Drop shipping T Shirts App



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Objective:

To develop a cross-platform e-commerce application using Flutter that provides a seamless and engaging shopping experience for users. The app should be responsive, user-friendly, and capable of handling essential e-commerce features like product browsing, cart management, secure checkout, and order tracking. It should aim to enhance user retention and boost sales by integrating modern design principles, performance optimization, and personalized user experiences.

Functional Requirements:

Admin Functionalities:

1. Authentication & Authorization:

- Admin login using secure Firebase Authentication.
- Admin role-based access control.

2. Product Management (CRUD):

- Create, update, delete, and read T-shirt product data.
- Categorize products into main and subcategories
- Add detailed product descriptions, including:
 - Product name.
 - Images (upload and preview).
 - Price.
 - Affiliate link for external purchases.

3. Category Management:

- Manage main categories (e.g., Men, Women, Kids).
- Add, edit, or delete subcategories.

4. Affiliate Links:

- Add affiliate URLs for each product.
- Ensure redirection to the appropriate website when users click "Buy Now."

5. Push Notifications:

- Send promotional notifications to users about:
 - New arrivals.
 - Discounts.

Updates.

User Functionalities:

1. Authentication:

• Guest login to explore products without sign-up.

2. Product Browsing:

- View products based on categories and subcategories.
- Search functionality for specific T-shirts.
- Filter and sort options (e.g., by price, popularity).

3. Affiliate Link Redirection:

• Redirect to the affiliate website when clicking "Buy Now."

4. Push Notifications:

- New products.
- Discounts and offers.

5. Multilingual Support:

• Choose preferred app language (e.g., English, Spanish, French).

Shared Functionalities

1. Multilingual Interface:

Admin and user-facing interfaces in multiple languages.

2. Dark/Light Mode:

• Support for theme customization for better user experience.

3. Responsive Design:

• Fully optimized for mobile and tablet screens.

4. Performance:

- Use Firebase Firestore for real-time data updates.
- Cache frequently accessed data for a seamless user experience.

5. Secure Data:

- All communication between the app and Firebase should be encrypted.
- Proper validation for user inputs to avoid vulnerabilities.