ONLINE HANDICRAFTS STORE

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INFORMATION TECHNOLGY

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by
Darshil Ajudia (Roll No.:03)
Akshat Chandel (Roll No.:09)
Hinal Kuvadiya (Roll No.:40)

Under the Guidance of
Mr. Shridhar Kamble
Assistant Professor, I.T Department, TCET

Choice Based Credit Grading System with Holistic Student

Development (CBCGS-H 2019)

Certificate

This is to certify that Mr. Darshil Ajudia (Roll No.:03), Mr. Akshat Chandel (Roll No.:09), Ms. Hinal Kuvadiya (Roll No.:40) are bonafide students of Information Technology Department, Thakur College of Engineering and Technology, Mumbai. They have satisfactorily completed the requirements of PROJECT-I as prescribed by the University of Mumbai, while working on "Online Handicrafts Store".

Signature :
Name   : Mrs. Shridhar Kamble
Designation: Assistant Professor

Signature:
Name: Dr.Bijith M.
Designation: HOD-IT

Signature:
Name   : Dr. B. K. Mishra
Principal,

Thakur College of Engineering and Technology.

Internal Examiner:

External Examiner:

Signature:

Signature:

Name:

Name:

Thakur College of Engineering and Technology, Kandivali (East) Mumbai.

Date:

Place:

Declaration

I/we declare that this written submission represents my/our ideas in my/our own words and where others ideas or words have been included, I/we have adequately cited and referenced the original sources. I/we also declare that I/we have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my/our submission. I/we understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

(Signature)

1. Darshil Ajudia (Roll No.:03)
2. Akshat Chandel(Roll No.:09)
3. Hinal Kuvadiya (Roll No.:40)

Date:

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1. Darshil Ajudia (Roll No.:03)
2. Akshat Chandel(Roll No.:09)
3. Hinal Kuvadiya(Roll No.:40)

ABSTRACT

India is a country in which millions of people possess traditional skills and knowledge of producing handicrafts goods. Indian Handicrafts industry is highly labour intensive & decentralized. It provides maximum employment opportunities after the agriculture sector. Despite being a major contributor towards the country's economy the industry has not achieved as much recognition as it deserves. Artisans are solely dependent on middle-man for the selling of their products. This creates a one-dimensional approach which minimises the profit and fails to display the skills of proud artisans.Internet marketing can help solve the problem of artisans in an efficient manner.

Online Handicrafts Store is an e-commerce portal for artisans and individual handicrafts makers to retail their products online. Artisans would benefit by maximizing their profit as this eliminates the need for a middle-man and they will also avail the benefits of a wider target audience. With the right approach, skilled products of individual artisans will be readily made available to people in need of it. Going through various existing platforms there was a common theme of capitalism i.e. scope for minimal profits. Sellers can register on the website and provide details of their various products. After confirmation of authenticity their products will be readily available on the portal.

The portal can be divided into two parts i.e. the front end which will be available to the user & the backend where data will be processed and maintained. The robust portal will provide convenience of ordering skilled handicraft products at the convenience of a computer system connected to the internet. Artisans can register as sellers and fill out a form pertaining to relevant details. The data will be entered into the databases and will be visible on the portal. Artisans will be kept in loop so as to maintain the availability of products and reduce the problems of online shopping.

C O N T E N T S

Chapter 1 Overview

1.1 Introduction

Online Handicrafts Store is a web-based portal designed keeping in mind the dedication and hardwork of individual artisans and craftsmen. Aim is to incorporate modern technology to provide artisans with a platform to showcase their skills of crafts and cater to a wider range of audience. This approach reduces the cost of acquiring a middle-man and also provides an opportunity for a greater profit margin for the sellers. Sellers can directly register on the portal and showcase their skills to the world.

The portal is a digital store where users can buy various products handcrafted by skilled artisans and individual manufacturers in accordance to their needs. The website is trendy and highly functional in accordance with the needs of a modern consumer.The administrator owns the right over the data displayed on the portal. Artisans register as sellers and send their products info to the administrator who manages the data at the backend.

1.2 Background

The main aim of this project is to provide the artisans with the right opportunities and chances that they rightfully deserve. Generally, a middle-man is responsible for the sales and profit made by an artisan. Our solution is a digital platform for artisans to showcase their talent and earn the money that they rightfully deserve. The idea is to highlight individual artisans and skilled craftsmen to showcase their talent to the right audience with the benefit of making the right profit for the products. Online Store helps with the marketing and publicity aspect which ultimately benefits the seller.

1.3 Importance of the Project

E-commerce business is very scarcely focused on the handicrafts industry which constitutes as the secondest biggest employing industry in India. This creates a sort of niche for providing the artisans and handicrafts sellers with a digital platform to help with their sales and growth. With the recent switch of emphasis of make in India products, the platform would be fruitful for helping the local artisans. Also, since individual artisans will be applying directly to sell their products they can benefit directly in terms of finance.

1.4 Perspective of stakeholders and customer

This application is designed for the web-based browsers. There should be an internet connection for appearing these tests. This interface is very easy and can be maintained by anyone. This familiar GUI will make the user feel more comfortable navigating and viewing the data on our system. Once our application is loaded into the browser it allows the user to purchase arts online at ease and with convenience.

1.5 Objectives and Scope of the project

Scope of this project directly revolves around welfare of individual artisans . Few of them are:-

-This can be used by and for various individual artisans throughout the country.

-Can be used anywhere any time as it is a web based application (user Location doesn't matter).

1.6 Summary

- Local & individual artisans can benefit with the exposure to digital platform
- Online retailing removes the need for a middle-man to facilitate the sales.
- Portal enables sellers to register to sell their products online
- Right marketing will help to reach wider customer bases.
- Digital platforms are easy to maintain and cater to a variety of people.
- True skills of artisans would be showcased to earn them the respect that they rightfully deserve.
- Financial benefit would be marginally better as compared to selling via a middle-man.
- Shift of emphasis towards "Made in India" products can help gain the required traction.

Chapter 2 Literature Survey & Proposed Work

2.1 Introduction

The purpose of our project titled, "ONLINE HANDICRAFTS STORE " is to develop a web application to help individual artisans sell their unique handicrafts online via our platform. "ONLINE HANDICRAFTS STORE" will be a website which provides a high-quality online service for the shopper as well as the seller working in harmony to meet optimal user satisfaction. The application facilitates the customers to buy high quality and real handicrafts from local and individual craftsmen. Users can register and put up their handicrafts for sale or place an order from the existing range of products.

2.2 Literature Survey Table

Year	Paper Name	Author	Key Findings
Dec 2019	Inspiring Digitalization of Handicraft Market: An empirical approach	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 AIML 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.

Mar 2013	Rationale of Handicraft on Women Employment in Rural Area: A case study on Jari workers	Ananya Chakraboty.	This paper highlights the socio-economic 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.

2.3 Problem definition

Most skilled craftsmen lack a platform to sell their products and showcase their skill. In order to make their product available to a larger audience, local artisans rely on a middleman which further reduces their margin of profit. Further problems include the authenticity of a design or a product since it is not being registered. Lack of publicity automatically yields low demand. Low quality makers are trumping skilled craftsmen due their vastly superior presence in the market. An online web application for selling handicrafts online can be used to tackle these problems.

Phase 1:

● **Planning:**
Planning will involve how to design the application in an efficient way as well as how to make the system user friendly. Planning involves a comprehensive suite of project plans which will set out a clear project roadmap ahead. The proposed System will be broken down into modules. Each module will be planned and the project timeline will be prepared accordingly. Resources required to develop the proposed System will be identified i.e. requirement gathering will be done.

