Initializing the state machine

Script start

In order to initialize our state machine, we will need to tell it which is the event or message that triggers a new state machine instance. So, let's go ahead and define this message.

In Trading repo

1. Add Contracts.cs:

```
namespace Play.Trading.Service.Contracts
{
    public record PurchaseRequested(Guid UserId, Guid ItemId, int Quantity, Guid CorrelationId);
}
```

2. Update PurchaseStateMachine.cs:

```
public class PurchaseStateMachine : MassTransitStateMachine<PurchaseState>
{
    public State Accepted { get; }
    public State ItemsGranted { get; }
    public State Completed { get; }
    public State Faulted { get; }

    public Event<PurchaseRequested> PurchaseRequested { get; }

    public PurchaseStateMachine()
    {
        InstanceState(state => state.CurrentState);
        ConfigureEvents();
        ConfigureInitialState()
    }

    private void ConfigureEvents()
    {
        Event(() => PurchaseRequested);
    }

    private void ConfigureInitialState()
    {
        Initially(
            When(PurchaseRequested)
                .Then(context =>
```

```
        {
            context.Instance.UserId = context.Data.UserId;
            context.Instance.ItemId = context.Data.ItemId;
            context.Instance.Quantity = context.Data.Quantity;
            context.Instance.Received = DateTimeOffset.UtcNow;
            context.Instance.LastUpdated = context.Instance.Received;
        })
        .TransitionTo(Accepted)
    );
  }
}
```

In the next lesson we will add a controller action that can publish the event that starts the state machine.