

Form Factory Method**

Subclasses implement a method similarly,
except for the way they create a type of object

*On each subclass, extract the instantiation code to a
Factory Method, then declare an abstract version
of the Factory Method on the superclass*

```
abstract class Query...
    public abstract void doQuery() throws QueryException;

class QuerySD51 extends Query ...
    public void doQuery() throws QueryException {
        if (sdQuery != null) sdQuery.clearResultSet();
        sdQuery = sdSession.createQuery(SDQuery.OPEN_FOR_QUERY);
        executeQuery(sdQuery);
    }

class QuerySD52 extends Query ...
    public void doQuery() throws QueryException {
        if (sdQuery != null) sdQuery.clearResultSet();
        sdQuery = sdLoginSession.createQuery(SDQuery.OPEN_FOR_QUERY);
        executeQuery(sdQuery);
    }
```



```
abstract class Query ...
    protected abstract SDQuery createQuery();
    public abstract void doQuery() throws QueryException;

class QuerySD51 extends Query ...
    protected SDQuery createQuery() {
        return sdSession.createQuery(SDQuery.OPEN_FOR_QUERY);
    }
    public void doQuery() throws QueryException {
        if (sdQuery != null) sdQuery.clearResultSet();
        sdQuery = createQuery();
        executeQuery(sdQuery);
    }

class QuerySD52 extends Query ...
    protected SDQuery createQuery() {
        return sdLoginSession.createQuery(SDQuery.OPEN_FOR_QUERY);
    }
    public void doQuery() throws QueryException {
        if (sdQuery != null) sdQuery.clearResultSet();
        sdQuery = createQuery();
        executeQuery(sdQuery);
    }
```

Motivation

This refactoring prepares you to *Form Template Method (345)* [Fowler].
[More Coming Soon]