● **Analysis:**
This phase will specifically address establishing a baseline and a way to track the requirements through the rest of the life cycle. Software and Hardware dependencies of the proposed System were analyzed.

● **Design &Implementation:**
After gathering the requirements, the blueprint for the application will be designed. The

Designing of the website will be done using HTML,CSS,Bootstrap and JS which are freely available on the internet.

Phase 2:

● **Coding:**
This will include actual implementation i.e. creating a website which will be very useful for the clients to search for lawyers and keep track of case status. Frontend will be designed using HTML, CSS, Bootstrap and JavaScript. Middleware will be designed using Javascript and Database will be designed using MySQL.

● **Testing:**
With respect to UI, initially the browser compatibility of the UI will be checked, also the correctness of the responsive web design will be tested. Regular testing will be done to check that the server is connected to Database(which is hosted) or not and whether values are being updated or not.

● **Deployment:**
Once the testing is done, the system is now ready for deployment. Deployment activities will include the release, activation, adaptation, updates, version tracking of the system etc.

2.4 Methodology used

The waterfall model was selected as the SDLC model due to the following reasons:

- Requirements were very well documented, clear and fixed.
- Technology was adequately understood.
- Simple and easy to understand and use.
- There were no ambiguous requirements.
- Easy to manage due to the rigidity of the model. Each phase has specific deliverables and a review process.
- Clearly defined stages.
- Well understood milestones. Easy to arrange tasks.

2.5 Summary

With the help of literature survey, the research gaps were identified from the existing papers/system. The research gaps identified has led to the problem definition of our proposed system. The problem definition was discussed in two phases. Phase 1 included planning, analysis, design and implementation where the project plan, requirement gathering, the layout of the system and the coding technique to be used was elaborated. Phase 2 included Coding, Testing and deployment where how the system will be tested using various cases and how the system will be deployed was discussed. The complete methodology used for our proposed system was also discussed.

Chapter 3 Analysis and Planning

3.1 Introduction

This section familiarizes us with the complete scheduling of the project. It introduces the importance of scheduling in the lifecycle of any project. The scheduling is explained in detail in this section. A Gantt chart has been created to show the Planning. Analysis and planning is very much essential for the perfect and proper completion of the project.

3.2 Feasibility Study

Operational Feasibility:

Only those users will be able to access this website/Mobile Application who have registered themselves on this website. The user needs to have a Computer or a smartphone as well as a basic knowledge of a computer or Internet which is not a big issue. This website will be compatible with both Computer and Android /IOS devices.

Economic Feasibility:

The program can be executed on a computer of normal configuration of at least 4 GB RAM. The project can be executed independently of that of other programs or modules and there is no need to install any extra dependent modules or programs to run this project without facing overhead or load on the system. This project requires development tools and Software such as Visual Studio Code or any other text editor and xampp server which are freely available on the internet.

Technical Feasibility:

The System will be designed using some free software like Visual Studio Code and some programming languages such as HTML, CSS, Bootstrap, Javascript, and MySQL. The internal working and complexities of the project are hidden from the user and all input/outputs can be executed without any technical knowledge, which is a critical aim of our project.

Legal Feasibility:

All the programs are developed using either open source software or freely available framework without any licensing issues. All the frameworks used to develop our project allows us to use and distribute our application freely and can be used and integrated anywhere free of cost.

Social Feasibility:

This project can be helpful for implementing an Online Law System. This project will be useful for the clients to easily search for lawyers. Clients and lawyers can also keep track of their case proceedings

3.3 Project Planning

The entire flow of the project will be decided in this phase. The working of the project will be clear at the end of this phase.

Requirements:

Hardware

- A computer / Mobile
- PC with
    - I3 or above processor
    - 4GB RAM
    - Hard drive with at least 10GB of ROM
    - Windows 7 or above 32 bit / 64 bit OS
    - A server
- PC with
    - I5 or above processor
    - 8GB RAM
    - Hard drive with at least 100GB of ROM
    - Windows 7 or above 64 bit OS

Software

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

3.4 Scheduling

| 2020 | 19/08 | 01/09 | 14/09 | 27/09 | 10/10 | 23/10 | 05/11 | 18/11 | 2020 |

Selection of Group and Project Title — 13 days
Literature Survey, Front End Design — 5 days
Database Design — 4 days
Implementation — 36 days
Testing — 5 days
Deployment — 7 days
Final Presentation — 21 days

3.5 Summary

In this section, we have described how the planning and analysis of our project is carried out. Considering the feasibility study of the project, will help to analyze the specific requirements and give the summary of the project. Also, this section helps us to understand and derive a way to prepare the entire project, keeping in mind the various constraints like time, etc. After the planning process, scheduling is done so that the project gets completed on time. This section gives an overview of the actual implementation of the project.

