Client is implementing “Contract **Employee Management System**” client server application with backend Mysql/Oracle database to perform below operations.

1.Assume Employee table exist with following sample data.

Productid,name,mDate,useBeforemonths,eDate,price

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| EmpID | Name | JoiningDate | ContractDuration | ContractEndDate | Commercial |
| 101 | Ram | 20/12/2022 | 3 | null | 60000 |
| 102 | Raj | 20/09/2022 | 6 | null | 50000 |
| 103 | Kiran | 20/11/2022 | 12 | null | 30000 |
| 104 | Smitha | 20/10/2022 | 8 | null | 50000 |
|  |  |  |  |  |  |

2.Perform following operations to accept new product from client using HTML page and persist in database passing values through controller,service and dao.

* addEmployee(Employee e)

3.Perform validations on EMPid cannot be null and Name cannot be null and length should be max 15 chars ,starting with Alphabet.

4.Perform update operation so that for all employees in table should be updated contractend date with addition of 2 columns ,joiningdate + contract duration months

* updateEmployeeContractDate(EmployeeList elist) -> contractEndDate should be calculated and updated in table

5.Perform delete operation so that all contract competed employees should be deleted.

* deleteEmployeebyContractDate(EmployeeList elist) ->all expiry products need to be deleted

6.Perform read operation to generate a report with all existing employees in the order of contract ending date

* List<Product> listAllEmployees()

7.Perform delete operation to delete employee for given employeeID

* Boolean deleteEmployeebyId(Integer id)

8.Perform update operation to update any of the employee details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| EmpID | Name | JoiningDate | ContractDuration | ContractEndDate | Commercial |

* Boolean updateEmployeebyId(Employee employee)

9.Junit test cases need to be implemented **for validate method in EmployeeServiceImpl and all methods in EmployeeDAOImpl classes**

10.Streams and lambda can be implemented (optional)

Classes need to be implemented:

com.ems.model -> Employee.java

com.ems.exception: EmployeeListEmptyException

com.ems.test: EmployeeServiceImplTest,EmployeeDAOImplTest

com.ems.util: DbConn.java

com.ems.service : EmployeeService, EmployeeServiceImpl

com.ems.dao :EmployeeDao,EmployeeDaoImpl

com.ems.validator : EmployeeValidator

com.ems.controller :EmployeeController/ ( servlet/jsp any one can be implemented)

Use HTML files for UI layer