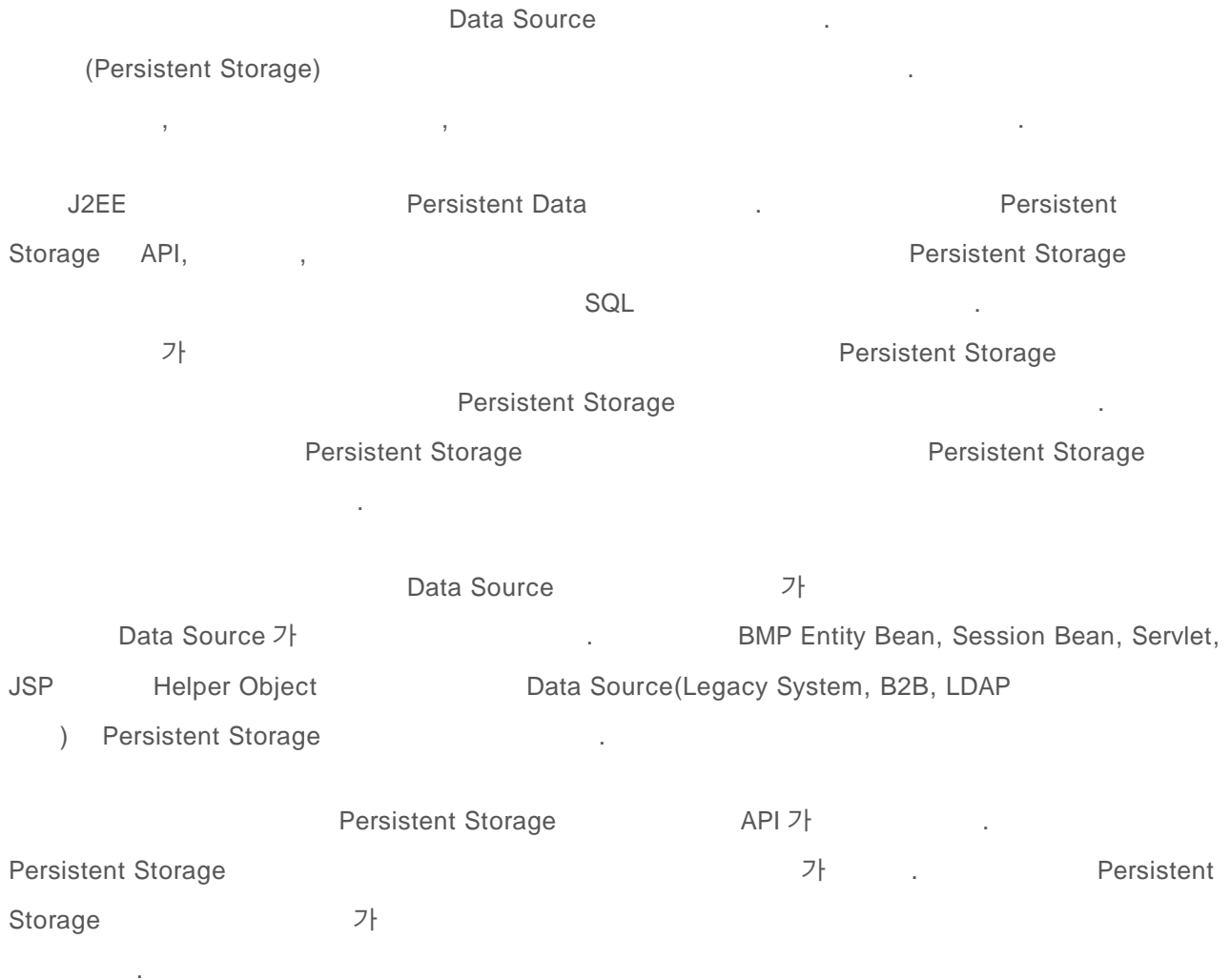
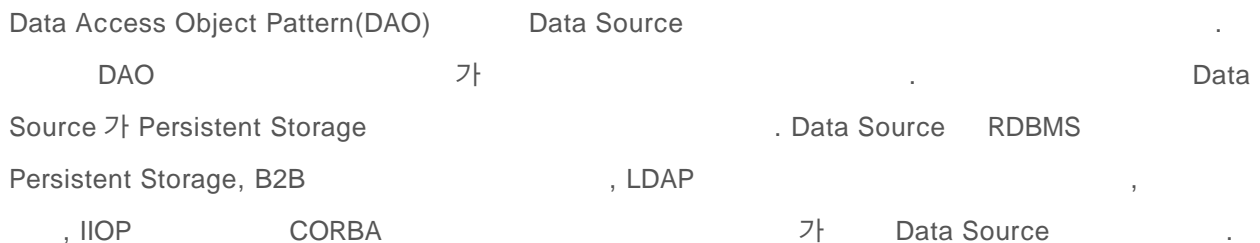
