Data Layer Documentation – companydata.jar

NOTE: When connecting to the remote DB, you must be on campus or using VPN.

Add companydata.jar, and mysql-connector-java-8.0.27.jar files to your project. You will need to add: import `companydata.*;` to the top of your class that wants to access the Data Layer.

To use it (see included TestDataLayer.java example):

```
DataLayer dl = null;

try {
      dl = new DataLayer("ritusername");  //e.g. kxmzgr
      //call the DataLayer method you want

} catch (Exception e) {
     //deal with the error – can be thrown by any of the methods
below
} finally {
      dl.close();
}
```

Methods (all throw an exception if there is an error, such as the requested object doesn't exist)**:**

//Delete all Departments, Employees and Timecards for a company
//Returns the number of rows deleted
public int deleteCompany(String companyName)

//Insert a department
//Returns the inserted Department
public Department insertDepartment(Department department)

//Get all Departments for a given company
//Returns a list of Department objects
public List<Department> getAllDepartment(String companyName)

//Get a given Department for a given company
//Returns the requested Department
public Department getDepartment(String companyName, int dept_id)

//Update a Department
//Returns the updated Department
public Department updateDepartment(Department department)

//Delete a given Department for a given company
//Returns the number of rows deleted
public int deleteDepartment(String company, int dept_id)

//Insert an Employee
//Returns the inserted Employee
public Employee insertEmployee(Employee employee)

//Get a list of Employees for a given company
//Returns the list of Employee objects
public List<Employee> getAllEmployee(String companyName)

//Get the requested Employee
//Returns the requested Employee
public Employee getEmployee(int emp_id)

//Update an Employee
//Returns the updated Employee object
public Employee updateEmployee(Employee employee)

//Delete the given Employee
//Returns the number of rows deleted
public int deleteEmployee(int emp_id)

//Insert a Timecard
//Returns the inserted Timecard
public Timecard insertTimecard(Timecard timecard)

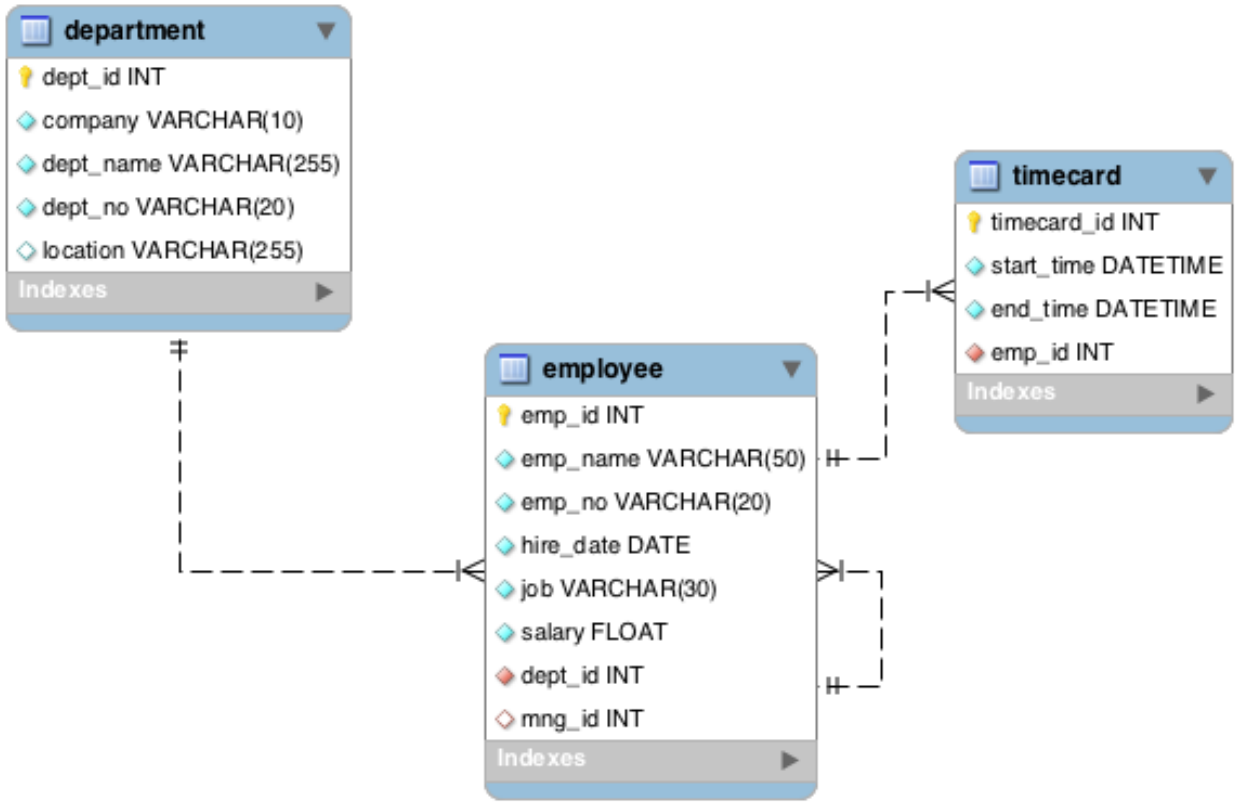
//Get all Timecards for a given Employee
//Returns the list of Timecard objects
public List<Timecard> getAllTimecard(int emp_id)

