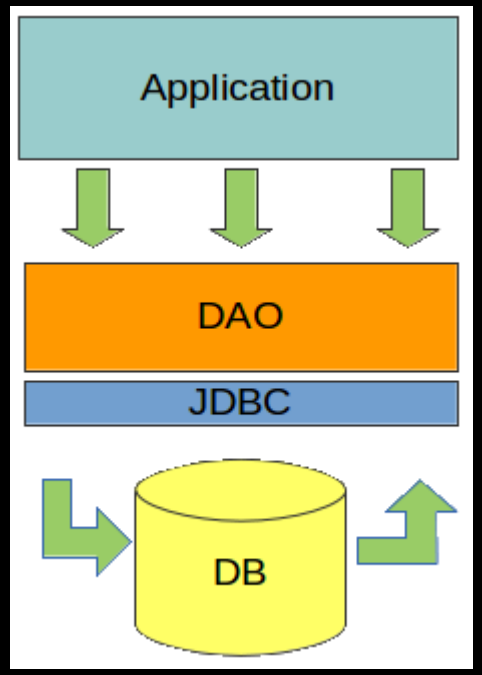
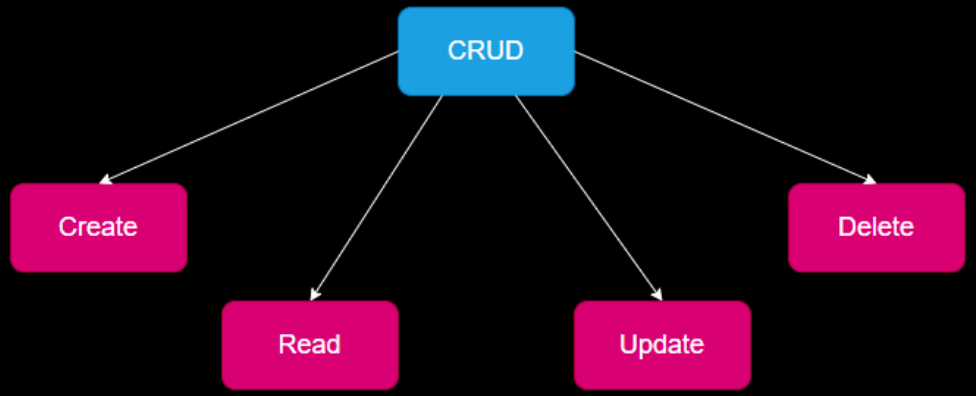
DAO (Data Access Objects) Overview

DAO (Data Access Object)



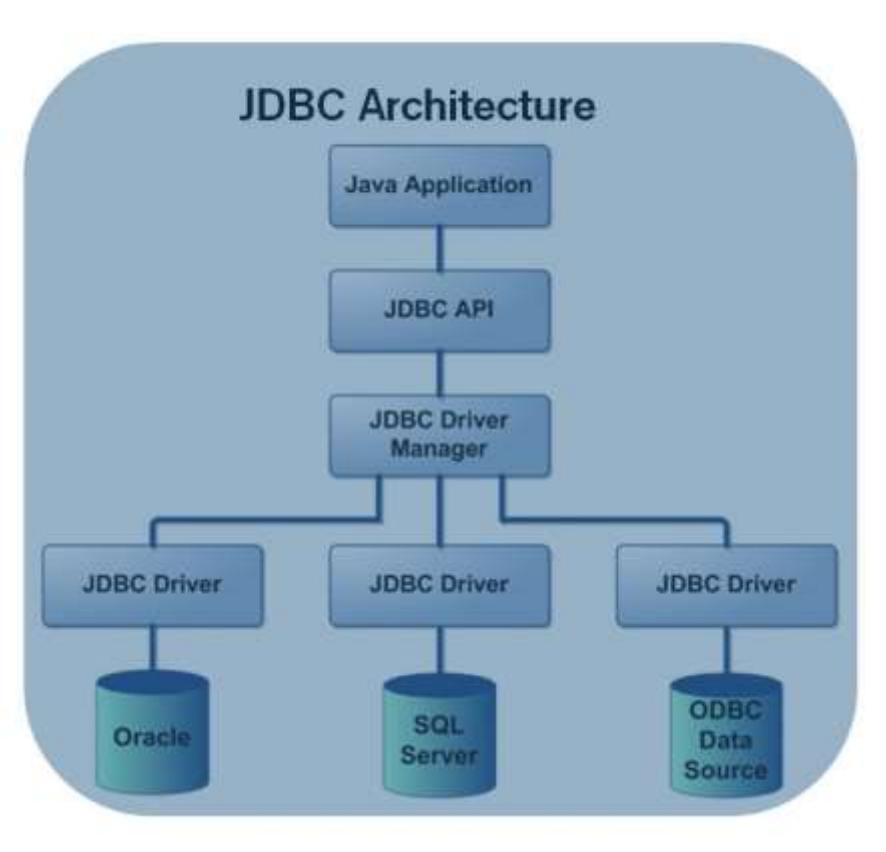
During the design of some information system, the logic of this system is usually divided into layers. DAO (Data Access Object) – is a layer, that interactive with database and had determined methods for that.

Methods of DAO



DAO had basic methods for interact with database. That methods are called CRUD (Create, Read, Update, Delete). Create – method creates some object in db, Read – method reads object from db. Update – method updates some object in db, Delete – method deletes some object from db.

JDBC



Application connects to database by JDBC. JDBC (Java Database Connectivity) – special program or driver for management facilities of database from code of application. Hibernate use such driver (depend of concrete type of database) for it work. Developer of database himself develops and provides that driver for other developers.

Implementation on interface level

```
public interface AccountDAO {

    Account get(String userName);
    void create(Account account);
    void update(Account account);
    void delete(String userName);

}
```

For implementation of DAO is created interface, that described all methods of CRUD (create, read, update, delete). That interface can had many different implementation, based by something ORM-frameworks or using sql queries directly.

Advantages

- Using data access objects is the relatively simple and rigorous separation between two important parts of an application
- All details of storage are hidden from other layers
- In the general context of the Java programming language, Data Access Objects as a design concept can be implemented in a number of ways