

Android Application For Handcrafts Goods

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Abstract— *The goal of this project is just to create a model that will assist craftsmen in selling their services. Our app gives a platform to the sellers that they can give their information about product details and their delivery service. The main goal of our app is to help sellers as Handicraft's people face many issues to sell their products. Indian artisans, typically manufactured by rural craftsmen, exude a certain charm of their own handiwork that has always been praised around the world for its vibrant colour schemes and fine craftsmanship. Rural units, often known as cottage industries, create 78.2percent of all crafts grown in the country. They represent the artistic representation of the producers, both women and men, and are grounded in India's traditions and social history. Around 77percent of artisans are self-employed, with the rest 23% working as daily workers. They must rely on exhibitions, tourism seasons, and the weather to make a living. But based on present pandemic situations one should follow the safety precautions as well as government guidelines so, it is impossible to run the exhibitions in large crowds. so that handicrafts men face several issues to sell their products. so by using our app they can sell their goods in a friendly way. It is a platform where a seller can sell his products on his own and there is no third-party involvement directly; the profit will be taken by the seller.*

Keywords - Craftsmen, Exhibition, Design, Java.

I. INTRODUCTION

Indian crafts is a best way to make handicrafts via hand in India. In ancient Period, people lived in tribal groups and were employed to produce utility things for their daily needs. That art of manufacturing crafts is known as handicrafts, as well as the items are known as handicrafts goods. Then people began to sell these items in small stores .As time has passed and people have become more developed and civilised in all elements, those that have been seeking to make handicraft products have officially started to trade their creations due to increased demand and population. The handicraft, which has been existent since the beginning of human civilization, is at the top of our list.

Paintings have always been a part of India's culture, dating back to prehistoric times. Cave paintings are fairly prevalent. Indian paintings such as Thangka Drawings, Miniatures Paintings, Walli's Works of art, Madhu Bani Art pieces, and Tanjore Paintings are currently among the most enticing to an art collector.

The painting techniques of India's handicrafts sector evolved over time and with the ruling dynasties. During the mediaeval period, Indian paintings primarily depicted Mughal art styles. Handicraftsmen have been a vital part of India's culture and history since the dawn of time.

These handicrafts gained a lot of appreciation from our own country to foreigners. The highly skilled laborers of our country showed their art by making many famous works.

Major crafts of our country are Pashmina Shawls from Kashmir, Bamboo handicrafts from West Bengal, Assam and Tripura, Phulkari Embroidery from Punjab and Haryana,

Kondapalli Bommalu from Kondapalli, Andhra Pradesh, Kalamkari from Machilipatnam, Andhra Pradesh.

Nowadays this sector is facing many problems in the areas of production, marketing, and selling.

The local handicrafts men are not getting proper reorganization and big industries making large production in a short period using the latest technologies, leading to downfall of Indian culture and traditional handicrafts works.

Real-time Applications of Proposed Work

ETSY:

Etsy , Inc. is an e-commerce company based in the United States that sells personal or vintage items as well as creative materials. Jewelry, bags, apparel, home decoration and architecture, toys, art, and craft supplies and equipment are just a few of the areas in which these things can be found. Products are at minimum 20 years old to be considered vintage. For a price of US\$0.20 per item, the site 3 continues the trend of accessible craft fairs by providing merchants with personalized shops where they can list their wares.

MICHAELS:

Michaels Companies, Incorporated (Michaels) is really a private limited arts and crafts retailer with 1,252 locations in the United States and Canada since about January 2021. It is one of the major suppliers of crafts, framing, floral and wall decoration, as well as items for manufacturers and then do home decorations in North America. Michael J. Dupey created the corporation in Dallas, Texas in 1973.

JOANN:

Jo-Ann Stores, Inc., established in Hudson, Ohio, is an American retail outlet of crafts and fabrics. It owns the JOANN Fabrics & Crafts as well as JoAnn Etc. retail businesses. The company's headquarters are located in the major General Motors Terexplant.

II. LITERATURE SURVEY

A. Digitalisation:

AN AID IN MARKETING OF HANDICRAFTS:

Handicrafts is a form of creative art of making products by hands that have an artistic and pleasing character and require skill and craftsmanship in manufacturing.

