Asynchronous communication

(Demo prep)

Using Asynchronous communication

1. Just like we need to define DTOs to establish contracts between our REST API and our API consumers, we also need to define the contracts that define the messages to exchange between services that use asynchronous communication. However, this time we will define the contracts in a separate project, mainly because we will later package and share the contracts with other services so they can easily use them.

   So, let’s start by defining the contracts that our Catalog service will use to send events asynchronously any time an item is created, updated or deleted.

2. In Catalog service open a terminal at \src

3. dotnet new classlib -n Play.Catalog.Contracts

4. In Terminal switch to Play.Catalog.Service dir

5. dotnet add reference ..\Play.Catalog.Contracts\Play.Catalog.Contracts.csproj

6. Delete Class1.cs

7. Create Contracts.cs

```
namespace Play.Catalog.Contracts
{
    public record CatalogItemCreated(Guid ItemId, string Name, string Description);

    public record CatalogItemUpdated(Guid ItemId, string Name, string Description);

    public record CatalogItemDeleted(Guid ItemId);
}
```

In the next lesson we will update the Catalog service to start using these contracts and a few new nuget packages to start publishing messages to a service broker.