

Readme File

Prototype Web Application: Farmers Central

This prototype web application is built using Visual Studio and C#. It provides a simple interface to manage a database of farmers and their products. The application offers two user roles: farmer and employee, and includes functionalities for user authentication, adding farmers/products, and viewing/filtering product lists.

Prerequisites

To build and run the prototype, you will need the following tools:

- Visual Studio: The application is developed using Visual Studio, so you should have it installed on your machine. You can download Visual Studio from the official Microsoft website.
- .NET Framework: The prototype uses C# and .NET Framework. Ensure that you have the appropriate version of the .NET Framework installed.

Building the Prototype

To build the prototype web application, follow these steps:

1. Download or clone the prototype source code files to your local machine.
2. Open Visual Studio and select "Open a project or solution."
3. Navigate to the downloaded source code files and open the solution file (.sln) in Visual Studio.
4. Once the solution is loaded, build the project by selecting "Build" from the top menu and then "Build Solution." Ensure that there are no build errors.

Running the Prototype

To run the prototype web application, follow these steps:

1. After successfully building the solution, press F5.
2. Visual Studio will launch the application in your default web browser, or you can manually open a web browser and navigate to the specified localhost address.

Using the Prototype

Once the prototype is running in your web browser, you can perform the following actions:

- Log in as a farmer or employee using the provided credentials.
- Employees can add new farmers to the database by navigating to the appropriate section and providing the necessary details.
- Farmers can add new products.
- To view list of products you can press the filter button and all the products will display.
- Filtering options are available to narrow down the displayed list of products by date range or product type.

Database

```
CREATE DATABASE FarmersDB;
```

```
USE FarmersDB;
```

```
CREATE TABLE Farmers (  
FarmerID INT PRIMARY KEY IDENTITY(1,1),  
FarmerName VARCHAR(100) NOT NULL,  
Email VARCHAR(100) NOT NULL,  
Password VARCHAR(100) NOT NULL  
);
```

```
CREATE TABLE Employees (  
  EmployeeID INT PRIMARY KEY IDENTITY(1,1),  
  EmployeeName VARCHAR(100) NOT NULL,  
  Email VARCHAR(100) NOT NULL,  
  Password VARCHAR(100) NOT NULL,  
);
```

```
CREATE TABLE Products (  
  ProductID INT PRIMARY KEY IDENTITY(1,1),  
  ProductName VARCHAR(100) NOT NULL,  
  SupplyDate DATE NOT NULL,  
  ProductType VARCHAR(50) NOT NULL  
);
```

```
CREATE TABLE FarmerProducts (  
  FarmerProductID INT PRIMARY KEY IDENTITY(1,1),  
  FarmerID INT NOT NULL,  
  ProductID INT NOT NULL,  
  FOREIGN KEY (FarmerID) REFERENCES Farmers(FarmerID),  
  FOREIGN KEY (ProductID) REFERENCES Products(ProductID)  
);
```

Demonstration video

https://youtu.be/m_q81RpxHVV