

## Adding the Purchase controller

### Script start

Now that we have our purchase state machine, let's define an ASP.NET controller and the corresponding action and dto that can trigger it.

### In Trading repo

#### 1. Add Dtos.cs:

```
namespace Play.Trading.Service.Dtos
{
    public record SubmitPurchaseDto([Required] Guid? ItemId, [Range(1, 100)] int Quantity);
}
```

#### 2. Add PurchaseController.cs:

```
namespace Play.Trading.Service.Controllers
{
    [ApiController]
    [Route("purchase")]
    [Authorize]
    public class PurchaseController : ControllerBase
    {
        readonly IPublishEndpoint publishEndpoint;

        public PurchaseController(IPublishEndpoint publishEndpoint)
        {
            this.publishEndpoint = publishEndpoint;
        }

        [HttpPost]
        public async Task<IActionResult> PostAsync(SubmitPurchaseDto purchase)
        {
            var userId = User.FindFirstValue("sub");
            var correlationId = Guid.NewGuid();

            var message = new PurchaseRequested(
                Guid.Parse(userId),
                purchase.ItemId.Value,
                purchase.Quantity,
                correlationId);
        }
    }
}
```

```
        await publishEndpoint.Publish(message);  
        return Accepted();  
    }  
}  
}
```

In the next lesson we will add the required configuration to be able to run the state machine for the first time.