

Src/App.js

```
import React from "react";
import styled from "styled-components";
import { FarmerProvider } from "../components/FarmerContext";
import FarmerProfile from "../components/FarmerProfile";
import FarmProducts from "../components/FarmProducts";
import AddProductForm from "../components/AddProductForm";
import UpdateFarmerInfoForm from "../components/UpdateFarmerInfoForm";

const StyledDiv = styled.div`
  width: 100%;
  display: flex;
  flex-direction: column;
  align-items: center;
`;

const App = () => {
  return (
    <FarmerProvider>
      <StyledDiv>
        <FarmerProfile />
        <FarmProducts />
        <AddProductForm />
        <UpdateFarmerInfoForm />
      </StyledDiv>
    </FarmerProvider>
  );
};

export default App;
```

```
import React, { useContext, useState } from "react";
import { FarmerContext } from "../FarmerContext";

const AddProductForm = () => {
  const { addProduct } = useContext(FarmerContext);

  const [newProduct, setNewProduct] = useState({
    productName: "",
    category: "",
    quantity: "",
    unit: "",
  });

  const handleChange = (e) => {
    const { name, value } = e.target;
    setNewProduct((prev) => ({
      ...prev,
      [name]: value,
    }));
  };

  const handleSubmit = (e) => {
    e.preventDefault();
    addProduct(newProduct);
    setNewProduct({ productName: "", category: "", quantity: "", unit: "" });
  };

  return (
    <form onSubmit={handleSubmit}>
      <h3>Add Product</h3>
      <input
        type="text"
        name="productName"
        placeholder="Product Name"
        value={newProduct.productName}
        onChange={handleChange}
        required
      />
      <br />
      <input
        type="text"
        name="category"
        placeholder="Category"
        value={newProduct.category}
        onChange={handleChange}
      />
    </form>
  );
};
```

```
        required
    />
    <br />
    <input
        type="number"
        name="quantity"
        placeholder="Quantity"
        value={newProduct.quantity}
        onChange={handleChange}
        required
    />
    <br />
    <input
        type="text"
        name="unit"
        placeholder="Unit"
        value={newProduct.unit}
        onChange={handleChange}
        required
    />
    <br />
    <button type="submit">Add Product</button>
</form>
);
};

export default AddProductForm;
```

```
import React, { createContext, useState } from "react";

export const FarmerContext = createContext();

export const FarmerProvider = ({ children }) => {
  const [farmer, setFarmer] = useState({
    farmerId: "F001",
    name: "John Doe",
    contact: "123-456-7890",
    farmLocation: "Green Valley",
    farmProducts: [
      {
        id: 1,
        productName: "Wheat",
        category: "Grain",
        quantity: 500,
        unit: "kg",
      },
      {
        id: 2,
        productName: "Apples",
        category: "Fruit",
        quantity: 200,
        unit: "kg",
      },
    ],
  });

  // Add a new product
  const addProduct = (newProduct) => {
    setFarmer((prevFarmer) => ({
      ...prevFarmer,
      farmProducts: [
        ...prevFarmer.farmProducts,
        { id: Date.now(), ...newProduct },
      ],
    }));
  };

  // Remove a product by ID
  const removeProduct = (id) => {
    setFarmer((prevFarmer) => ({
      ...prevFarmer,
      farmProducts: prevFarmer.farmProducts.filter(
        (product) => product.id !== id
      ),
    }));
  };
}
```

```
    ),  
  }));  
};  
  
// Update farmer's personal details  
const updateFarmerInfo = (updatedInfo) => {  
  setFarmer((prevFarmer) => ({  
    ...prevFarmer,  
    ...updatedInfo,  
  }));  
};  
  
return (  
  <FarmerContext.Provider  
    value={{ farmer, addProduct, removeProduct, updateFarmerInfo }}>  
    {children}  
  </FarmerContext.Provider>  
)  
);  
};
```

src/components/FarmerProfile.js

```
import React, { useContext } from "react";
import { FarmerContext } from "../FarmerContext";

const FarmerProfile = () => {
  const { farmer } = useContext(FarmerContext);

  return (
    <div>
      <h2>Farmer Profile</h2>
      <p>
        <strong>Farmer ID:</strong> {farmer.farmerId}
      </p>
      <p>
        <strong>Name:</strong> {farmer.name}
      </p>
      <p>
        <strong>Contact:</strong> {farmer.contact}
      </p>
      <p>
        <strong>Farm Location:</strong> {farmer.farmLocation}
      </p>
    </div>
  );
};

export default FarmerProfile;
```

src/components/FarmProducts.js

```
import React, { useContext } from "react";
import { FarmerContext } from "../FarmerContext";

const FarmProducts = () => {
  const { farmer, removeProduct } = useContext(FarmerContext);

  return (
    <div>
      <h2>Farm Products</h2>
      <ul>
        {farmer.farmProducts.map((product) => (
          <li key={product.id}>
            {product.productName} ({product.category}): {product.quantity}{" "}
            {product.unit}
            <button onClick={() => removeProduct(product.id)}>Remove</button>
          </li>
        ))}
      </ul>
    </div>
  );
};

export default FarmProducts;
```

```
import React, { useContext, useState } from "react";
import { FarmerContext } from "../FarmerContext";

const UpdateFarmerInfoForm = () => {
  const { farmer, updateFarmerInfo } = useContext(FarmerContext);

  const [updatedInfo, setUpdatedInfo] = useState({
    name: farmer.name,
    contact: farmer.contact,
    farmLocation: farmer.farmLocation,
  });

  const handleChange = (e) => {
    const { name, value } = e.target;
    setUpdatedInfo((prev) => ({
      ...prev,
      [name]: value,
    }));
  };

  const handleSubmit = (e) => {
    e.preventDefault();
    updateFarmerInfo(updatedInfo);
  };

  return (
    <form onSubmit={handleSubmit}>
      <h3>Update Farmer Info</h3>
      <input
        type="text"
        name="name"
        placeholder="Name"
        value={updatedInfo.name}
        onChange={handleChange}
        required
      />
      <br />
      <input
        type="text"
        name="contact"
        placeholder="Contact"
        value={updatedInfo.contact}
        onChange={handleChange}
        required
      />
    </form>
  );
};
```



```
<br />
<input
  type="text"
  name="farmLocation"
  placeholder="Farm Location"
  value={updatedInfo.farmLocation}
  onChange={handleChange}
  required
/>
<br />
<button type="submit">Update Info</button>
</form>
);
};

export default UpdateFarmerInfoForm;
```