**MicroService Assignment**

**Product Management:** Represent the main project namespace or assembly.

**DbContext** : Manages the database context and includes a DbSet<User> for interacting with the User entities and DbSet<Product> for interacting with the Product entities.

**Interfaces and Repositories:**

* **IUserRepository:** Defines methods for CRUD operations on Users entities.
* **UserRepository:** Implements IUserRepository and provides concrete implementations for the data access operations
* **IProductRepository:** Defines methods for CRUD operations on Users entities.
* **ProductRepository:** Implements IProductRepository and provides concrete implementations for the data access operations

**Services :**

* **User Service**: Implements business logic related to user entities. Depends on IUserRepository for data access operations
* **Product Service**: Implements business logic related to User entities. Depends on IProductRepository for data access operations
* **Inventory Service**: Handles inventory management including adding/removing products.
* **Price Service**: Manages pricing information.
* **Cart Service**: Manages shopping cart operations.
* **Order Service**: Handles order processing and checkout functionality.

**Key Relationships:**

* **Dependency Relationship:** User Service depends on IUserRepository for accessing and manipulating User data and Product Service depends on IProductRepository for accessing and manipulating Product.
* **Association Relationship:** DbContext has a composition relationship with DbSet<User> and DbSet<Product> , indicating that it manages a collection of User and Product entities