

Lab assignment 5: Domain Driven Design

Exercise 1: Bounded context/components

Create a new class diagram that shows the design of our webshop using bounded contexts/components based on our aggregates found in Lab4. Show all classes, including controllers, service classes, DAO's/repositories, DTO's and other plumbing classes.

Exercise 2: Implement the whole webshop with components

Modify the existing webshop from Lab 4 according your component design of exercise 1.

Exercise 3: Implement the whole webshop

In your webshop, implement all functionality that is still missing.

We should be able to add and view Suppliers

We should be able to add a Supplier to a Product

We should be able to add Reviews to a Product

We should be able to add and view Customers and their accounts

We should be able to add Customer, billing Address, shipping Address, ShippingOption and CreditCard to the Order

Add functionality that if the user confirms the Order, then the webshop should send an email and write the Order in a log file. Both sending an email and writing to a logfile can be simulated with a `System.out.println(...)`.

Use the RestClient to call all this functionality with REST

Exercise 4: Add events to the webshop

Use Spring events so that

- When the user checks out the Shoppingcart, an event is published. The listener of this event should write the Shoppingcart to a log file. Writing to a logfile can be simulated with a `System.out.println(...)`.
- When the user adds a new Product to the ProductCatalog, an event is published. The listener of this event should write the Product to a log file. Writing to a logfile can be simulated with a `System.out.println(...)`.
- When the user confirms the Order, an event is published. The listener of this event should send an email to the customer. Sending an email can be simulated with a `System.out.println(...)`. Another listener of this event should update the stock quantity in the ProductCatalog. Also add the functionality that when we add a product to the Shoppingcart, we first check if we have enough products in stock. If the number of products in stock goes below 1, send an email (`System.out.println(...)`) to the business.