

JDBC Project

Mayank Chadha — IMT2020045

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1 Use Case Diagram

NOTE : Since all the tables should be able to access any other table in the database for smooth working of the management system we are displaying all of them in the use case diagram.

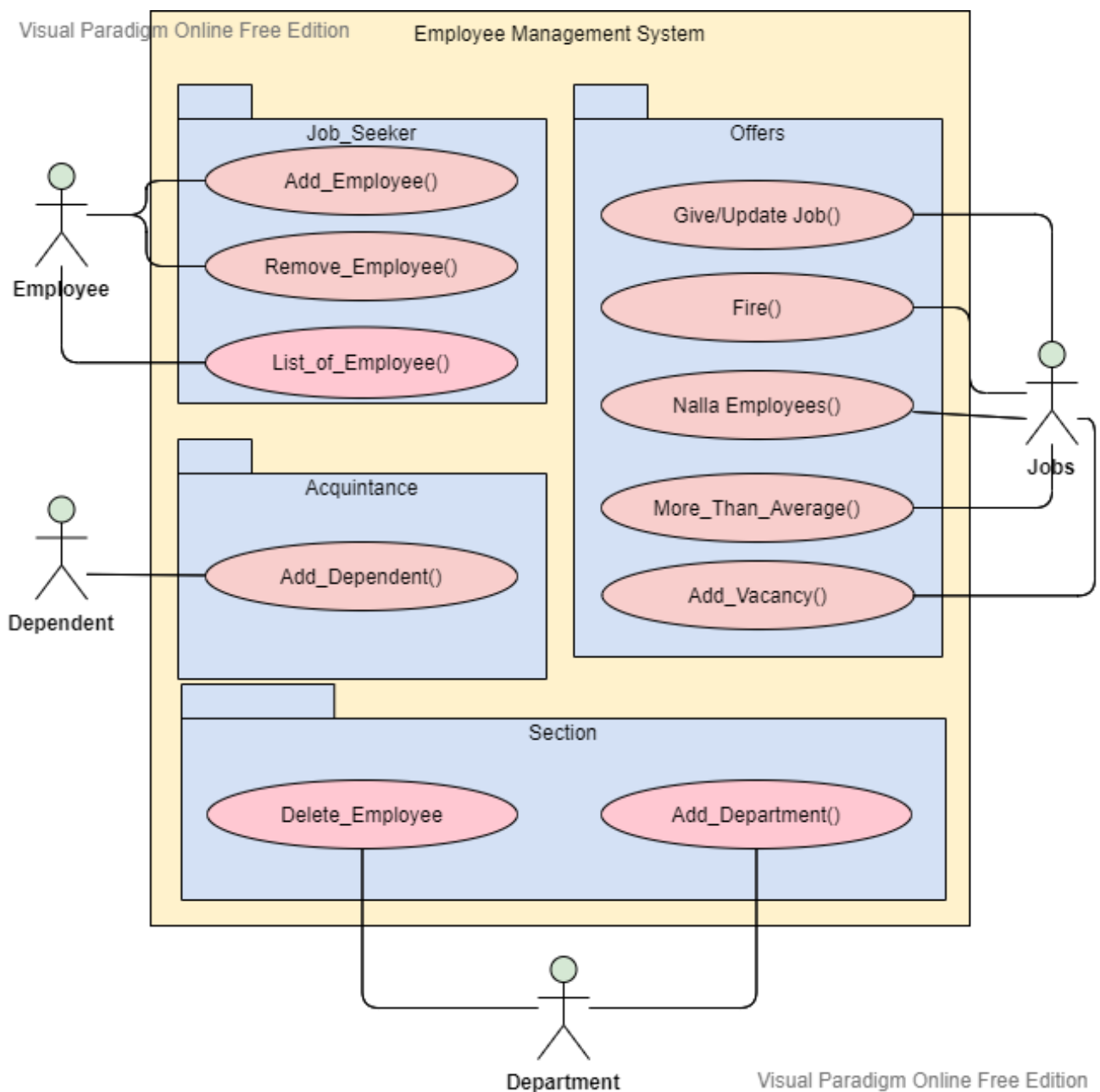


Figure 1: Use Case Diagram of Employee Management System

2 UML Diagram

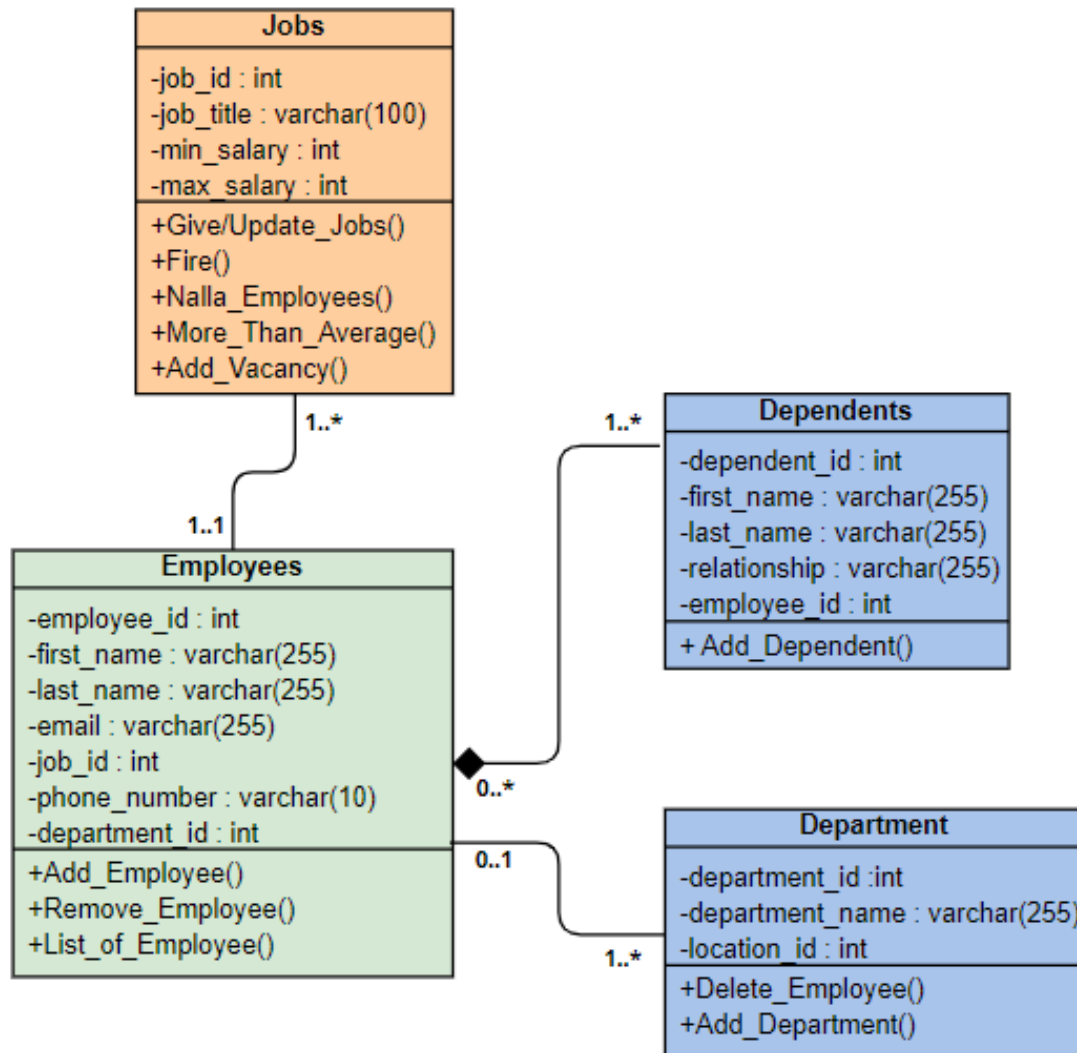


Figure 2: UML Diagram of DB

3 OR Mapping

Inputs:

