**Functional Requirements Specification (FRS)**

**Project Name**: KrishiMitra  
**Website URL**: <https://krishi-mitra-front.vercel.app/>  
**Version**: 1.0

**1. Introduction**

**Purpose**

This document outlines the functional requirements for the KrishiMitra website, covering user authentication, product browsing, cart management, and user profile interactions.

**Scope**

* **In-scope**:
  + User login/auth flow.
  + Product filtering/search.
  + Cart management (+/- items).
  + QR code product linking.
  + User profile dropdown.
* **Out-of-scope**:
  + Payment gateway integration.
  + User registration (assumed to exist).

**2. System Overview**

* **Frontend**: React.js (hosted on Vercel).
* **Backend**: (To be specified, e.g., Node.js/Firebase).
* **Users**: Farmers, Buyers, Guest Visitors.

**3. Functional Requirements**

**Feature 1: Landing Page (/)**

* **FRS-101**: Display the text **"Fresh From Farm to Table"**.
* **FRS-102**: Show a green button labeled **"Let’s Get Started"**.
  + **Action**: Redirect to /auth on click.

**Feature 2: Authentication Page (/auth)**

* **FRS-201**: Display two input fields:
  + Email Address (textbox).
  + Password (masked textbox).
* **FRS-202**: **Sign in** button below the fields.
  + **Validation**:
    - If credentials are invalid → Show popup: **"Invalid login credential"**.
    - If valid → Redirect to /shop.

(for testing the correct email : [farmer@gmail.com](mailto:farmer@gmail.com) password : 123456 )

**Feature 3: Shop Page (/shop)**

* **FRS-301**: Display a grid of products with:
  + Name (e.g., "Organic Apples").
  + Quantity (e.g., "1kg").
  + Price (e.g., "$2.99").
  + QR code icon (per product).
* **FRS-302**: **Filters** (Buttons: All, Fruits, Vegetables, Organic).
  + **Action**: Reload products based on selected filter.
* **FRS-303**: **Search Bar to Search fresh fruits & vegetables**
  + **Action**: Dynamically show products matching search query.

**Feature 4: Product QR Code & Details**

* **FRS-401**: Clicking QR code icon shows:
  + A QR code.
  + Clickable text: **"View Product Page"**.
    - **Action**: Redirect to /product/[id].
* **FRS-402**: Product Page (/product/[id]) has:
  + Product details (name, price, etc.).
  + **"Back to Shop"** button (returns to /shop).

**Feature 5: Cart Management**

* **FRS-501**: Clicking the **cart icon** on a product:
  + Icon changes to **"1"** with **"+"** (right) and **"-"** (left).
  + **Total items** displayed near the cart icon (e.g., "3 items").
* **FRS-502**: **Clicking the cart icon** again redirects to /cart:
  + Shows all selected items + total price.
  + If empty → Displays **"Your Cart is empty"** + **"Continue Shopping"** button (redirects to /shop).

**Feature 6: User Profile Dropdown**

* **FRS-601**: Clicking the **user icon** (top-right) shows:
  + **Dropdown options**:
    - Profile
    - Favorites
    - Settings
    - Sign Out
* **FRS-602**: **Sign Out** → Redirects to /auth.

**4. Non-Functional Requirements**

* **Performance**: Shop page loads in <1.5s with 100+ products.
* **Security**: Passwords encrypted (bcrypt).
* **Compatibility**: Works on Chrome, Firefox, Safari (latest versions).

**5. UI Specifications**

* **Wireframe References**:
  + Landing Page: Centered text + green button.
  + /auth: Two input fields + Sign In button.
  + /shop: Grid layout, filters on top, search bar.

**6. Error Handling**

* **FRS-701**: Invalid login → Popup message.
* **FRS-702**: Empty cart → "Your Cart is empty" message.

**7. Glossary**

* **QR Code Icon**: Links to product details.
* **Organic Filter**: Shows only organic products.