**E-commerce Application on IBM cloud Foundry**

**Phase 1: Problem Definition and Design Thinking**

Build an artisanal e-commerce platform using IBM Cloud Foundry. Connect Skilled artisans with the global audience. Showcase handmade products , from exquisite jewellery to artistic home decor. Implement secure shopping carts, Smooth payment gateways, and an intuitive checkout process. Nuture creativity and support small business throw an artisan’s dream marketplace!

**Problem Definition:**

Building an artisanal e-commerce platform using cloud foundry will help the skilled artisans connect with the global audience. The handmade products and handcrafts are not well-known by many people and the job of the artisans are vanishing day by day as people are unaware of the handmade products.

Inorder to solve the problem,the handcraft products must be marketed for which a e-commerce platform must be created to showcase the products so that people can easily access the products.The objective is to leverage IBM cloud's infrastructure and services to create a secure,scalable and user-friendly online marketplace.

a web-based portal designed keeping in mind the dedication and hardwork of individual artisans and craftsmen. Aim is to incorporate modern technology to provide artisans with a platform to showcase their skills of crafts and cater to a wider range of audience. This approach reduces the cost of acquiring a middle-man and also provides an opportunity for a greater profit margin for the sellers. Sellers can directly register on the portal and showcase their skills to the world

**Design Thinking:**

Building an artisanal e-commerce platform on IBM Cloud Foundry involves several steps. Below is a high-level outline of the process. Please note that this is a simplified overview, and you might need to adapt it based on your specific requirements and the tools available on IBM Cloud Foundry.

Platform design:

To design the platform layout with sections for product categories, individual project pages, shopping cart, checkout and payment,front end is being used and back end is used to ensure the accessibility.

**Product Showcase**:

Mongo database is used to store product information such as images, description, prices, and categories which is used to create the ecommerce.

**User Authentication:**

User registeration and authentication features are implemented . Once this has been confirmed,authorization is then used to enable artisans and customers to access the platform.

**Shopping cart and Checkout:** Back end isresponsible for storing and organising data, and ensuring everything on the client-side actually worksto develop the shopping cart functionality and smooth checkout process.

**Payment Integration:** A payment processor is chosen and security features are implemented ,that is integrated to facilitate transactions.

**User Experience:** Focus on providing an intuitive and visually appealing user experience for both artisans and customers ,products which are usable, credible, valuable, accessible and desirable are much more likely to succeed