosal, Bikram Prasad	This system highly focuses on the development of handicraft/handloom market in terms of offline and online market providing more profits to the artisans.
Feb 2017	Online Shopping Management System with Customer Multi-Language Supported Query handling AI-ML Chatbot	Shahriare Satu, Niamat Ullah Akhund, Mohammad Abu Yousuf	The project has an interactive chatbot system for the users to enquire about the products and also for the regular customer service

Table 2.1. Literature Survey

**Phase 1:**

**Planning:**

Arranging will cover both how to design the application in a useful way and how to make the framework simple to grasp. Planning entails creating an extensive collection of project plans. These plans will clearly lay out the project's future course. The proposed System will be divided up into each module. The blueprints for each module will be used to create the project timetable. The necessary materials will be acquired, or the needs will be obtained, to develop the suggested system.

**Analysing:**

Establishing a baseline and a method for tracking requirements through out the life cycle will be specifically addressed in this phase. The proposed system's software and hardware dependencies were looked at.

**Design and Implementation:**

The application's design blueprint will be created after the requirements have been gathered. The website will be designed utilising the open-source web standards HTML, CSS and JS.

**Phase 2:**

**Coding:**

Included in this is the actual implementation, which entails creating a website. The front-end design will make use of JavaScript, HTML and CSS. The middleware will be developed using JavaScript and the React editor.

**Testing:**

The responsive web design's accuracy and browser compatibility will be evaluated first in terms of the user interface. To determine whether values are being updated and whether the server is connected to the hosted Database, it will be checked on a regular basis. When testing is complete, the system is prepared for deployment. Release, activation, adaption, updates, version tracking and other deployment-related tasks are included.

**METHODOLOGY USED**

This is the AGILE model because it is necessary to divide the process into several phases: It Involves the constant collaboration between customers and users.

1. The Method in this is Planning, Executing and Evaluating.
2. It is a cycle in which every stage gets repeated again & again.
3. It has a benefit such as multiple phases can run simultaneously.

**Requirements**

**Hardware**

1. 4GB RAM
2. Hard drive with at least 10GB of ROM, Windows 7 above 32 bits / 64 bit OSA server.
3. Computer with i3 or above processor, or with i5 processor with at least 100 GB of RAM.

**Software**

1. Browser(Google chrome)
2. Firebase for Back end
3. Any Text Editor like Visual Studio Code
4. Browsery

**IV. ALGORITHM AND FRAMEWORK**

The following is the algorithmic process used to create the website: For the section on implementation, we split the entire design process into two algorithms. The two parts of the algorithms—the first for client-side development and the second for administration—are provided as follows.

**1. Client-side:** Visitors and customers can both be users at the client-side. Customers must register before viewing the products and price information. Customers must enter their information and obtain a customer ID.

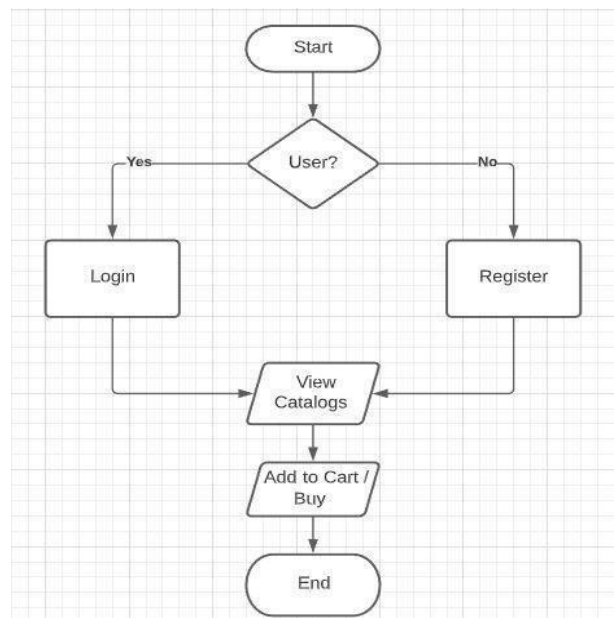


Fig 4.1. Flow Chart

**2. Administration-side:**

- Admin tries to login.
- I/p ID and cust ID.
- Add the item.
- Add prices and sales.
- Check and collect the payment.
- Manage order and shipping.
- Update data.

These are some of the interesting algorithm will use in the project.

