Lab: Java Auto Mapping Objects

This document defines the lab assignments for the

1. Simple Mapping

Create class **Employee** that has properties **first name**, **last name**, **salary**, **birthday** and **address**. Create **EmployeeDto** class that will keep synthesized information about instances of the Employee class (only **first name**, **last name** and **salary**). Create an **instance of employee object** and **use the ModelMapper to map** the **newly created Employee** to **object of type EmployeeDto**.

2. Advanced Mapping

Create class **Employee** with properties **first name**, **last name**, **birthday**, **salary**, information about whether the employee **is on holiday**, **address**, **manager** (another employee) and **list of employees** that he/she is in charge of.

Create **2 types** of data transfer objects – **employee** data transfer object and **manager** data transfer object.

- **EmployeeDto** – first name, last name, salary
- **ManagerDto** – first name, last name, list of EmployeeDtos that he/she is in charge of and their count

Create a list of several **employees**, then **transform it to list of ManagerDtos** and **print it on the console** in the format provided below:

```
{ManagerFirstName} {ManagerLastName} | Employees: {EmployeesCount}
    - {EmployeeFirstName} {EmployeeLastName} {EmployeeSalary}
```

Example

Sample output

Steve Jobbsen | Employees: 2
    - Stephen Bjorn 4300.00
    - Kirilyc Lefi 4400.00
Carl Kormac | Employees: 14
    - Jurgen Straus 1000.45
    - Moni Kozinac 2030.99
    - Kopp Spidok 2000.21
    - …

3. Projection

Use Hibernate to create and insert into a database a **list of employees**, for which each employee has **first name**, **last name**, **salary**, **birthday**, **address** and **manager** (another employee). Transform to **EmployeeDto** (first name, last name, salary, manager's last name) those employees who are **born before 1990**. Order them **by salary descending** and **print them on the console**.

Example

Sample output
Steve Jobbsen 6000.20 – Manager: [no manager]
Kirilyc Lefi 4400.00 – Manager: Jobbsen
Stephen Bjorn 4300.00 – Manager: Jobbsen