

## Phase 3: Development Part 1

### Introduction:

Phase 3 of the “E-commerce Application on IBM Cloud Foundry” project is the pivotal stage where we transition from planning and innovation to actual development. In this part, we will begin building the artisanal e-commerce platform on IBM Cloud Foundry. Our focus for this part is to design the platform layout and create a database to store product information. The design and structure of the platform are fundamental in delivering an exceptional user experience and enabling the seamless operation of the e-commerce system.

### Designing the Platform Layout:

#### User-Centric Design:

Our e-commerce platform is built with a user-centric approach. The design philosophy revolves around ensuring that users can easily navigate the platform, find what they need, and enjoy a hassle-free shopping experience. The following aspects are crucial to the design:

- **Intuitive Navigation:** The platform layout should have a clear and intuitive navigation menu, allowing users to browse product categories, access their wishlists and reviews, and perform quick searches.
- **Responsive Design:** In today’s mobile-driven world, a responsive design is essential. Our platform should adapt to different screen sizes and devices, ensuring that users can access it from smartphones, tablets, and desktops.
- **User-Friendly Product Listings:** The product listings should be presented in an organized and user-friendly manner. Each product should have clear images, detailed descriptions, and pricing information.
- **Easy Checkout Process:** The checkout process should be streamlined and user-friendly, minimizing the steps required for users to complete their purchases. Security measures should also be in place to protect user data during transactions.

#### Product Catalog Layout:

Designing the layout for the product catalog involves structuring how products are displayed and categorized. Key elements include:

- **Product Categories:** Grouping products into categories for easy browsing. Each category should have a dedicated page with relevant filters.
- **Product Details Page:** Creating a detailed product page with images, descriptions, reviews, and the option to add products to the shopping cart.
- **Search Functionality:** Implementing a robust search feature that allows users to find products by name, category, or other attributes.

#### **User Account Layout:**

User accounts are a crucial part of the platform. The user account layout should include:

- **Registration and Login:** A user-friendly registration and login process to create and access user accounts.
- **User Profile:** Users should have the ability to manage their profiles, including personal information, addresses, payment methods, and communication preferences.
- **Wishlist and Reviews:** Users can access and manage their wishlists and product reviews from their accounts.

#### **Creating the Product Information Database:**

A well-structured and efficient database is essential for storing product information. This database will serve as the backbone for the e-commerce platform. Key elements include:

- **Product Information:** Storing details for each product, including product name, description, price, images, and other relevant attributes.

- **Product Categories:** Categorizing products into different categories and subcategories for easy retrieval and display.
- **User Data:** Managing user account information, including user profiles, wishlists, and reviews.
- **Order History:** Tracking user order history and order details for order processing and analytics.
- **Reviews and Ratings:** Storing product reviews and ratings submitted by users.

#### **Conclusion:**

Development Part 1 represents a significant step in turning our project vision into a reality. The design of the platform layout and the creation of the product information database are foundational to delivering a seamless and user-centric e-commerce experience. As we move forward with the development, our commitment to excellence and user satisfaction remains unwavering. Stay tuned for the upcoming phases as we continue building this artisanal e-commerce platform on IBM Cloud Foundry.