

# CST 8288 Object Oriented Programming

## Lab Exercise #2

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**Purpose** Explore DAO pattern

**Activity** Implement a console application:

- that implements the DAO design pattern
- using the **NetBeans** IDE, **MySQL** and **JDBC**
- and a database containing a partial list of recipients of *The Order of Ontario* (*recipients.sql*)<sup>1</sup>

**Coding requirements:**

- Be sure to include Javadoc comments and other comments in your code.
- Your application must implement the following as Java packages:
  - `businesslayer`
  - `dataaccesslayer` (including an class to encapsulate the "data source")
  - `transferobjects`
- Your application must:
  - use `Properties` class and file called `database.properties` (as in Week3 example)
    - Be sure to place this file in the `src` folder ... just like in the example
  - use `ResultSet` to display the table contents
  - use `ResultSetMetaData` to display the column attributes:
    - column name
    - column type (the MySQL type) and
    - corresponding Java class for the column.
  - output the contents of the `recipients` table
  - insert a new row in that table and print the contents of the resulting table
  - delete the newly inserted row and print the table contents
- Hints:
  - refer to [StanPiedaDAOexampleNBproj.zip](#) from Week4 lecture

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<sup>1</sup> This example uses data from *Ontario's Data Catalogue*. The full dataset is available at:  
<https://www.ontario.ca/page/order-ontario#section-6>

- export your **NetBeans** project as a .zip (use your own first and last names, of course)
  - name your file Lastname.Firstname.Lab2.zip
  - name your project Lastname.Firstname.Lab2