**E-commerce App**

**Problem Statement:** Build an artisanal e-commerce platform using IBM Cloud Foundry. Connect skilled artisans with a global audience. Showcase handmade products, from exquisite jewelry to artistic home decor. Implement secure shopping carts, smooth payment gateways, and an intuitive checkout process. Nurture creativity and support small businesses through an artisan's dream marketplace.

**Phase** **2:** **Innovation**

**1. Product Reviews:**

* User-Generated Reviews: Allow customers to leave reviews and ratings for products they've purchased. Encourage honest feedback to build trust.
* Moderation: Implement a moderation system to prevent spam, fake reviews, or inappropriate content.
* Display Reviews: Display product reviews prominently on product pages to help potential buyers make informed decisions.
* Sort and Filter: Allow users to sort and filter product reviews by criteria such as date, rating, and helpfulness.
* Review Notifications: Notify customers when their reviews are approved and published to encourage engagement.

**2. Wishlists:**

* User Accounts: Require users to create accounts or log in to save items to their wishlist. This can also help with personalization.
* Add to Wishlist Button: Include an "Add to Wishlist" button on product pages to make it easy for users to save products they're interested in.
* Wishlist Management: Allow users to view, edit, and organize their wishlists. They should also be able to remove items.
* Sharing: Enable users to share their wishlists with friends and family, especially useful for special occasions.
* Reminder Notifications: Send occasional reminder notifications to users about items in their wishlist, especially if there are price drops or limited stock.

**3. Personalized Recommendations:**

* User Profiling: Collect user data and preferences through their interactions with the platform, such as search history, purchase history, and wishlist items.
* Machine Learning Algorithms: Implement recommendation algorithms that analyze user behavior and preferences to suggest relevant products.
* Recommendation Widgets: Display personalized product recommendations on the homepage, product pages, and in emails.
* Segmentation: Segment users based on their preferences and behavior, and tailor recommendations accordingly (e.g., "Recently Viewed," "Recommended for You").
* Feedback Loop: Allow users to provide feedback on recommendations, such as rating or dismissing suggestions, to improve accuracy.

**4. User Engagement:**

* Email Notifications: Send personalized email notifications to users based on their activity, such as abandoned cart reminders, product updates, and promotions.
* User Activity Feed: Implement an activity feed that shows users what products have been recently added, liked, or purchased by other users.
* Social Sharing: Enable users to share their purchases and favorite products on social media, increasing engagement and potentially attracting new users.

**5. Analytics and Optimization:**

* Monitor User Interaction: Use analytics tools to track how users engage with these features and gather insights on their effectiveness.
* A/B Testing: Continuously test variations of these features to optimize their performance and user satisfaction.

**6. Privacy and Data Protection:**

* Data Security: Ensure that user data collected for personalized recommendations is protected and compliant with data protection regulations.
* Transparency: Clearly communicate to users how their data is being used to provide personalized experiences, and provide opt-out options if desired.