Chapter 4 Design and Implementation

4.1 DFD Level 0:
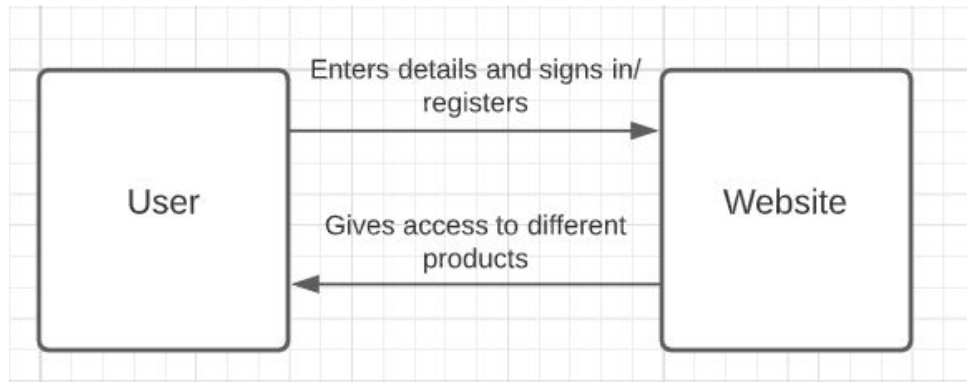
4.2 DFD Level 1:
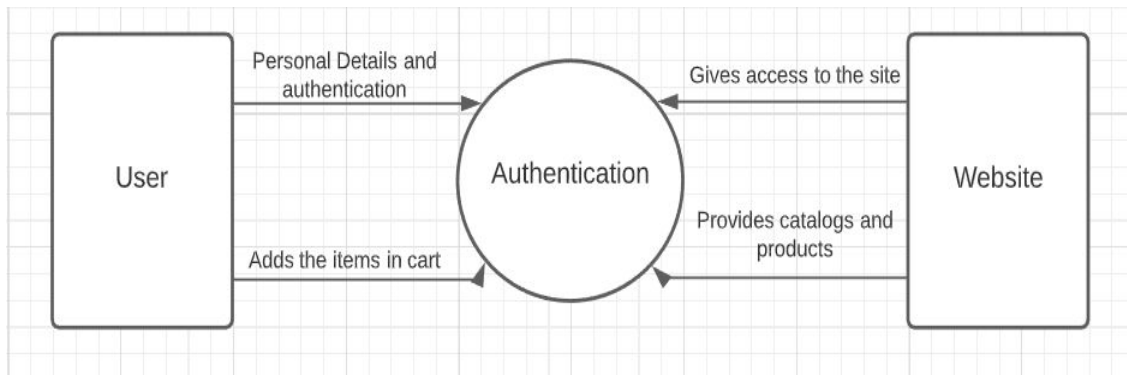
4.3 DFD Level 2:
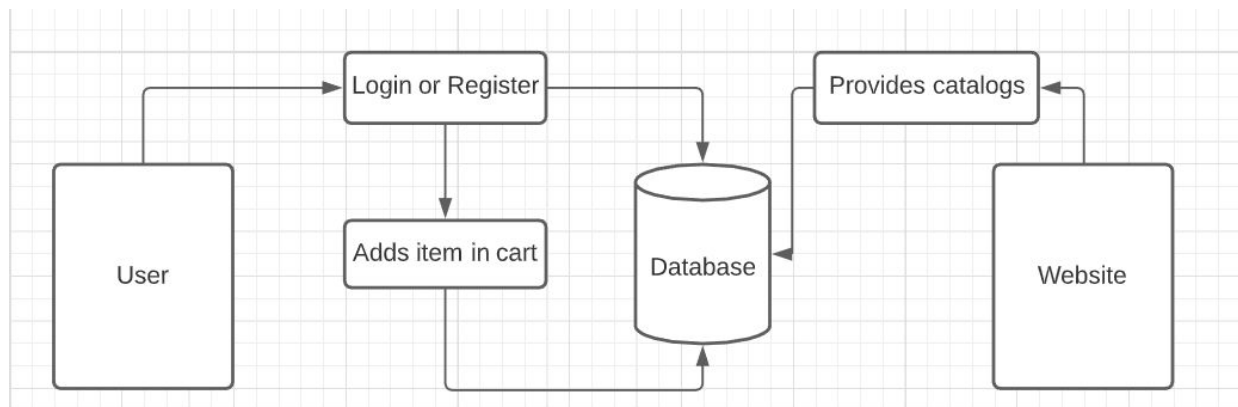
4.4 Flow Chart
