

Assignment 2 Report

Software Verification and Validation

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1 HTML Unit

While defining the HTML Unit tests, some adaptations where made to the JSP files. The *name* property was added to some HTML elements, in order to be able to get them using HTML Unit's API, those adaptations were made to the following files:

- CustomerInfo.jsp
- SalesInfo.jsp
- ShowSalesDelivery.jsp
- addSaleDelivery.jsp

2 DB Setup

2.1 Sales Behavior

The first Junit test verifies that it is not possible to add a sale to an non existent customer.

```
public void extraSaleBehaviour1() throws
    ApplicationException {
    int vat = 503183504;
    assertFalse(hasClient(vat));
    assertThrows(ApplicationException.class, () -> {
        SaleService.INSTANCE.addSale(vat);
    });
}
```

All new sales created for a new customer must have its date the same as of creation, a total of 0.0, an open status and it needs to be associated to the right vat.

```
public void extraSaleBehaviour2() throws
    ApplicationException {
    int vat = 503183504;
    assertFalse(hasClient(vat));
    CustomerService.INSTANCE.addCustomer(vat, "FCUL",
        217500000);
    assertTrue(hasClient(vat));
    SaleService.INSTANCE.addSale(vat);
    List<SaleDTO> sales =
        SaleService.INSTANCE.getSaleByCustomerVat(vat).sales;
    SimpleDateFormat dateFormat = new
        SimpleDateFormat("yyyy-MM-dd");
    for (SaleDTO curr : sales) {
        assertEquals(dateFormat.format(new Date()),
            curr.data.toString());
        assertEquals(new Double(0.0), curr.total);
        assertEquals("O", curr.statusId);
        assertEquals(vat, curr.customerVat);
    }
}
```

2.2 Sale Deliveries Behavior

3 Bugs found