PROJECT: FLUTTER E-COMMERCE APP (WITH FIREBASE BACKEND)

Tech stack:

- **Frontend:** Flutter (Android, iOS, Web optional)
- Backend: Firebase (Firestore, Authentication, Storage, Cloud Functions)
- Admin Panel: (Optional via web dashboard or integrated admin module)

ESTIMATED TOTAL COST

UGX 3,500,000 - 5,000,000

(Depending on scope, design quality, and feature set)

Break down in detail

1. Requirement Gathering & System Design — UGX 400,000

Includes:

- Meetings, requirement documentation, user flow diagrams
- UI/UX wireframes
- Firebase structure design (Collections, subcollections, security rules)

Reason:

Lays foundation for app logic and smooth development. Usually 10–15% of total cost.

2. UI/UX Design — UGX 600,000

Includes:

- High-quality modern app design using Figma or Flutter UI kits
- Responsive layout for both Android & iOS
- Custom icons, color theme, logo adaptation

Reason:

Professional, clean UI boosts user trust and conversion.

3. Frontend Development (Flutter) — UGX 1,800,000

Includes:

- Building main app screens:
 - Onboarding, Login/Register (Firebase Auth)

- Home Page with product listing
- Product details page
- Add to cart, Checkout page
- o Profile & order history
- State management (e.g., Provider, Riverpod, or Bloc)
- Integration with Firebase (Firestore, Storage)
- Navigation, loading indicators, validation, etc.

Reason:

Core development — 40–50% of total project time and complexity.

4. Firebase Backend Setup — UGX 800,000

Includes:

- Firestore DB structure design
- Firebase Authentication (email, Google)
- Firebase Storage (for product images)
- Cloud Functions (for order handling, notifications)
- Security rules and testing

Reason:

Ensures reliable, scalable cloud backend with security and automation.

5. Admin Panel / Dashboard — UGX 600,000

Includes:

- Web-based or mobile admin interface
- Manage products, categories, and orders
- Update stock, prices, and delivery status
- Optional Firebase Hosting setup

Reason:

Client control center to manage the business without coding.

6. Payment Integration (Optional – if they want it integrated) — UGX 400,000

Includes:

- Integration with MTN MoMo API, Airtel Money, or Flutterwave
- Test and deploy sandbox → live
- Handle transaction success/failure logic

Reason:

Adds convenience for users, requires extra API and security testing.

7. Testing & QA — UGX 250,000

Includes:

- Unit testing, bug fixing
- Compatibility testing (Android versions)
- UAT with client

Reason:

Ensures smooth and stable experience before launch.

8. Deployment & Training — UGX 150,000

Includes:

- Publishing to Google Play Store (and optionally App Store)
- Setting up Firebase hosting (if web dashboard used)
- Training client on how to manage the app/admin panel

Reason:

Hands-over the final product professionally.

9. Maintenance (Optional Retainer) — UGX 200,000/month

Includes:

- Bug fixes, minor updates, Firebase optimization
- Cloud cost monitoring

Reason:

Keeps app stable and updated after launch.

SUMMARY BUDGET TABLE

Item	Description	Cost (UGX)
1	Requirements & Design	400,000
2	UI/UX Design	600,000
3	Flutter Frontend	1,800,000
4	Firebase Backend Setup	800,000
5	Admin Panel	600,000
6	Payment Integration	400,000
7	Testing & QA	250,000
8	Deployment & Training	150,000
Subtotal		5,000,000 UGX
Maintenance (optional)	Monthly support	200,000/month