Artisanal E-commerce Platform on IBM Cloud Foundry

Problem Definition:

The digital landscape is bustling with e-commerce platforms, but there is a notable gap for specialized artisanal platforms. Our aim is to fill this void by creating an artisanal e-commerce platform using IBM Cloud Foundry.

The primary objectives are:

- Bridging skilled artisans with a global audience.
- Offering a dedicated space to showcase handmade products such as jewelry, home decor, and more.
- Ensuring online transactions are secure and user-friendly with features like secure shopping carts, integrated payment gateways, and an intuitive checkout process.
- Crafting a user-centric design that caters to both the artisans, by providing them with an efficient interface to manage their products and orders, and the customers, by offering them a seamless shopping experience.

Design Thinking:

1. Platform Design:

The platform layout should be structured yet fluid, allowing ease of navigation. Main sections to consider:

Homepagehighlighting trending products, artisans, and categories.

Product Categoriesfor efficient product discovery.

Individual Product Pageswith detailed descriptions, images, and artisan profiles.

Shopping Cartwith clear product details and the option to easily add or remove items.

Checkoutwith multiple payment options and a clear summary of the purchase.

2. Product Showcase:

A robust database is crucial for storing extensive product details:

Utilize IBM Cloud Databases to store product images, detailed descriptions, pricing, categories, and artisan details.

Offer artisans an intuitive interface to add, edit, or remove their products.

3. User Authentication:

Secure and hassle-free user experience is paramount:

Implement registration and login mechanisms for both artisans and customers.

Ensure data protection with encrypted passwords and possibly two-factor authentication.

4. Shopping Cart and Checkout:

Efficiency and clarity are key:

Users should be able to add or remove products with ease.

The checkout process should display a clear summary, shipping details, and estimated delivery time.

Ensure a guest checkout option for users who don't want to register.

5. Payment Integration:

Secure and varied payment options increase user trust and convenience:

Integrate with renowned payment gateways like Stripe, PayPal, etc.

Ensure transaction details are encrypted and secure.

Provide a clear payment confirmation and digital receipt.

6. User Experience:

The overall aesthetic and functional efficiency can make or break the platform:

Use a clean and modern design with emphasis on product visuals.

Optimize load times and ensure mobile responsiveness.

Include user reviews, ratings, and feedback mechanisms to continually refine the user experience.