With the aid of information technology such as World Wide Web and mobile applications not only it is customers and traders but also investors including the media gets enabled in locating craftpersons.

B. Indian Handicraft Industry:

PROBLEMS AND STRATEGIES:

The most prominent elements in the definitional argument are how the product is manufactured, particularly the value of handcrafted vs. machine-made production, and the reason for production, which might be founded in tradition and culture or driven by economics. The government should make the duty drawback system more appealing, as it is becoming increasingly hard to compete with Chinese exporters, who enjoy strong state backing in the case of low margin, big volume buyers.

C. Analysis On Application Of Traditional Arts And Crafts In Exhibition Design

Our country has abundant cultural deposits due to centuries of history and culture. Historic culture and art are having an increasing impact on current culture and conceptual art design. Traditional Chinese crafts are cultural and artistic treasures. Meanwhile, it positively supports and affects modern exhibition with its diverse art aspects and forms.

D. E-Commerce And Rural Handicraft Artisans

The following objectives are emphasised in this paper:

to describe the idea of Rural Artisans as well as Rural Handicraft; to clarify the meaning of Rural Artisans as well as Rural Handicraft;

To introduce the point of Rural Craftsmen and Regional Handicraft; to define the process of Rural Artisans but also Rural Handicraft; To draw attention to the importance of e-commerce in the growth of rural craftsmen; To show how government and non-government agencies, groups, and individuals are using E-commerce to improve the socio-economic status of rural artisans; Analyze the strengths, weaknesses, opportunities, threats, and challenges that rural handicraft artists are facing or will encounter when they adopt E-commerce.

Summary of Literature study

All the handicrafts' apps did not provide the direct details of the seller. Many of the apps charge money for displaying their products in the apps. In the unorganized way these products are being sold by showroom owners at much higher prices, but they are paid surprisingly small amounts for the excellent work they do.

III. PROPOSED WORK

A. Design Methodology

Actor:

Here actor is the user who first register in the app. Then, the user logs into his/her account. After login he will get list of ads that are already placed in the app. The customer can investigate the details of the products like name of the product, product price, product description and seller details like seller name and seller phone number. After seeing the products, the user can select their favorites products and make payment. The payment is secured by Razorpay. The payment can be in form of card, net banking, UPI, Wallets. The language of the payment screen can be changed to other languages like English, Telugu, Hindi and many more.

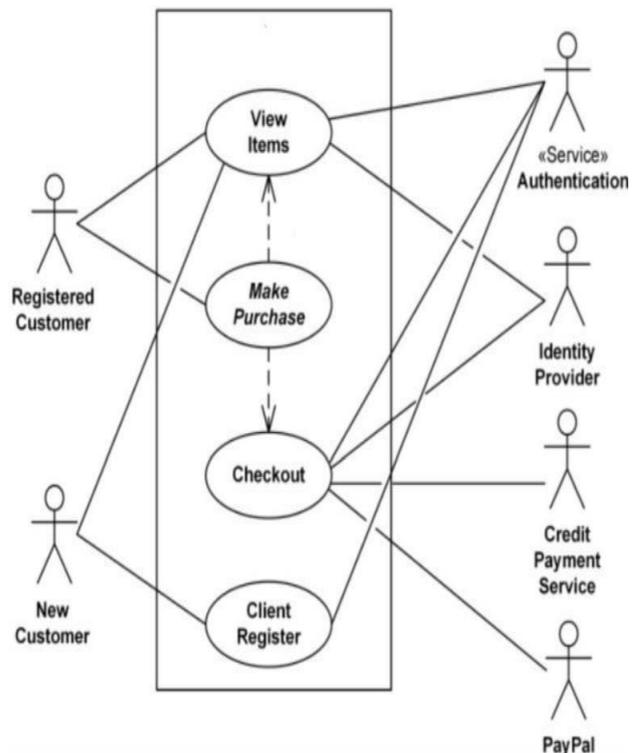


Figure 1.

B. Architecture Diagram

- The user opens the app and registers in the app using the mail id and password.
- After registering he/she should login using the same mail id used for registering.
- After logging in the user will get a page displaying all the products.