- Product Recommendation Algorithm
- Sorting Algorithm.

**V. CONSTRUCTION AND WORK FLOW**

You must first create a react file and search for REACT JS on Google Chrome. The ideal method to begin creating a new single-page application with React is to create a comfortable learning environment. It optimises your software for production, sets up your development environment so you can leverage the most recent JavaScript capabilities, and offers a pleasant developer experience. Node >= 14.0.0 and npm >= 5.6 must be installed on your computer. Run to make a project. By entering the aforementioned information, we can access the react framework to build a website. Now that the website is being built, we can start with the header design, such as how many product photographs, the cart, and the sign-in and sign-out boxes are designed in it..Only index.js and app.js are provided to us at first. We obtain the default react settings for importing the contents of HTML and CSS from the index.js file. Building the header, order and payment files in accordance with the layout you intended for your website. It creates a function on the page, and we write anything we want to create.

Since we use Fire base as our database to save time, this has no back end. It is this project's strongest feature.

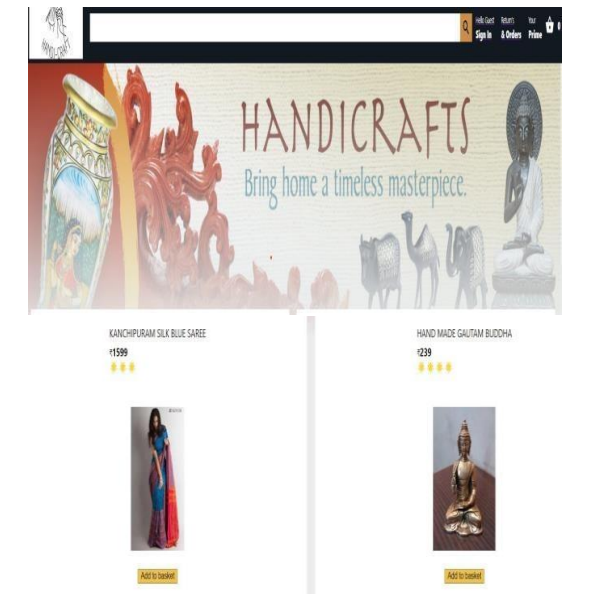


Fig.5.1 Home Page

**VI. Output of Cart Page and Sign In Page**

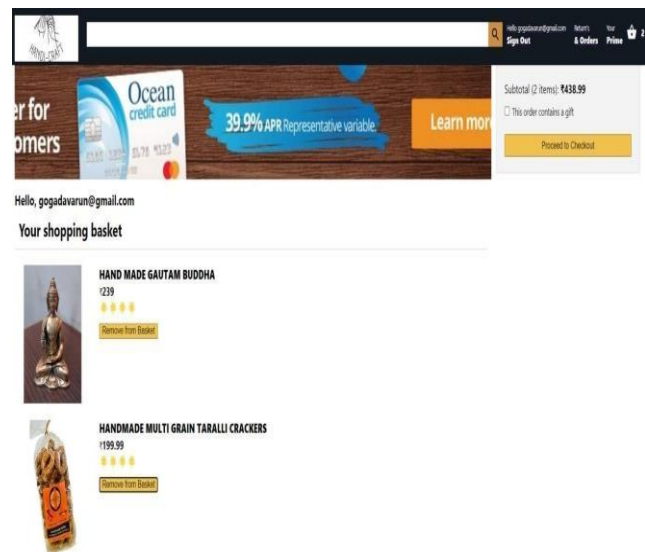


Fig.6.1 Cart Page



## Sign-in

**E-mail**

**Password**

[Sign In](#)

By signing-in you agree to the Handi-craft FAKE CLONE Conditions of Use & Sale. Please see our Privacy Notice, our Cookies Notice and our Interest-Based Ads Notice.

[Create your Handi-craft Account](#)

Fig 6.2. Sign Page

## VI. CONCLUSION

Customers and craftsmen alike will find it easy to purchase their products thanks to e-commerce for artisans. Due to the pandemic, it is exceedingly dangerous to travel anyplace, but thanks to this e-commerce website, people can view and buy the top-notch creations of local artists from the comfort of their own homes. It will help local artists get their work in front of more art lovers. They will be able to connect with those who admire art but reside a great distance away and are unable to travel to buy it.

## VII. REFERENCES

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