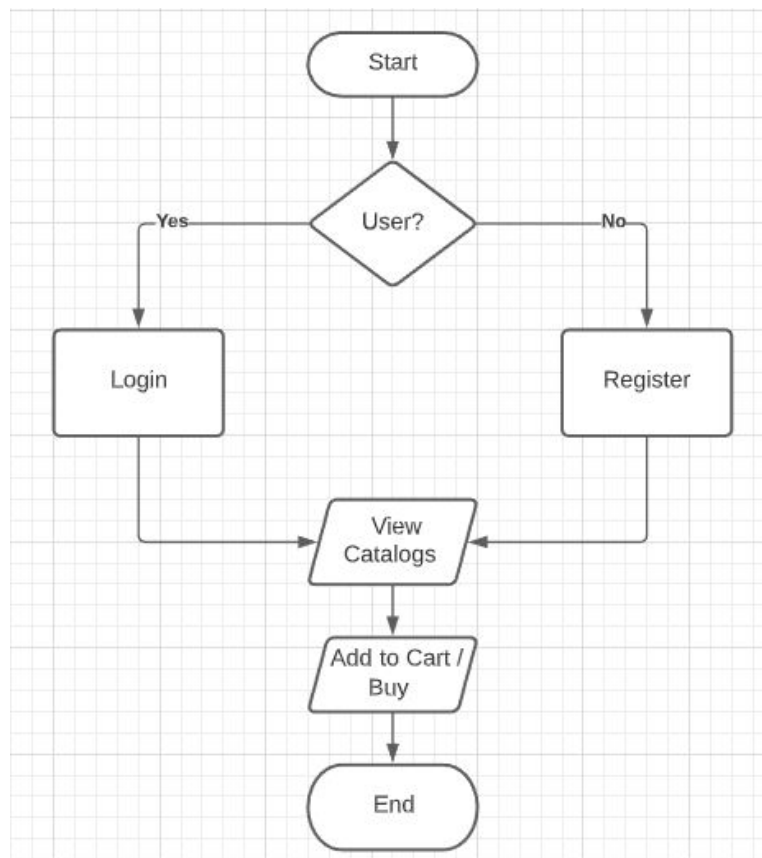
4.5GUI Screenshot
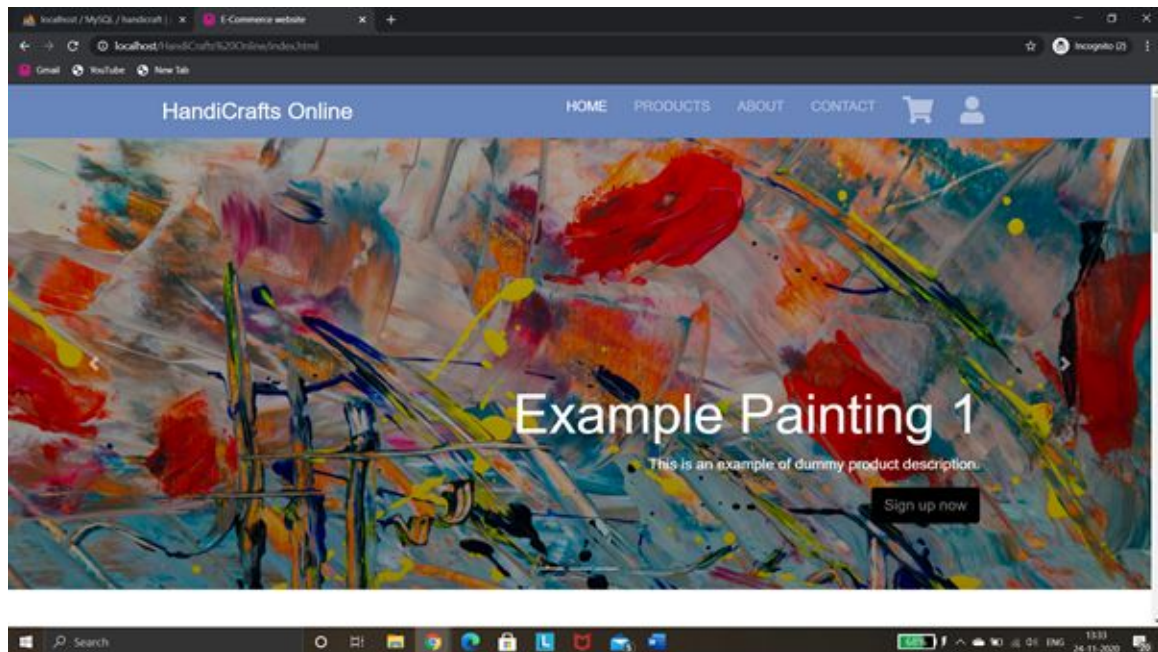
Fig 1: Home Page
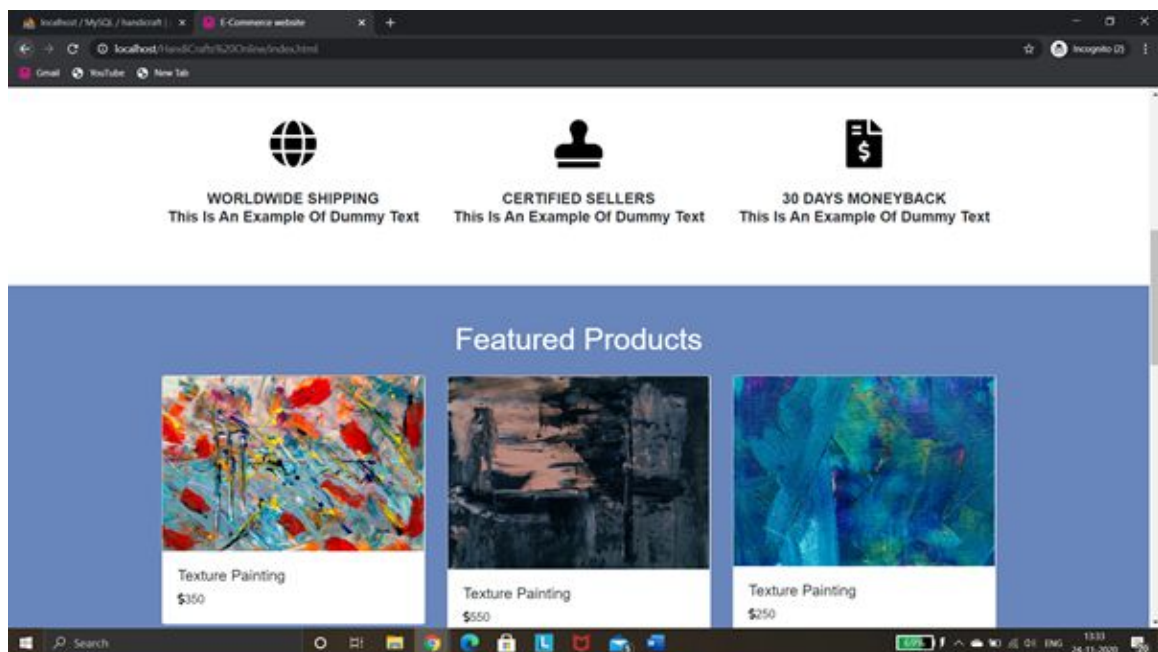
Fig 2: Home Page
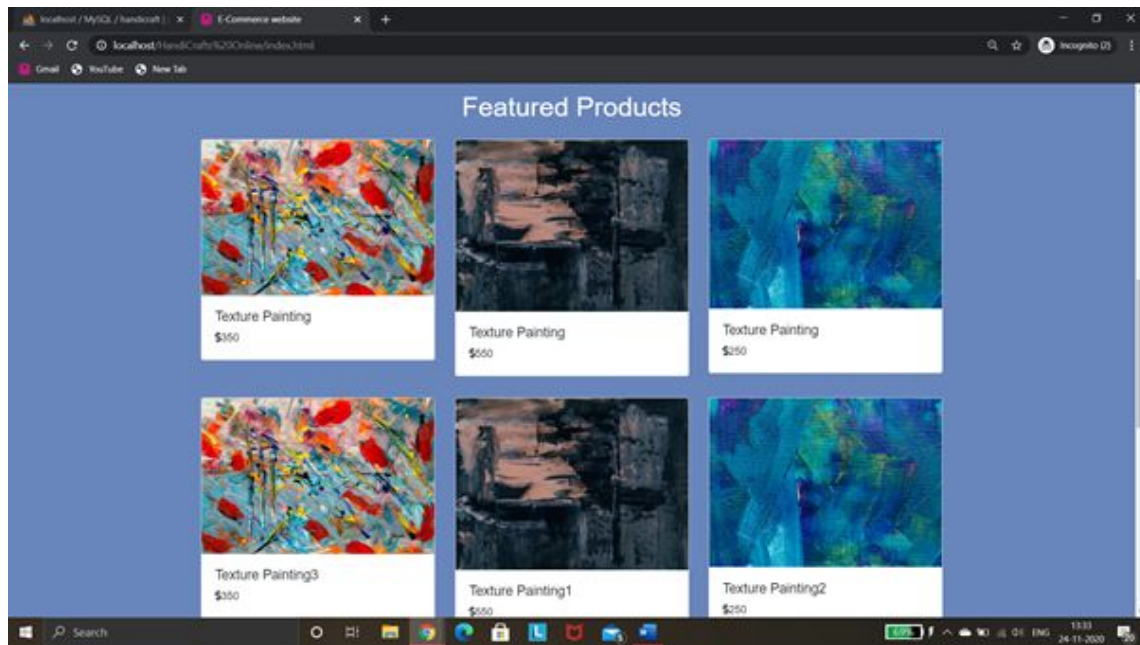
Fig 3: Home Page
