

Exercise N° 1

Backend

Part one

Implement an Order Entity. The attributes are:

- id
- orderDate
- name
- street
- city
- musicCds

Part two

Add two methods to the ShoppingSessionBean:

- public void setOrder(Order order)

Add the filled in Order object to the stateful session bean.

- public void submitOrder()

Submit the previously added Order object to the database. Make sure to add the collections of musicCds to the Order object.

Frontend

There are two new JSPs in the web package of the MusicStore. The **order.jsp** and the **orderfinish.jsp**. The first contains the input fields for the customer's address data.

Your challenge is now to implement the logic that creates a new Order object with the submitted data from the order.jsp in orderfinish.jsp. Set the Order object to the ShoppingSessionBean and submit the order.

Exercise N° 2

The website now should get an administrative interface that lists all submitted orders. An order has a state (NEW, VALID, SHIPPED). The state of each order can be changed in the admininterface. If the order is "SHIPPED", it remains at this state.

Backend

Part One

Extend the Order Entity. Add an attribute "state" and define constants for each state.

Part Two

Extend the ShopAdminBean. Create a method

```
public void switchState(int orderId)
```

that retrieves the entity instance from the database and switch it's state according to its current state.

Frontend

The file **admin.jsp** should show a list of all orders that have been made. Get the list of all orders from the ShopAdminSessionBean. generate a html table that shows each order with the state and make the possibility to switch the state of each order. If there is time, also list the nested music cds for each order.