Hands-On Assignment

C# .NET Starter

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Context

" Improve **software development skills** in information systems' design and implementation by **incrementally** building a solution to a client's demand. "

Results

1. Standalone C# application;
2. C# application with database connectivity;
3. ASP .NET Core application;
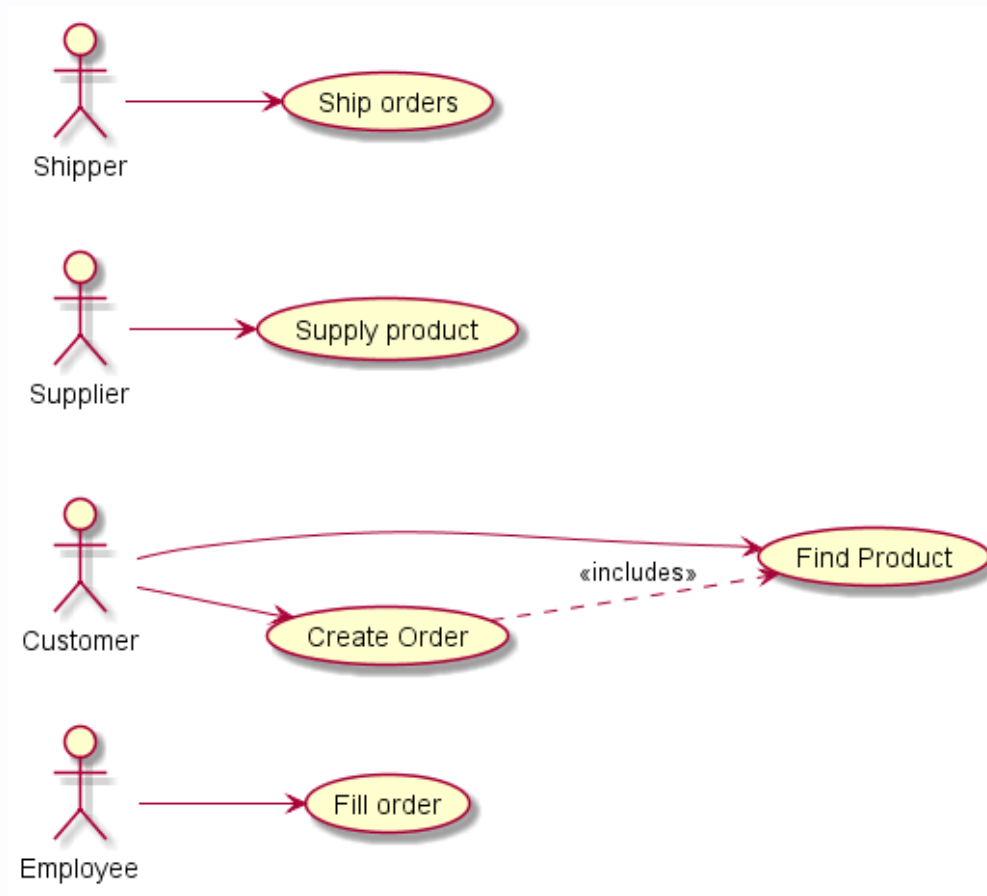4. ASP .NET Core API;

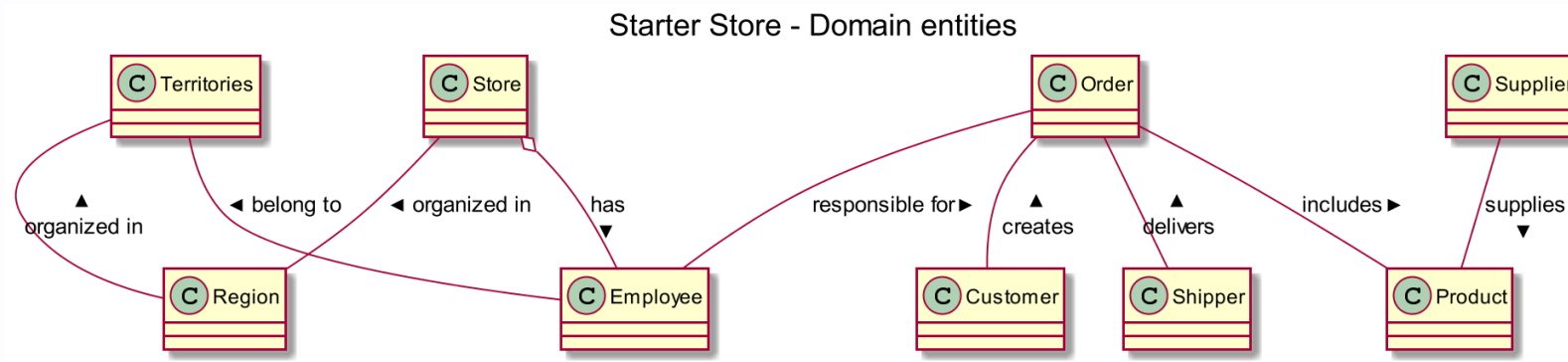# Analysis

Problem description

A company named **StarterStore** has expanded its food sales business and needs an information system to manage the **products** which are in stock in each of its twenty-five stores.