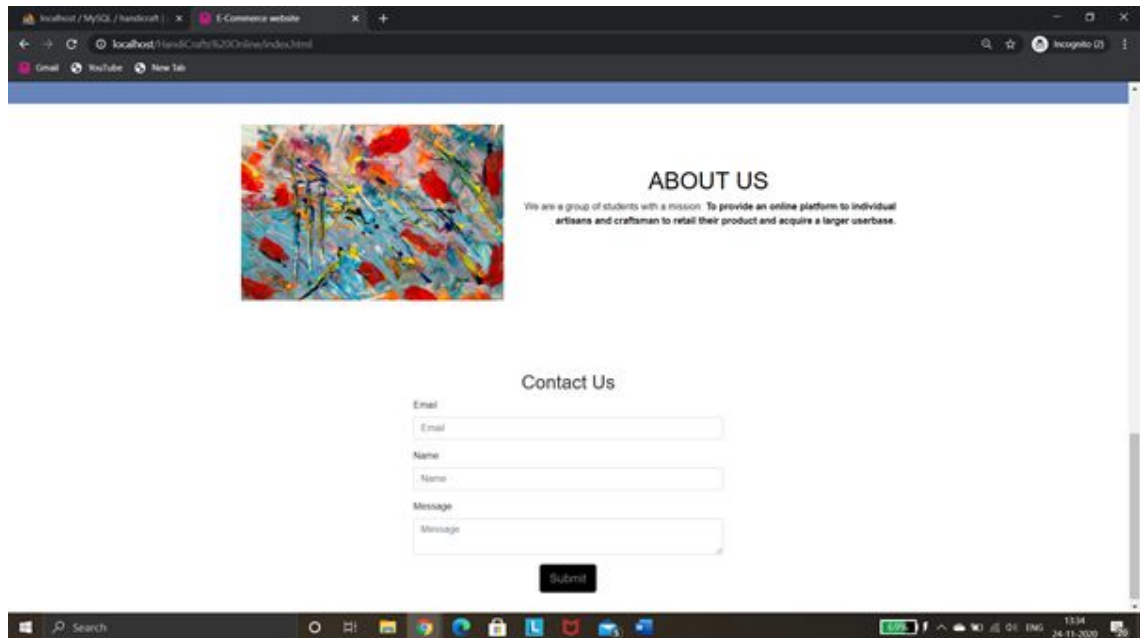
Fig 4: Home Page
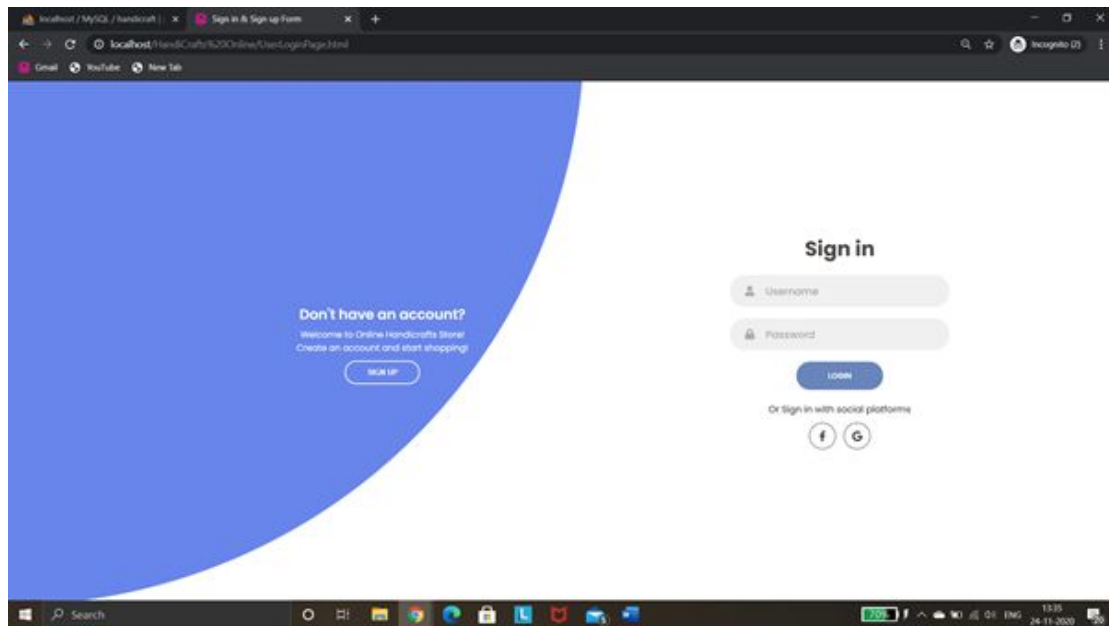
Fig 5: Login and Registration Page
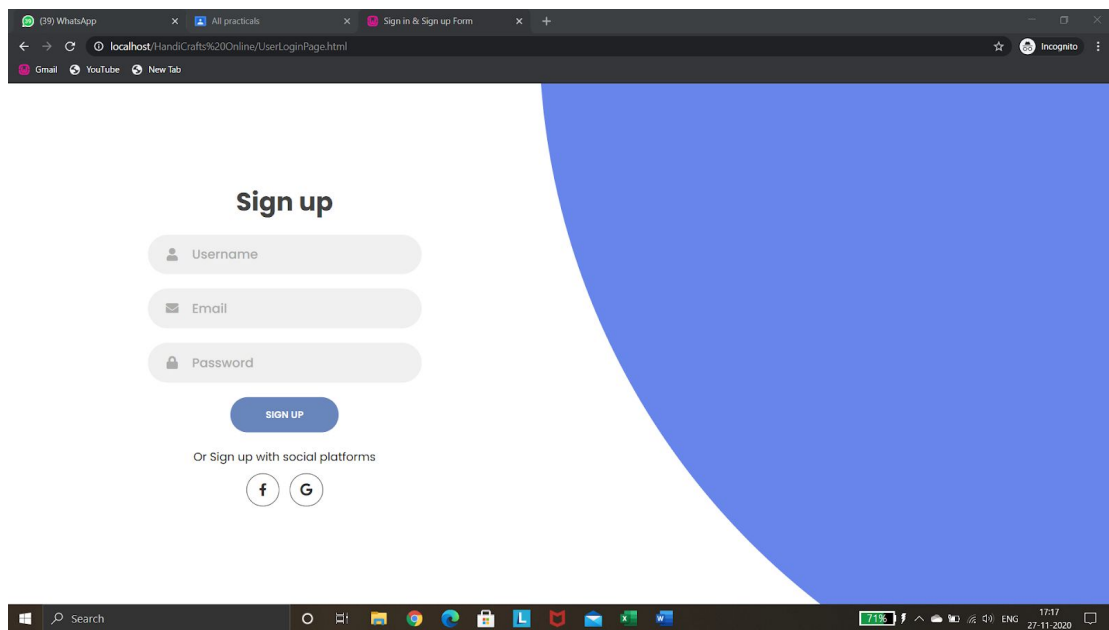
Fig 6: Login and Registration Page
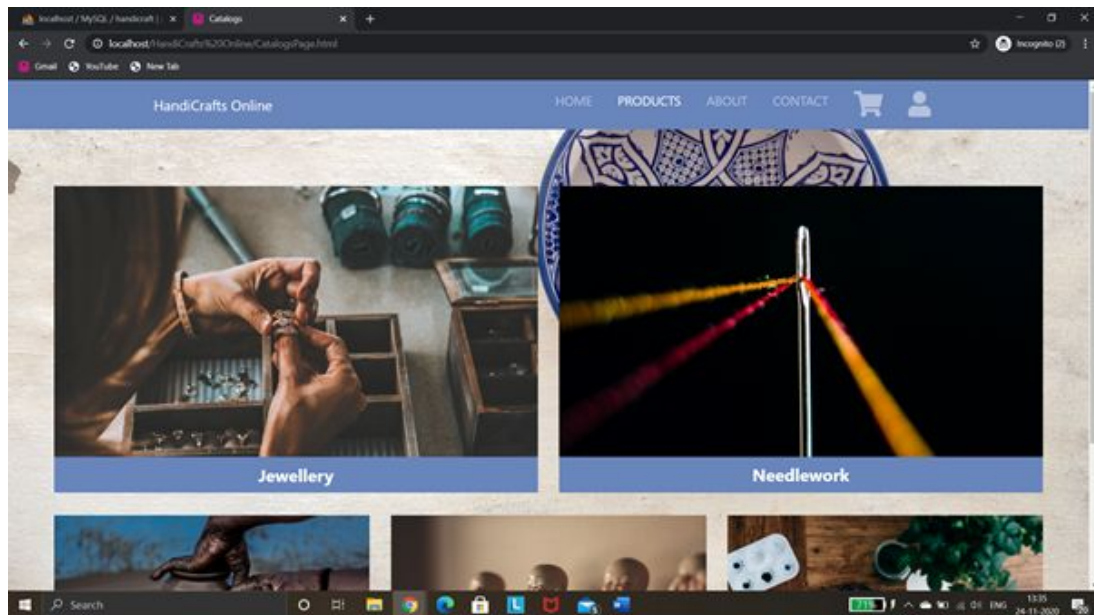