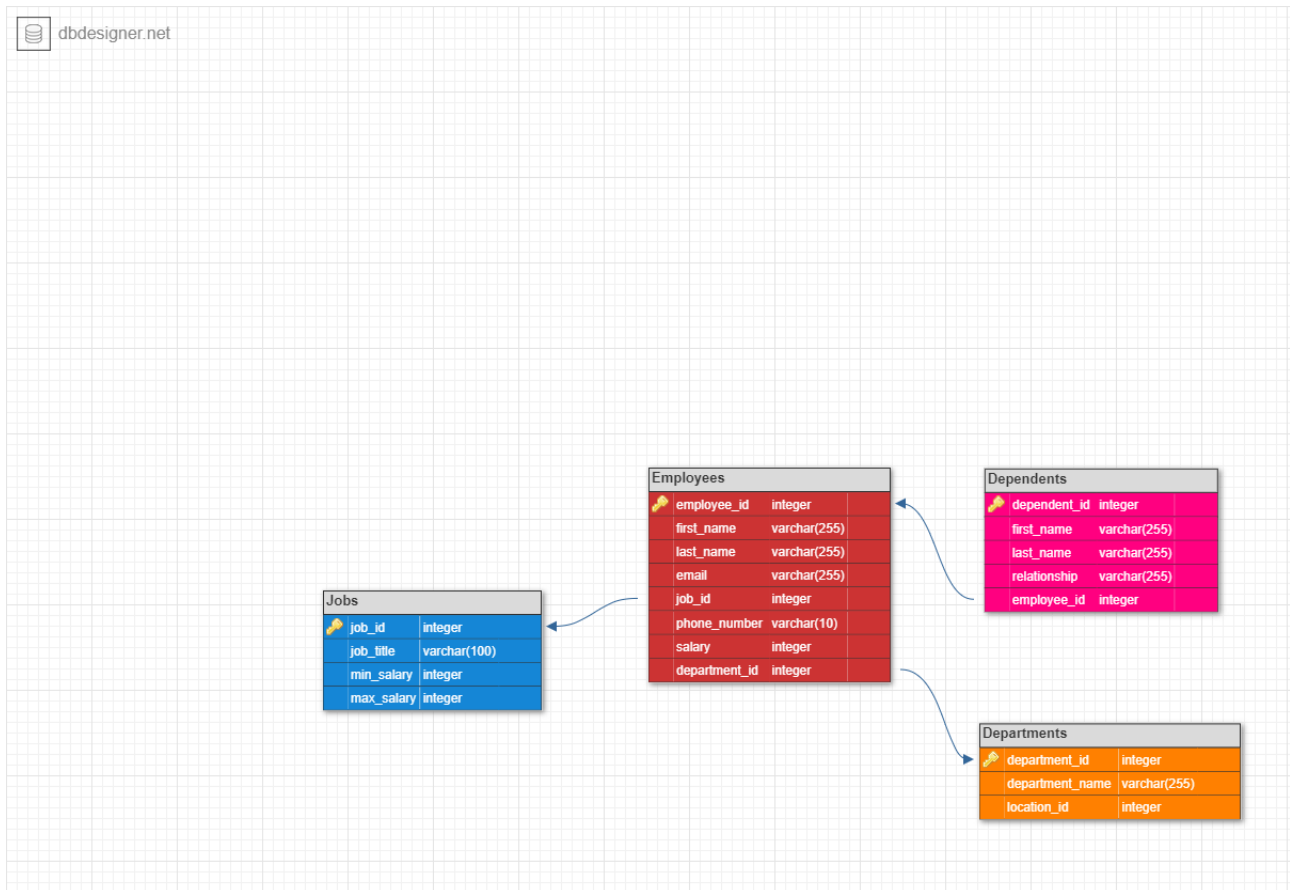


Figure 3: OR Mapping of DB

4 Instructions to Run the Code and Notes

```

1 # To create a database
2 source <PATH OF jdbc.sql>
3
4 # To run the actual code
5 export CLASSPATH = 'PATH:.'
6 javac JdbcDemo.java
7 java JdbcDemo
8
9 #Now you can browse through the Menu-driven Interface
  
```

NOTE: I have added extra functionality for DEMO purposes. The extra functionalities are SELECT and DELETE queries on Dependents, Departments and Jobs tables.

