Project Report On ARTISANO - A Marketplace For Handmade Products

1. Introduction

Artisano is an innovative eCommerce platform designed to empower artisans by providing a centralized marketplace for handmade products. This platform allows various vendors to list and sell their unique creations. This platform connects sellers with shoppers through one platform which supports handcrafted creators in local communities.

Objective:

The main objective of Artisano is to create a user-friendly and secure eCommerce platform that showcases handmade products and mainly to support small businessmen.

Scope:

The scope of the project includes:

- Designing and developing a multi-vendor eCommerce platform
- Enabling user accounts and secure sign-in/sign-up
- Product browsing, selection, and purchasing.
- Shopping cart functionality and order management.

2. Technologies Used

Frontend:

- <u>HTML</u>, <u>CSS</u>: For the structure and styling of the website.
- JavaScript: For dynamic page elements and user interaction

Backend:

- Flask: A micro web framework for handling server-side logic
- <u>MySQL</u>: For database management to store user, product, order, and cart data.

3. System Architecture

Frontend:

- Home Page: Displays aim, featured products and categories.
- **Product Listing Page:** Shows all available products.
- **Product Detail Page:** Detailed view of individual products, including images, descriptions, and price.
- Cart Page: Displays added products with quantity update feature.
- **Checkout Page:** Allows users to review their order and complete the purchase.
- User Profile: For users to view and update their account details.
- About Page: Allows user to discover about Artisano.

Backend:

- Authentication: Users can sign up, log in to their account.
- **Product Management:** Vendors can add, update, and manage their products.
- Order Management: Tracks the user's orders.
- **Shopping Cart Management:** Handles adding, removing, and updating items in the cart.

4. Database

The MySQL database for Artisano includes several tables like:

- users: Stores user information such as name, email, and password.
- **products:** Stores product details such as name, description, price, and image URL.
- **orders:** Stores information about the orders placed by users, such as order date, total price, and user ID.
- **order_items:** Stores individual items in an order, linking products to specific orders.
- cart: Stores temporary cart data for users before the order is completed.

5. Key Features

User Authentication

- Users can sign up for an account using a secure authentication system.
- Upon successful registration, users can log in and access their personalized dashboard to view and manage their orders.

Product Management

- The platform features a product catalog, where users can filter products based on categories, price range, and availability.
- Each product has a detailed page showcasing images, pricing, and a description.

Shopping Cart

- Users can add items to their shopping cart, update quantities, or remove products.
- The shopping cart integrates directly with the backend.

Order Management

- Once users complete their order, the system generates an order record and links it to the user's account.
- Vendors can view and process orders through their dashboard.

6. Future Enhancements

- **Mobile App Integration:** Developing a mobile application for both Android and iOS to reach a wider audience.
- **Payment Gateway Integration:** Adding support for secure payment systems like PayPal, Stripe, or credit card processing.
- Vendor Analytics Dashboard: Adding a detailed dashboard for vendors to track their sales, customer reviews, and inventory status.