Fig 7: Catalogs Page
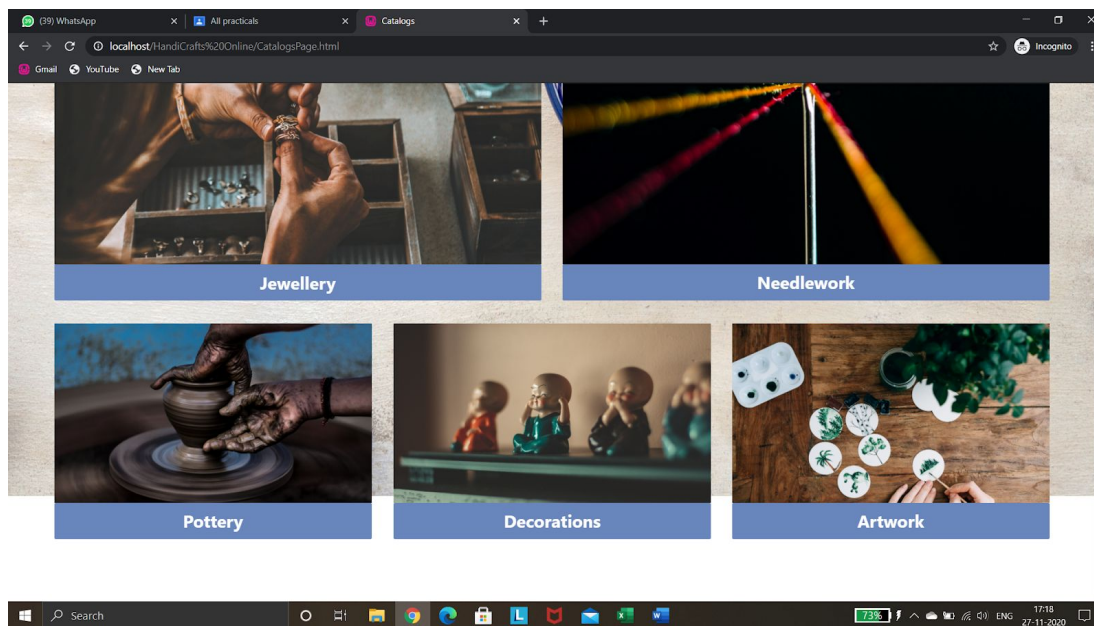
Fig 8: Catalogs Page
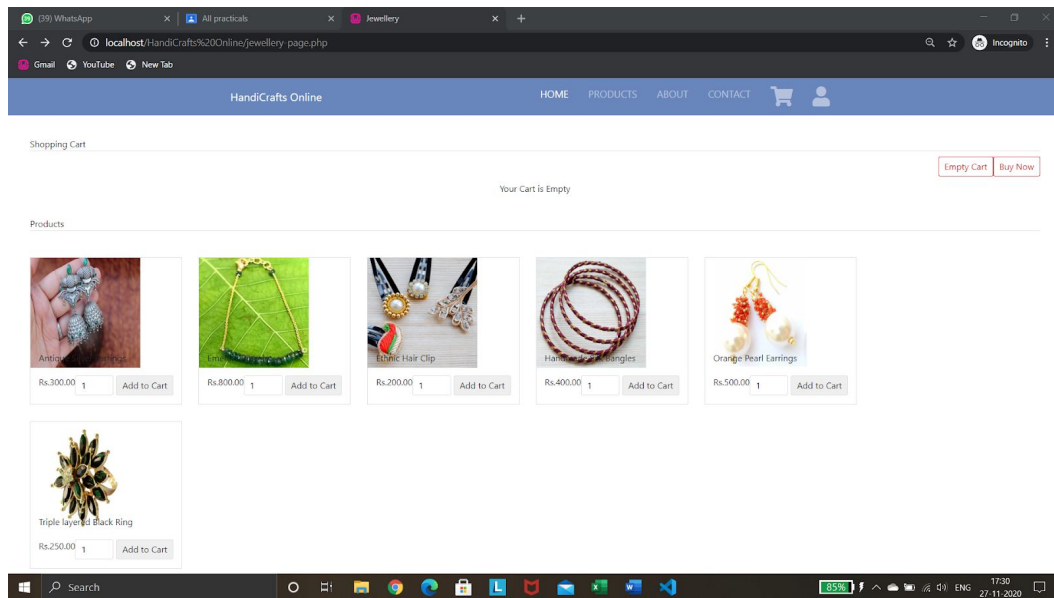
Fig 9: Jewellery Page
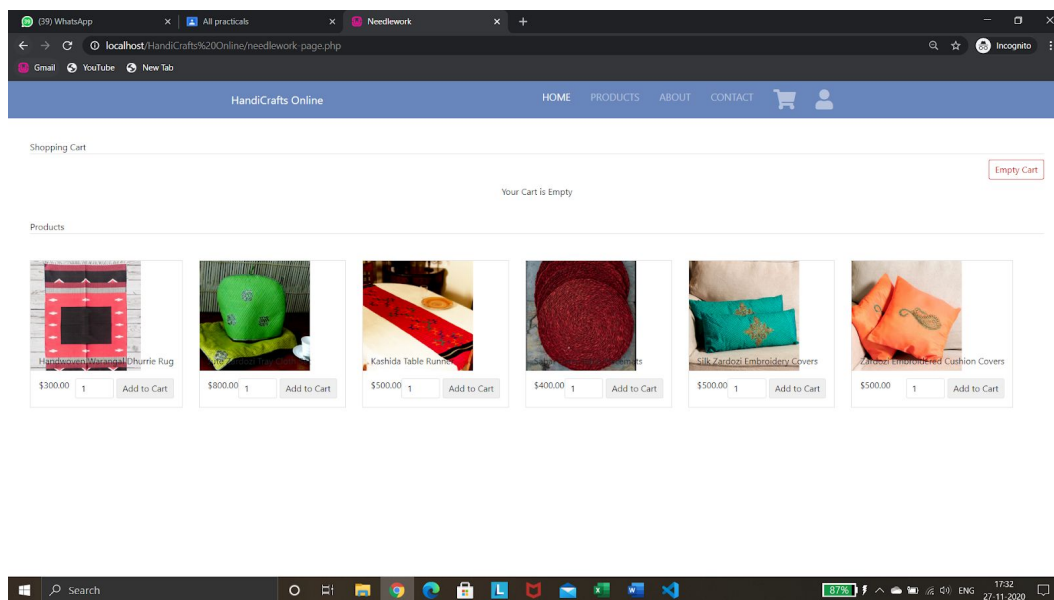
Fig 10: Needlework
