

software requirements

(functional & non-functional)

Software Requirements - Arimma Frontend (B2B2C Platform)

Arimma – Frontend Development for Digital Trade and Climate Neobank

Project Scope:

The frontend application is designed to provide a responsive, user-friendly interface that allows B2B2C actors (farmers, traders, cooperatives, logistics, financial institutions) to interact with the Arimma ecosystem through trade, procurement, banking, insurance, and credit features.

Functional Requirements

1. User Management

Registration & login (multi-role): Farmer, Buyer, Trader, Financier, Logistics Profile setup: Name, contact info, location, business type, role-based fields Role-based dashboards

Password reset & email verification flow

2. Product & Service Marketplace

Browse & search products (inputs, produce, insurance, logistics, finance)

Filters: Category, location, price, availability

Product detail view

Add/list product form (title, image, description, category, price, quantity)

Buyer request interface (reverse listing)

3. Wallet Interface (UI Only in MVP)

View wallet balance (fiat & stablecoins)

Transaction history mock

Buttons: "Top Up", "Send", "Withdraw" (non-functional or placeholder)

4. Procurement & Order Management

View cart & checkout process (for input or produce buyers)

Track orders (static status for MVP)

Confirmation and delivery summary screens

5. Insurance & Credit Module (UI-Only MVP)

View available insurance covers (crop, livestock, logistics, equipment)

Apply for climate insurance (form-based UI only)

Credit score preview mock screen

Apply for finance (static form)

6. Logistics Integration (UI Only)

Browse available logistics partners (dropdown map view)

Track order delivery (mock timeline)

Book logistics provider (static UI)

7. Farmer & Trader Dashboards

Summary cards: # of products, orders, active listings, wallet balance

Shortcuts: "Add Product", "Buy Inputs", "Apply for Loan", "Get Insurance"

Analytics preview (for full platform): order volumes, revenue, savings, climate risk tips

8. Customer Support & Resources

FAO section

Contact form

Live chatbot integration placeholder

WhatsApp chat button

Non-Functional Requirements

Requirement Description

- Responsiveness Fully responsive (mobile-first) for phones and tablets
- Performance Lightweight, load-time optimized (<3 seconds on 4G)
- Accessibility WCAG 2.1 compliant (contrast, font size, semantic HTML)
- Scalability Modular components and layout ready for expansion
- Localization Multi-language support (English, Swahili, Portuguese, French)
- Security Secure front-end routing, basic form validation.

Tech Stack Recommendation

Layer Technology

- Framework React.js + Next.js
- Styling Tailwind CSS or SCSS
- State Mgmt Redux Toolkit or React Context
- Forms React Hook Form + Yup
- Maps (optional) Leaflet.js or Mapbox for geolocation
- Auth (UI) Firebase Auth integration (frontend only)
- UI Kit shadcn/ui or Chakra UI (optional)

Deliverables

- Fully functional front-end MVP
- GitHub-hosted source code
- Static pages with placeholder APIs
- Responsive layout & mobile testing

