

Problem Definition and Design Thinking

Phase 1

Building an Artisanal E-Commerce Platform

Introduction:

In an era where digitalization has revolutionised the global market, connecting skilled artisans with a worldwide audience has never been more important. This project aims to develop an artisanal e-commerce platform using IBM Cloud Foundry, bridging the gap between artisans and customers. The platform will serve as a marketplace, showcasing handmade products while providing a secure, user-friendly shopping experience.

Project Objectives:

The primary objectives of this project are:

Empowering Artisans: Provide a digital platform for artisans to showcase their handmade products, expanding their reach and customer base.

Global Accessibility: Connect artisans with a global audience, breaking down geographical barriers.

Secure E-commerce: Implement robust security measures for both artisans and customers, ensuring safe transactions.

User Experience: Create an intuitive and visually appealing platform that enhances user engagement and satisfaction.

Scope:

The project scope encompasses the following key areas:

Platform Design: Design the platform layout with sections for product categories, individual product pages, shopping cart, checkout, and payment.

Product Showcase: Develop a database to store product information, including images, descriptions, prices, and categories.

User Authentication: Implement user registration and authentication features to enable artisans and customers to access the platform.

Shopping Cart and Checkout: Design and develop the shopping cart functionality and a smooth checkout process.

Payment Integration: Integrate secure payment gateways to facilitate transactions.

User Experience: Focus on providing an intuitive and visually appealing user experience for both artisans and customers.

Technical Overview:

The technical stack for this project includes:

Tech Stack: HTML, CSS, and JavaScript for creating a responsive and interactive user interface.

Database: MongoDB for efficient storage of product information.

Security: Implementation of industry-standard security protocols, including HTTPS, encryption, and user authentication.

Features:

The platform will offer the following essential features:

Platform Layout: A well-organised layout with sections for product categories, individual product pages, shopping cart, checkout, and payment.

Product Showcase: A database storing product information, including images, descriptions, prices, and categories.

User Authentication: User registration and authentication features for artisans and customers.

Shopping Cart and Checkout: Functionality for adding/removing items from the cart and a smooth, multi-step checkout process.

Payment Integration: Integration of secure payment gateways for seamless transactions.

User Experience: A focus on an intuitive and visually appealing user experience, including responsive design, user-friendly navigation, and features such as product reviews and wish lists.

Conclusion:

This project sets out to create an artisanal e-commerce platform that will empower artisans to showcase their craft to a global audience.