Those **stores** are organised in **regions**, which are further organised in **territories**. Also, StarterStore has **employees** that belong to a territory and are responsible for **orders** created by **customers**. Those orders are delivered by **shippers**. **Suppliers** supply products that are then associated with orders when a customer decides to buy an item.
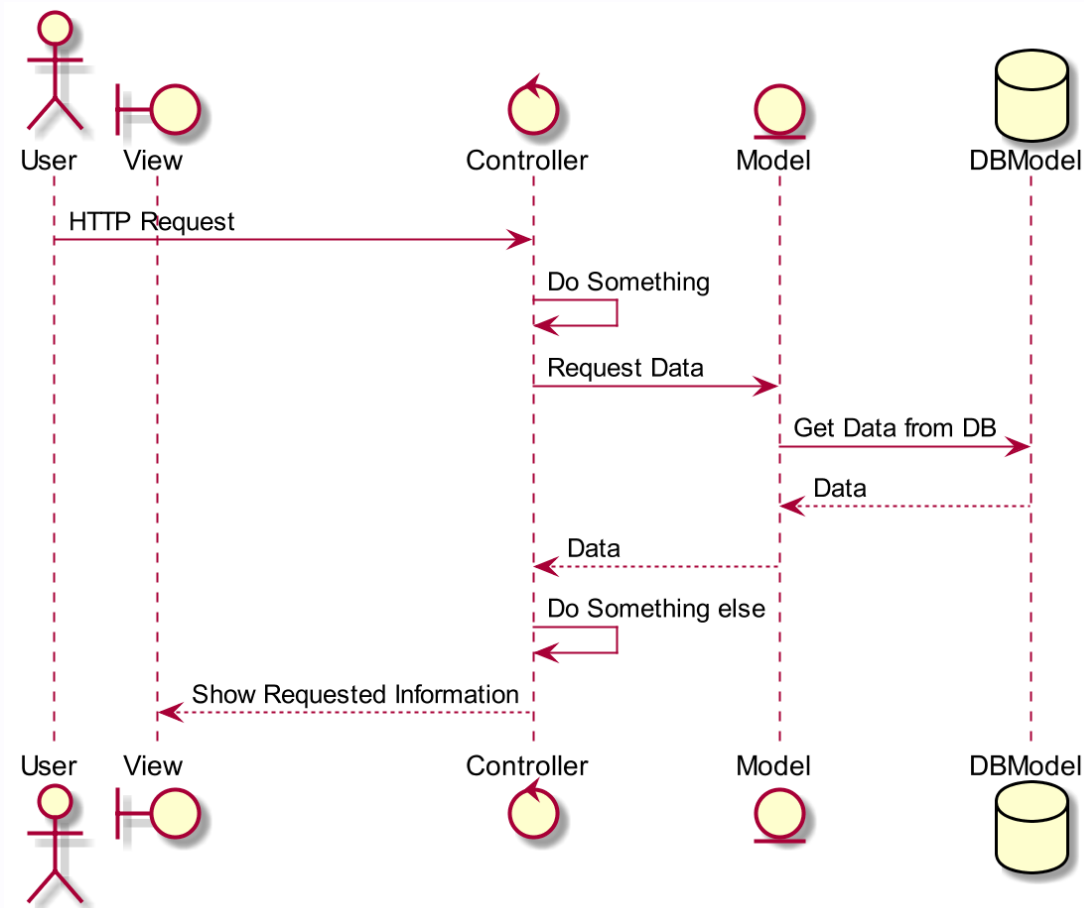
Use Case Diagram

Domain Model

Starter Store - Domain entities

Three Layered Architecture

Entity Details

A **product** has a name and a unit price. An **employee** has a name, a title, a title of courtesy, a birth date, an address (address, city, region, postal code, and country), a home phone, and, optionally, a photo. A **customer** has a name, a title, an address (address, city, region, postal code, and country), a home phone, and, also, a fax.

Diagram

Starter Store - Domain entities (detail)

Product
-name: string
-unitPrice: decimal

Person
-name: string
-title: string
-address : string
-homePhone : string

Employee
-titleCourtesy: string
-birthDate: Date
-photo : string

Customer
-fax: string