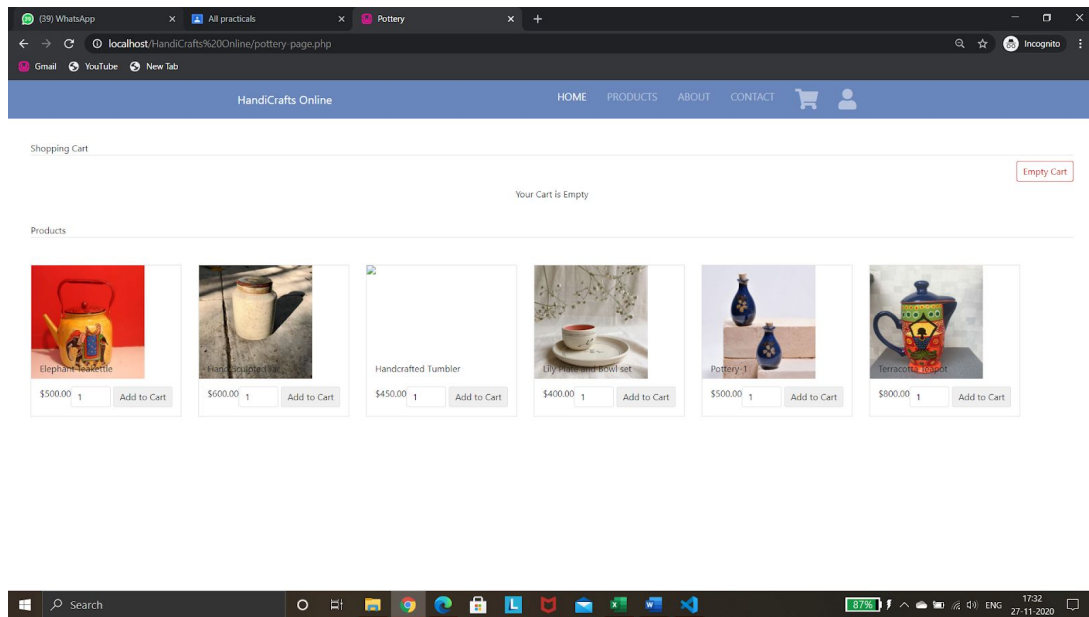
Fig 11: Pottery
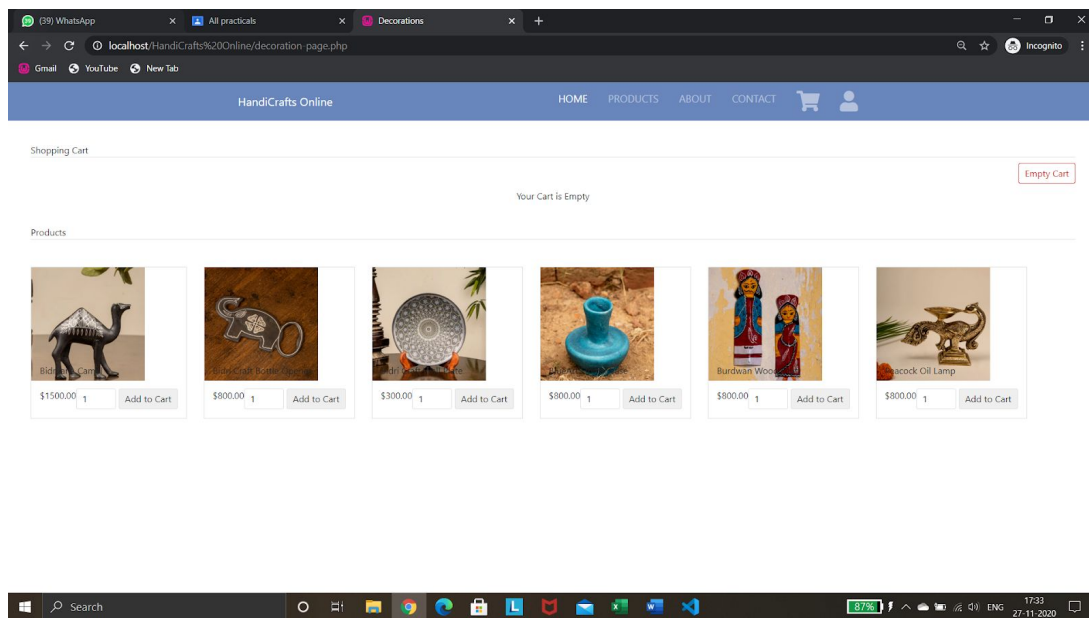
Fig 12: Decorations
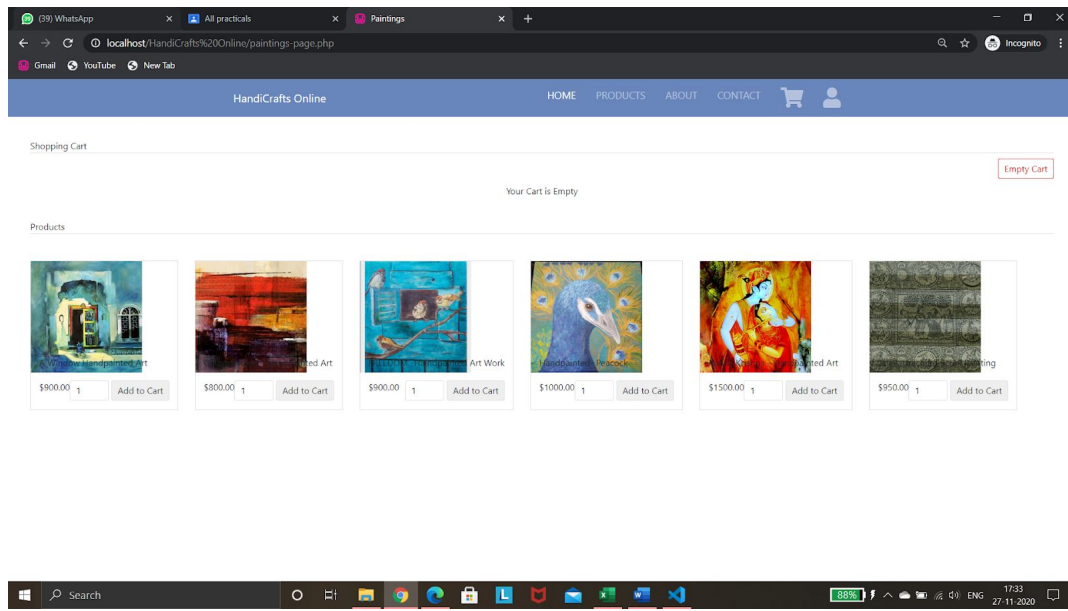
Fig 13: ArtWork
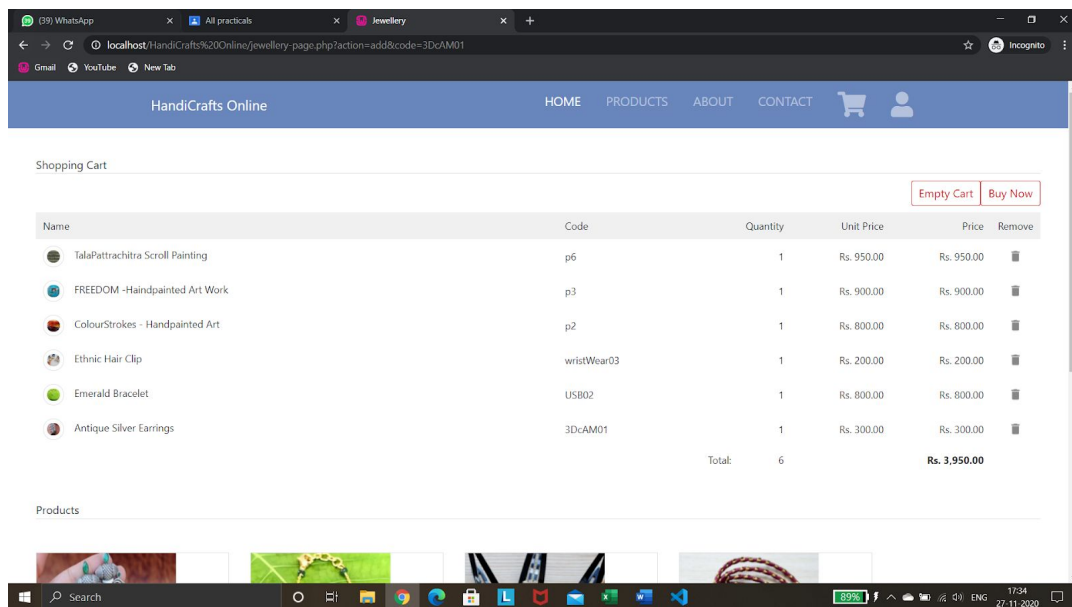
Fig 14: Shopping Cart