- Then the user can select the products from the list and the user can also see the description of the product.
- In the description of the product the user can also get the seller's name and phone no.
- The user can contact the seller and get extra details of the product.
- After selecting products, the user can order the products using the 'pay now' option.
- The payment security and verification is done by Razorpay.

Heap sort is generally used for comparison technique it is based on binary heap data structure.

We could sort KPI's usually:

- Best soldproduct
- Highly searchedproduct
- Highest product in buyer'scart
- Newestproduct
- Highestproduct

IV. DESCRIPTION OF DATASETS AND TOOLS USED

A. Datasets:

We have taken real world products of handicraftsmen as input hence we have no datasets to be described.

B. Tools and Frameworks Used:

1) Android Studio:

On May 16, 2013, pre to post Google I/O conference, Android Studio was revealed. Starting with version 0.1 since May 2013, this was in early release preview mode, then moved to beta mode with version 0.8, which was launched in June 2014. Android Studio is an open and free application development platform for Android. It's a build system based on Gradle. It comes with an Android - based Device that can be used to launch and debugging apps in Android studio.

2) Firebase:

Google's Firebase technology allows developers to create mobile and online applications. It started off as a stand-alone business in 2011. Google bought the technology in 2014, and now it is their primary app development platform.

The Database Server, an API that integrates user information among iOS, Android, & Web devices and saves it in Firebase's cloud, was Firebase's initial offering. Software developers can use the tool to create real-time, collaborative apps.

V. RESULTS AND OBSERVATIONS

Description of Results and Observations

- This is an app for helping handicrafts people for reaching large audience.
- The user opens the app and registers in the app using the mail id and password.
- After registering he/she should login using the same mail id used for registering.
- After logging in the user will get a page displaying all the products.
- Then the user can select the products from the list and the user can also see the description of the product.
- In the description of the product the user can also get the seller's name and phone no. The user can contact the seller and get extra details of the product.

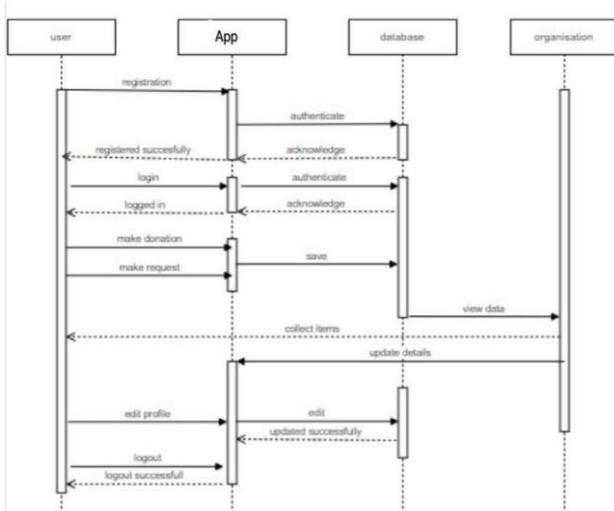


Figure.2.

C. Description Of Algorithm

```

def heapSort(arr):
    n = len(arr)
    for i in range(n//2 - 1, -1, -1):
        heapify(arr, n, i)
    for i in range(n-1, 0, -1):
        arr[i], arr[0] = arr[0], arr[i] # swap
        heapify(arr, i, 0)
arr = [12, 11, 13, 5, 6, 7]
heapSort(arr)
n = len(arr)
print("Sorted array is")
for i in range(n):
    print("%d" % arr[i],end=" ")
    
```

- After selecting products, the user can order the products using the 'pay now' option. The payment security and verification are done by Razorpay.

Main landing page that you can access after logging in



Figure.3. Landing Page

The navbar which helps customers navigation between specific sheets is made with HTML and CSS on the main home page.



Figure.4. Display Of Products

When you select the different product in the mobile app you can see the complete description of a product including its history, raw materials used for making and also the making process steps along all these it has an additional feature of rating of a product by which a product buyer can buy the product.



Figure.5. Product Details

By choosing the product description you can know the full details of the product like its origin and complete history and the craft work done by the skilled worker.