//Get the requested Timecard
//Returns the requested Timecard
public Timecard getTimecard(int timecard_id)

//Update a given Timecard
//Returns the updated Timecard
public Timecard updateTimecard(Timecard timecard)

//Delete the given Timecard
//Returns the number of rows deleted
public int deleteTimecard(int timecard_id)

//Close the connection
public void close()



The **employee** table has two foreign keys:

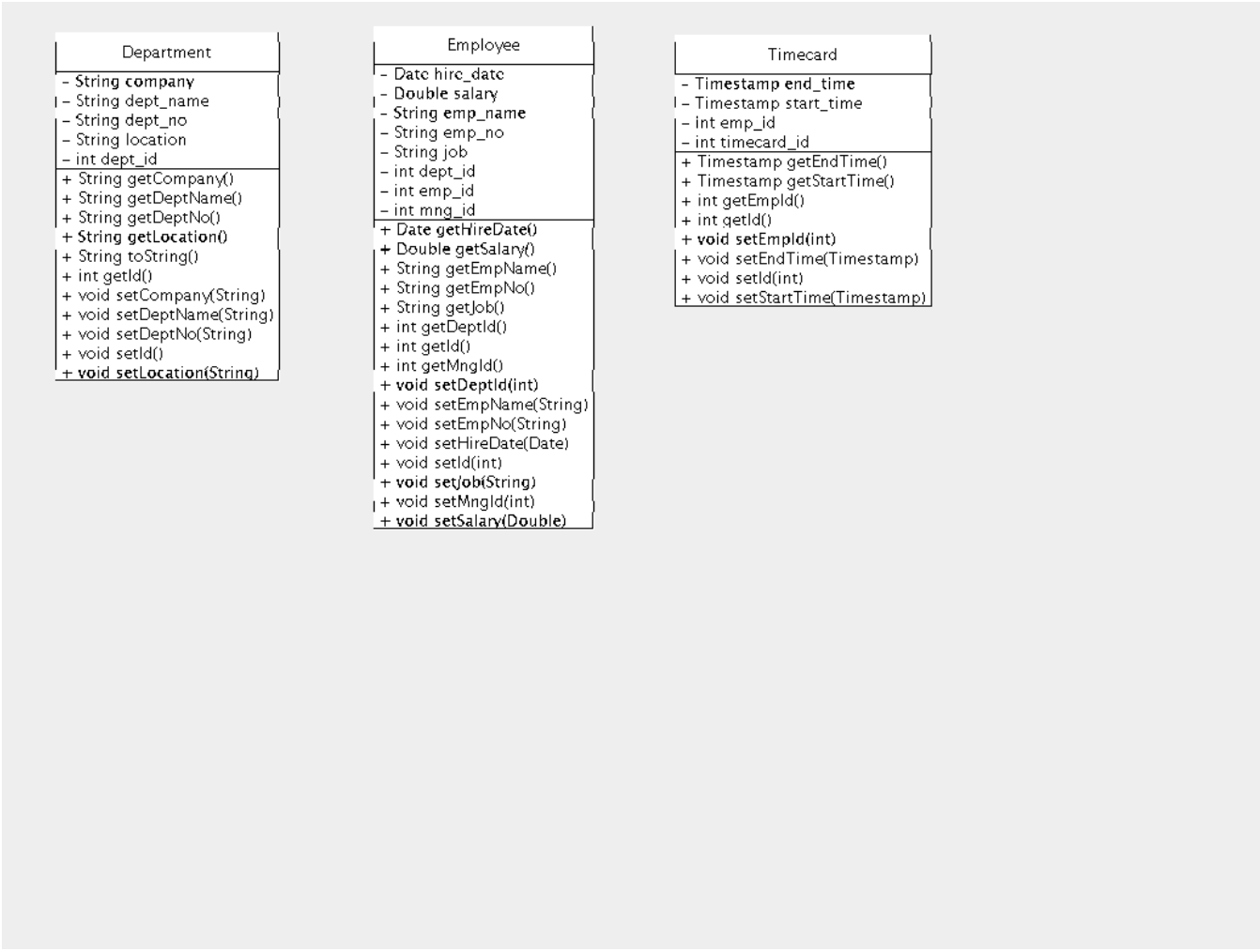
1. mng_id references **employee**.emp_id
2. dept_id references **department**.dept_id

The **employee** table has an additional unique index of emp_no besides the the primary key

The **timecard** table has one foreign key:

1. emp_id references **employee**.emp_id

The **department** table has one additional unique index of dept_no besides the primary key



Each class has constructors of:

Employee:

Employee(String emp_name, String emp_no, Date hire_date,
String job, Double salary, int dept_id, int mng_id)

Employee(int emp_id, String emp_name, String emp_no, Date hire_date,
String job, Double salary, int dept_id, int mng_id)

Department:

Department(String company, String dept_name, String dept_no,
String location)

Department(int dept_id, String company, String dept_name,
String dept_no, String location)

Department(String company, int dept_id)

Department()

Timecard:

Timecard(Timestamp start_time, Timestamp end_time, int emp_id)

Timecard(int timecard_id, Timestamp start_time, Timestamp end_time,
int emp_id)

Timecard()