5 Output Screenshots

Tables in DB

```
mysql> show tables;
+-----+
| Tables_in_mayank2 |
+-----+
| Departments        |
| Dependents         |
| Employees          |
| Jobs               |
+-----+
4 rows in set (0.02 sec)
```

Menu Command-1

```
mayank1609@Mayank: /mnt/  x  +  v
+=====+
|              MENU DRIVEN INTERFACE              |
|                                                    |
|              -MAYANK CHADHA (IMT2020045)          |
+=====+
|1|-> Add Employee
|2|-> Add Dependent
|3|-> Add a Job Vacancy
|4|-> Add a Department
+=====+
|5|-> Give/Update Job
|6|-> Fire
|7|-> Delete Employee from Department
+=====+
|8|-> Remove Employee
|9|-> Remove Department
|10|-> Remove Job
+=====+
|11|-> More than average Employees
|12|-> Nalla Employees
|13|-> List of Employees
|14|-> List of Departments
|15|-> List of Jobs
|16|-> List of Dependents for a Employee
+=====+
|0|-> Exit
+=====+

Enter your choice: 13
```

List of Employees

```
mayank1609@Mayank: /mnt/ × + ∨
Printing out the list of Employees
+-----+-----+-----+-----+
| ID | Name           | Email id           | Phone Number | Salary |
+-----+-----+-----+-----+
| 1 | Mayank Chadha  | chadhamayank1609   | 9166853967   | 300000 |
| 2 | Anshul Jindal  | anshuljindal1601   | 9786523457   | 400000 |
| 3 | Shridhar Sharma| shrisharma2602     | 9013812213   | 500000 |
| 4 | Shreeya Vennati| sventi1403         | 9817238829   | 300000 |
| 5 | Ramesh Suresh  | sramesh            | 9221213737   | 0       |
+-----+-----+-----+-----+
Press Enter to go back to menu
```

Addition of Employee

```
mayank1609@Mayank: /mnt/ × + ∨
Please Enter the Values Required -
Employee ID: 10
First Name: Ramesh
Last Name: Suresh
Email: rmasndas
Job ID(Set -1 for assigning NULL): 1
Phone Number: 9100122288
Salary: 30000
Department ID(Set -1 for assigning NULL): 1

Employee Added Successfully to the Table
Press Enter to go back to menu
```

Check if Added

```

mayank1609@Mayank: /mnt/ × + v
Printing out the list of Employees
+-----+
| ID | Name                | Email id          | Phone Number | Salary |
+-----+
| 1  | Mayank Chadha       | chadhamayank1609  | 9166853967  | 300000 |
| 2  | Anshul Jindal       | anshuljindal1601  | 9786523457  | 400000 |
| 3  | Shridhar Sharma     | shrisharma2602    | 9013812213  | 500000 |
| 4  | Shreeya Vennati     | sventi1403        | 9817238829  | 300000 |
| 5  | Ramesh Suresh       | sramesh           | 9221213737  | 0      |
| 10 | Ramesh Suresh       | rmasndas          | 9100122288  | 30000  |
+-----+

Press Enter to go back to menu

```

Remove Employee

```

mayank1609@Mayank: /mnt/ × + v
Please Enter the Values Required -
Employee ID who you want to remove: 10

Employee Removed

Press Enter to go back to menu

```

Check if Removed

```

mayank1609@Mayank: /mnt/ × + v
Printing out the list of Employees
+-----+
| ID | Name                | Email id          | Phone Number | Salary |
+-----+
| 1  | Mayank Chadha       | chadhamayank1609  | 9166853967  | 300000 |
| 2  | Anshul Jindal       | anshuljindal1601  | 9786523457  | 400000 |
| 3  | Shridhar Sharma     | shrisharma2602    | 9013812213  | 500000 |
| 4  | Shreeya Vennati     | sventi1403        | 9817238829  | 300000 |
| 5  | Ramesh Suresh       | sramesh           | 9221213737  | 0      |
+-----+

Press Enter to go back to menu

```

Update Job

```
Please Enter the Values Required -  
Employee ID who you want to update: 2  
Job id which you want to update to: 1  
  
Employee Status Updated  
Press Enter to go back to menu
```

Dependent using inner join

```
mayank1609@Mayank: /mnt/ × + v  
Please Enter the Values Required -  
Employee ID: 1  
Printing out the list of Dependent of the Selected Employee  
  
+-----+  
| ID | Name |  
+-----+  
| 1 | Rajesh Chadha |  
| 2 | Urmila Chadha |  
+-----+  
  
Press Enter to go back to menu  
|
```