ST10358162

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PROG 7311

GitHub Link: <https://github.com/VCSTDN2024/prog7311-part-2-zahrakarann.git>

YouTube video: <https://youtu.be/dsW0cfswFZE>

READ ME File is on GitHub, also pasted on the next page.

READ ME

# 🌱 Agri-Energy Connect

Agri-Energy Connect is a modern \*\*ASP.NET Core MVC\*\* web application that bridges sustainable agriculture and energy innovation. It supports \*\*Farmers\*\* and \*\*Employees\*\* with role-based dashboards, collaboration tools, and a clean UI.

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## 🚀 Features

### 🧑‍💼 Employee Dashboard

- Add new farmers to the platform

- View and manage profile

- Access the Marketplace

- Participate in the Collaboration Forum

### 👨‍🌾 Farmer Dashboard

- Add and manage marketplace products

- Filter product listings

- Join collaboration forums

### 🔐 Authentication

- User registration and login

- Role-based access (Farmer, Employee)

- Authorization via ASP.NET Identity

### 🎨 UI & Layout

- Responsive design (Bootstrap 5)

- Shared layout and components

- Carousel and site styling

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## 🧰 Tech Stack

| Layer | Technology |

|-----------|--------------------------|

| Frontend | HTML, CSS, Bootstrap |

| Backend | ASP.NET Core MVC (C#) |

| Database | SQL Server + EF Core |

| Identity | ASP.NET Core Identity |

| Tools | Visual Studio / VS Code |

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## 📁 Project Structure

Agri-EnergyConnect/

│

├── Connected Services/

├── wwwroot/

│ ├── css/

│ │ ├── carousel.css

│ │ ├── site.css

│ │ └── style.css

│ ├── js/

│ ├── lib/

│ └── favicon.ico

│

├── Controllers/

│ ├── AccountController.cs

│ ├── AdminDashboardController.cs

│ ├── CollaborationController.cs

│ ├── ContactController.cs

│ ├── DashboardController.cs

│ ├── EmployeeDashboardController.cs

│ ├── FarmerController.cs

│ ├── FarmerDashboardController.cs

│ ├── HomeController.cs

│ ├── MarketplaceController.cs

│ └── ProductsController.cs

│

├── Data/

│ ├── ApplicationDbContext.cs

│ └── DbInitializer.cs

│

├── Helpers/

│ └── PasswordHelper.cs

│

├── Models/

│ ├── AppUser.cs

│ ├── Employee.cs

│ ├── ErrorViewModel.cs

│ ├── Farmer.cs

│ ├── ForumPost.cs

│ ├── Message.cs

│ └── Product.cs

│

├── ViewModels/

│ ├── DashboardViewModel.cs

│ ├── LoginViewModel.cs

│ └── RegisterViewModel.cs

│

├── Views/

│ ├── Account/

│ ├── AdminDashboard/

│ ├── Collaboration/

│ ├── EmployeeDashboard/

│ ├── Farmer/

│ ├── FarmerDashboard/

│ ├── Home/

│ ├── Marketplace/

│ ├── Product/

│ └── Shared/

│ ├── \_Layout.cshtml

│ ├── \_ValidationScriptsPartial.cshtml

│ ├── \_ViewImports.cshtml

│ ├── \_ViewStart.cshtml

│ └── SharedForum.cshtml

│

├── appsettings.json

├── appsettings.Development.json

├── Program.cs

└── Startup.cs

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## 👤 User Roles

| Role | Access Areas |

|----------|------------------------------------------|

| Employee | Dashboard, Marketplace, Add Farmer, Forum |

| Farmer | Dashboard, Add/View Products, Forum |

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## 🧪 Sample Credentials

| Username | Password | Role |

|----------------------|-----------|----------|

| employee1@agri.com | Pass@123 | Employee |

| farmer1@agri.com | Pass@123 | Farmer |

> Roles can be seeded via `DbInitializer.cs` or Identity UI

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## ⚙️ Getting Started

1. Clone the repository:

```bash

git clone https://github.com/your-org/agri-energy-connect.git

cd agri-energy-connect

2.Update database (Packet Manager Console):

Update-Database

3. Run the app.

4. Navigate to https://localhost:5001