

## Lab 3

**All parts of this lab has to be drawn with StarUML.**

If you have windows, you can download starUML from here:

<https://drive.google.com/file/d/1Xk1FerRI41vFVgNEb9ZwMGmmbUHWq1pL/view?usp=sharing>

If you have a MAC you can download it from here: <https://staruml.io/>

**This is the only tool that is allowed on the exams.**

### **Part 1**

Design de architecture with all the necessary layers and classes for a webshop with the following requirements:

The webshop contains products that we can add or remove from a shoppingcart

We can also add multiple copies of the same product in the shoppingcart

We can place an order based on our shoppingcart.

Orders can only be paid by creditcard

For every order we need to know

- The shipping address and the billing address
- The customer
- The creditcard information
- The shipping method

The webshop administrator should be able to add, remove and update products.

For every product we need to know the following information:

- ProductNumber, name , price, description.
- Reviews from customers that have purchased this product.
- Stock information: number in stock, and location code in the warehouse
- The supplier for this product

Customers can create an account, so they can login when they want to place on order

- For every customer we want to know the following information:
- CustomerNumber, first name, last name, email, phone and address information
- Creditcards from the customer
- Orders that the customer has placed

When an order is placed, the webshop should send an email to the customer.

The webshop administrator should be able to add, remove and update suppliers.

Draw a class diagram showing the different layers and their corresponding classes and relationships. Also show the attributes and methods of each class.

In the domain classes of the webshop specify clearly for each domain class if it is a value object, entity, domain service or domain event.

## **Part 2**

Draw a sequence diagram showing how we place an order.

### **What to hand in?**

1. A PDF of part 1
2. A PDF of part 2
3. Write a readme.txt file with the following statement and sign with your name:

***I hereby declare that this submission is my own original work and to the best of my knowledge it contains no materials previously published or written by another person. I am aware that submitting solutions that are not my own work will result in an NC of the course.***

***I am aware that I am not allowed to share solutions with other students.***

***I am aware that if I submit only parts of this lab that points will be subtracted.***

***I am aware that if my lab submission does not contain this readme.txt file that I do not get points for this lab.***

***[your name as signature]***