**Project Title: E-commerce Application on IBM Cloud Foundry**

**Problem Definition**:

In this project ,we have to create an e-commerce website for IBM Cloud Foundry .By presenting their handmade goods and offering services like secure shopping carts, payment gateways, and an easy checkout procedure, the website aims to link skilled craftsmen with a global audience. This entails creating the e-commerce platform, adding the required features, and making sure the customer experience is seamless.

**Design Thinking:**

* **Homepage Layout**: Create a homepage layout that is both aesthetically pleasing and responsive, with sections for featured products, artisan profiles, and a search bar for simple navigation.
* **Contents**: Log-in and sign-up buttons, terms and conditions, navigation bar is available for showing the detailed information of another webpages.
* Filters are also available for search efficiently

**Product Showcase**:

• Create a database structure to keep track of product details such pictures, descriptions, costs, and classifications. Ensure effective data storage and retrieval.

• **Navigation and Categories**: To make it easier for clients to find what they're looking for, implement a simple, user-friendly navigation menu with product categories.

• **Artisan Profiles**: Give artisans the ability to personalize and construct their own profiles that highlight their abilities, educational background, and a portfolio of their work.

**User Authentication:**

**• User Registration**: Create a simple registration procedure with few details needed. Verify your email to add an extra layer of security.

• **User accounts:** Both buyers and craftsmen can create user accounts with the possibility to include personal data, shipping addresses, and payment methods.

**Shopping Cart and Checkout:**

**• Shopping Cart**: Create a feature for the shopping cart that makes it simple for customers to add, remove, and update things. Give a detailed list of what's in their cart.

• **Checkout procedure**: Create an easy-to-use checkout procedure with a variety of payment choices. Features like the order summary, shipping choices, and order confirmation should be included.

**Payment Integration:**

* **Secure Payment Gateways**: Integrate trusted payment gateways like PayPal, Stripe, or others to ensure secure and seamless transactions.
* **Payment Confirmation**: Implement instant payment confirmation notifications to both customers and artisans to enhance transparency.

**User Experience:**

* **Responsive Design**: Ensure the platform is responsive, adapting to various screen sizes and devices for a consistent user experience.
* **Search and Filters**: Provide advanced search and filtering options, enabling customers to narrow down product choices efficiently.
* **Reviews and Ratings**: Allow customers to leave reviews and ratings for products and artisans, fostering trust within the community.
* **Customer Support**: Include a support system, such as chat or email, for users to get assistance and resolve issues promptly.
* **Feedback Mechanism**: Implement a feedback system to gather input from both artisans and customers for continuous platform improvement.
* **Mobile App**: Consider developing a mobile app to expand the platform's reach and provide a more convenient shopping experience.
* **Analytics and Reporting**: Incorporate analytics tools to track user behavior, sales trends, and platform performance, enabling data-driven improvements.
* **Marketing and Promotion**: Create a mechanism for artisans to promote their products and for the platform to run promotional campaigns.
* **Security Measures**: Prioritize the security of user data and transactions by implementing SSL certificates, data encryption, and regular security audits.
* **Scalability**: Design the platform architecture to be scalable, allowing it to handle increased traffic and products as it grows.