

DAO Design Pattern

Team 9

Overview

Data access object:

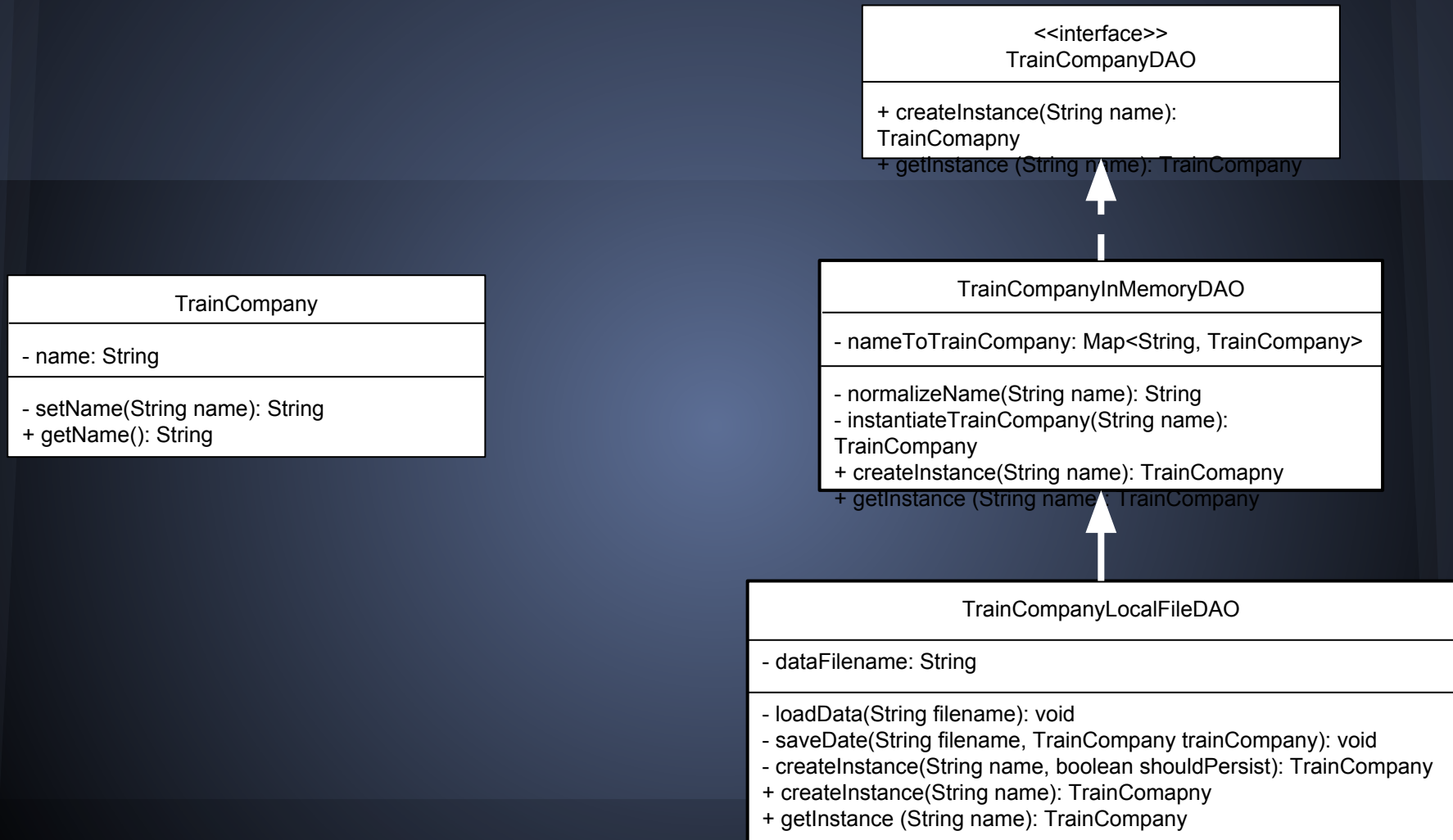
An object that provides an abstract interface to some type of database or other persistence mechanism.

Advantages

- Encapsulation: Hide all details of how the data and the persistent model works
- Abstraction: Allow for changing of the persistent model without impacting the user of the objects
- Objects: Allow user of the object to only deal with the object itself, regardless of the persistent model

Disadvantages

- Code duplication
- Abstraction problem when abstraction is not carefully designed
- User of the object has no control over how the data is stored and retrieved



Examples

Java Object:

TrainCompany.java

DAO Interface:

TrainCompanyDAO.java

DAO with hashmap:

TrainCompanyInMemoryDAO.java

DAO with file:

TrainCompanyLocalFileDAO.java

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References

WIKI :

http://en.wikipedia.org/wiki/Data_access_object

Example codes:

<https://github.com/csc301-fall2014/DAOExample/tree/master/src/csc301>