4.6 Database screenshot
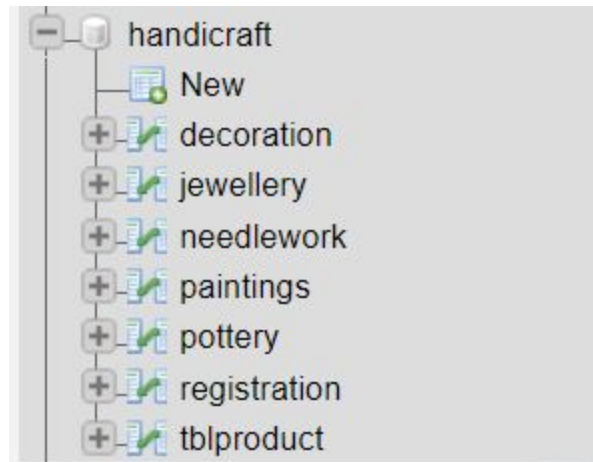

Fig 15: MySQL Database
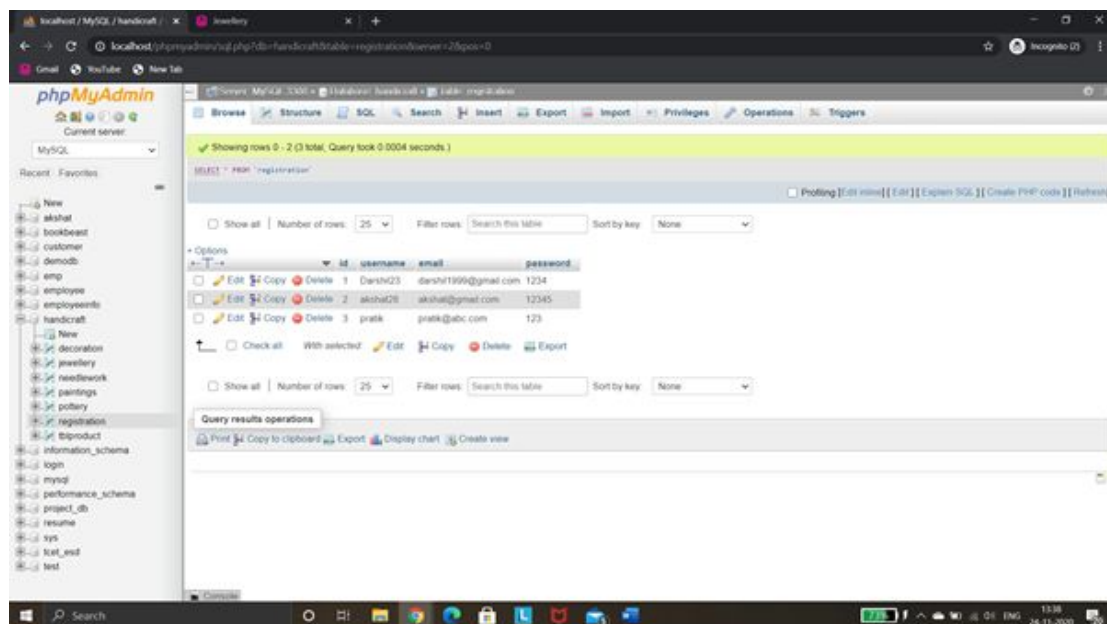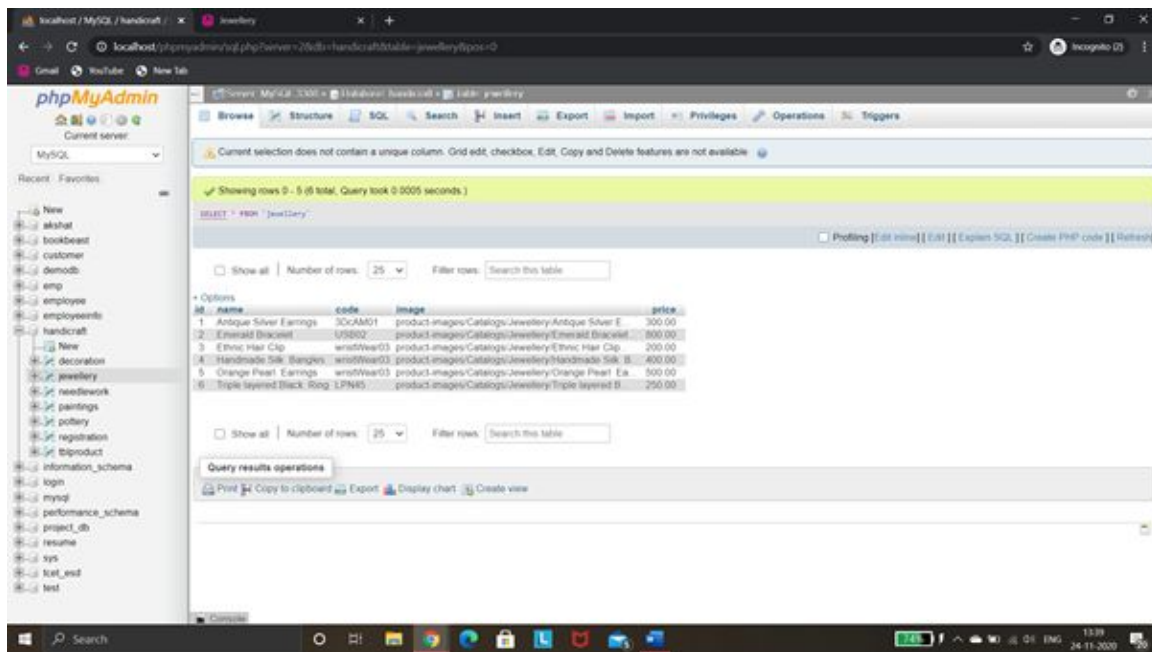
Fig 16: User Data Table (registration)

Products Table:


Fig 17: Jewellery Table


Fig 18: Needlework Table

Fig 19: Pottery Table


Fig 20: Decorations Table

Fig 21: ArtWork Table

Chapter 5 Results & Discussion

5.1 Actual Results

    a. Outputs

The project Handicrafts Online was developed by using Html, Bootstrap, CSS, Php, MySQL and Javascript. The main aim of developing this project was to help the local artisans grow their businesses more and bring our traditional culture to light. Through our e-commerce website people can browse and view the local handicrafts made by our very own Indian Artisans and buy them at reasonable costs. We hope our project will provide a platform to all the local artists to display and sell their fine craftsmanship.

    b. Outcomes

We think in today's world and in this economy it's very important to support the local craftsmen and admire their fine art and so this e-commerce website will not only help them but also help people buy their fine art sitting at home and ordering at their ease instead of going to shop for them specially.

    c. Discussion of the results

As we all know that the world is witnessing the Covid-19 pandemic, it has been very difficult for people to survive especially the lower class and middle class people as they are having economic burdens on them. So our project not only helps the local craftsman economically but also helps the buyers as in this pandemic situation going out and shopping is highly dangerous, so they can order the handicrafts and fine art sitting at home at their own convenience without having the need to go out and risk their health.

5.2 Future Scope (further phases)

So as far as future scope is concerned, right now due to time and knowledge constraint, we weren't able to link a payment gateway to our e-commerce website, so in future we will surely learn how to add a payment gateway so that people can start buying the fine art right away. Also we will make provision for a page where the local craftsmen can easily add their products just with a few clicks. Also, we will try to improve our GUI for better experience and interaction for the customers.

5.3 Testing

In computer programming, unit testing is a software testing method by which individual units of source code, sets of one or more computer program modules together with

associated control data, usage procedures, and operating procedures, are tested to determine whether they are fit for use. Intuitively, one can view a unit as the smallest testable part of an application. In procedural programming, a unit could be an entire module, but it is more commonly an individual function or procedure. In object-oriented programming, a unit is often an entire interface, such as a class, but could be an individual method. Unit tests are short code fragments created by programmers or occasionally by white box testers during the development process. It forms the basis for component testing. Ideally, each test case is independent from the others. Substitutes such as method stubs, mock objects, fakes, and test harnesses can be used to assist testing a module in isolation. Unit tests are typically written and run by software developers to ensure that code meets its design and behaves as intended.

Chapter 6 Conclusion

The following conclusions can be deduced from the development of the project:

- Online Handicrafts store will be an ease of access for everyone, i.e, customers as well as the artisans.
- Due to the pandemic , it is highly risky to go out for anything but with this e-commerce website people can admire and buy the fine work of the local craftsmen sitting at home.
- It will help the local craftsmen reach out to a wider audience who admire the real art. It will help them reach out to those people who respect the artwork but live far away and can't travel to shop for them.

REFERENCES:

1. Abisuga-Oyekunle, O. A., & Fillis, I. R. (2017).The role of handicraft micro-enterprises as a catalyst for youth employment.Creative Industries Journal,10(1), 59-74
2. Deshwal, P., Dr. (2016). Online advertising and its impact on customer behavior.International Journal of Applied Research, 2(2), 200-204
3. Chakraborty, A. (201 3). Rationale of handicraft on women employment inrural area: A case study on Jari workers of Bhagwangola-II block,Murshida bad district, WestBengal. Research Journal of Humanities and Social Sciences,4(2),271-276
4. Ghosh, A. (2013). Triggering innovation and creativity in traditional handicrafts sectors-an Indian perspective. Management Insight,8(1)
5. Mapdar, S. (2011). A study on the handloom textile clusters in India with special reference to select clusters in WestBengal.

APPENDIX:

[A] Copies of Literature survey papers

1)

https://www.researchgate.net/publication/341593107_Inspiring_Digitalization_of_Handicraft_Market_An_empirical_approach

2)

https://www.researchgate.net/publication/313315555_Online_Shopping_Management_System_with_Customer_Multi-Language_Supported_Query_handling_AIML_Chatbot

3)

https://www.academia.edu/4189716/Rationale_of_Handicraft_on_Women_Employment_in_Rural_Area_A_case_study_on_Jari_workers_of_Bhagawangola_II_Block_Murshidabad_District_West_Bengal?auto=download