Figure.6. Payment Options

Our android application provides an online payment option to make users and sellers easier about payment.



Figure.7.

Using different payment options like card, UPI net banking, wallet, pay later people can have flexibility to make a payment according to their availability.

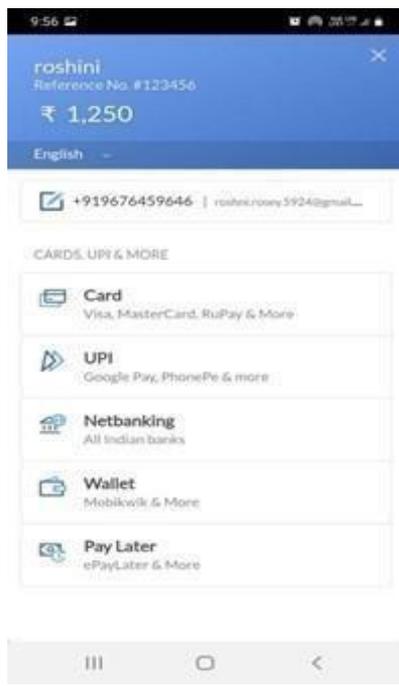


Figure.8. Different Payment Options

People can have their native language for project description or for payment options. As we aren't sure that everyone is educated to understand the default English language for the app. So, adding their mother tongue of the user can easily understand about the product and can do payment easily.

Fieldwork Details

Before Covid-19, we have seen many exhibitions and mela's near our college where many craftsmen sell there goods but during the pandemic time everyone lost their livelihood job so we decided to help them and met the workers who works on Indian Handicrafts their main need is to have a better platform to sell their goods so, we designed an app which each every handicraftsmen can sell their hard work through our platform and get their reasonable prices for their handwork and can reach large audience. It is easy to see the product and give ratings but when we went to the on-work field it is very hard to complete at least one piece of there work as each and every piece of the work was done by their own skilled hands and with natural product even the colours used by them are very natural prepared by them and In future, We wanted to extend this app for helping the handicraftsmen. So that handicraftsmen can directly interact with the customers and sell their piece of art at their willing price. They can also reach large audience for selling their products. We wanted to add some more features for them like many categories of handicrafts, more locations of the sellers and more interaction interface between the customers and sellers.

Social Benefits

The goal of social media selling isn't just to sell and promote items or services. You should also strive to improve your personal relations. Simply said, social media lets you to communicate with prospects and convert them into devoted clients. You can only develop customer loyalty if you provide what the customers want. Repeat purchases are difficult to come by, so treat your first-time purchasers with the same care as your returning clients; these two types of customers are crucial.

The first step toward starting a dialogue is to grow your social media following.

By sharing content, products, or any other information that is important to the consumers, online retailing makes things simpler for you to reach out. On social media, a brand is developed through posting often and participating in conversations. Consumers are always looking for the most convenient ways to shop. Several apps have made online transactions for ordinary purchases much easier.

Since it has the ability to do so, social retail will soon follow suit. You may utilise social media to drive visitors to your company's website.

This, in turn, has an impact on your company's search engine rating. Sharing information with links is the most effective technique to attract traffic to your website. It helps your customers to interact with your material more deeply. Every day, a growing number of people join social media. Not to mention the fact that millions of people use it on a daily basis. Let's agree that each company's first priority is how to get out to their target market and generate revenue. Fortunately, you will not have to fear about this; as you keep to use social media, you will find that your popularity will progressively grow.

VI. CONCLUSION AND FUTUREWORK**A. Conclusion:**

In the current situations like pandemic handicraftsmen are unable to reach large audience for selling their products. So, our vision is to support handicraftsmen and make the process of selling easy for them. We developed an app. Using this different handicraftsman can directly interact with the customers and sell their piece of art at their willing price.

They can also reach large audience for selling their products.

B. Future Scope:

One thing is certain: this initiative has a lot of room for expansion in the future. Many functions and applications can be implemented, including:

- Adding custom input to the database.
- Custom result based on location.
- Profile features for Users.
- Adding live streaming option of making goods.

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