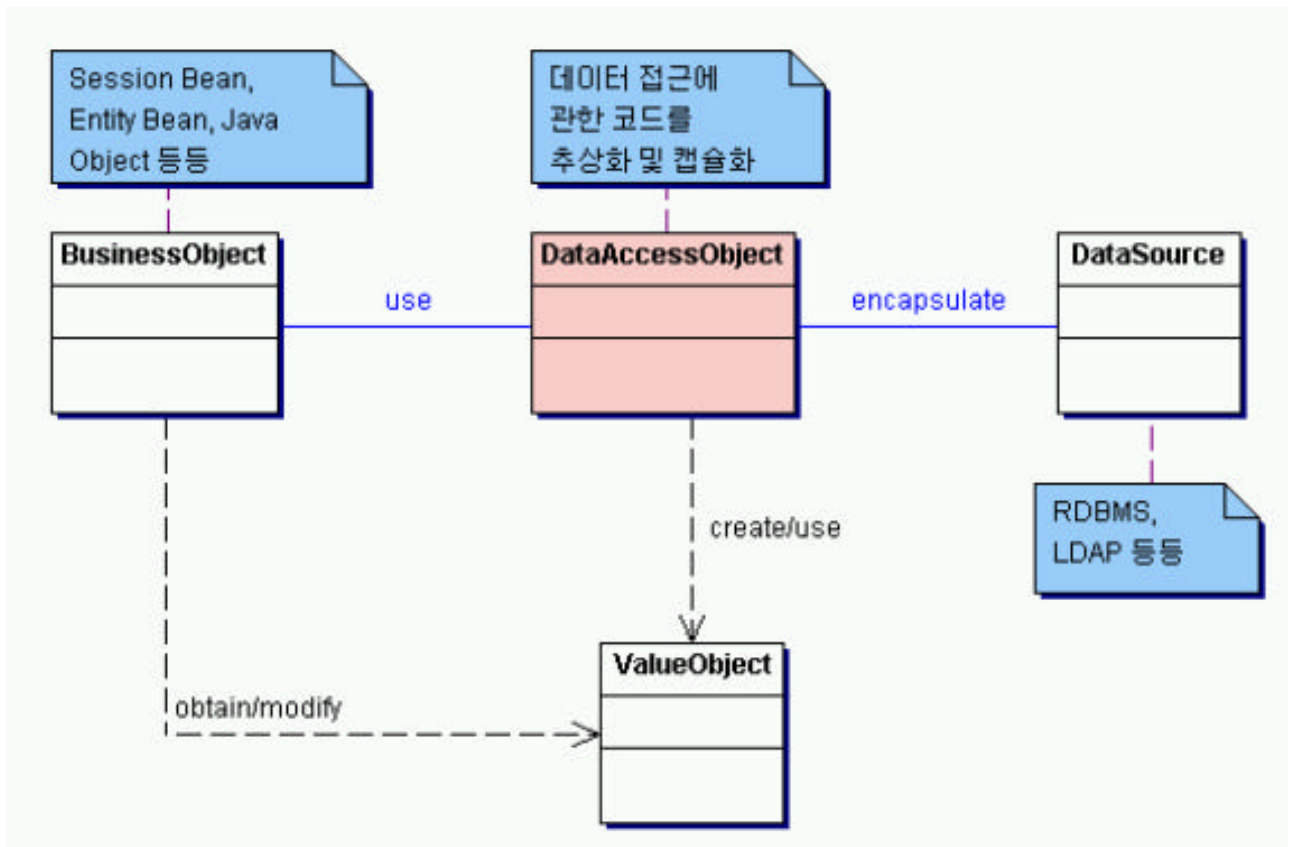


## Data Access Object Pattern



### Data Access Object Pattern





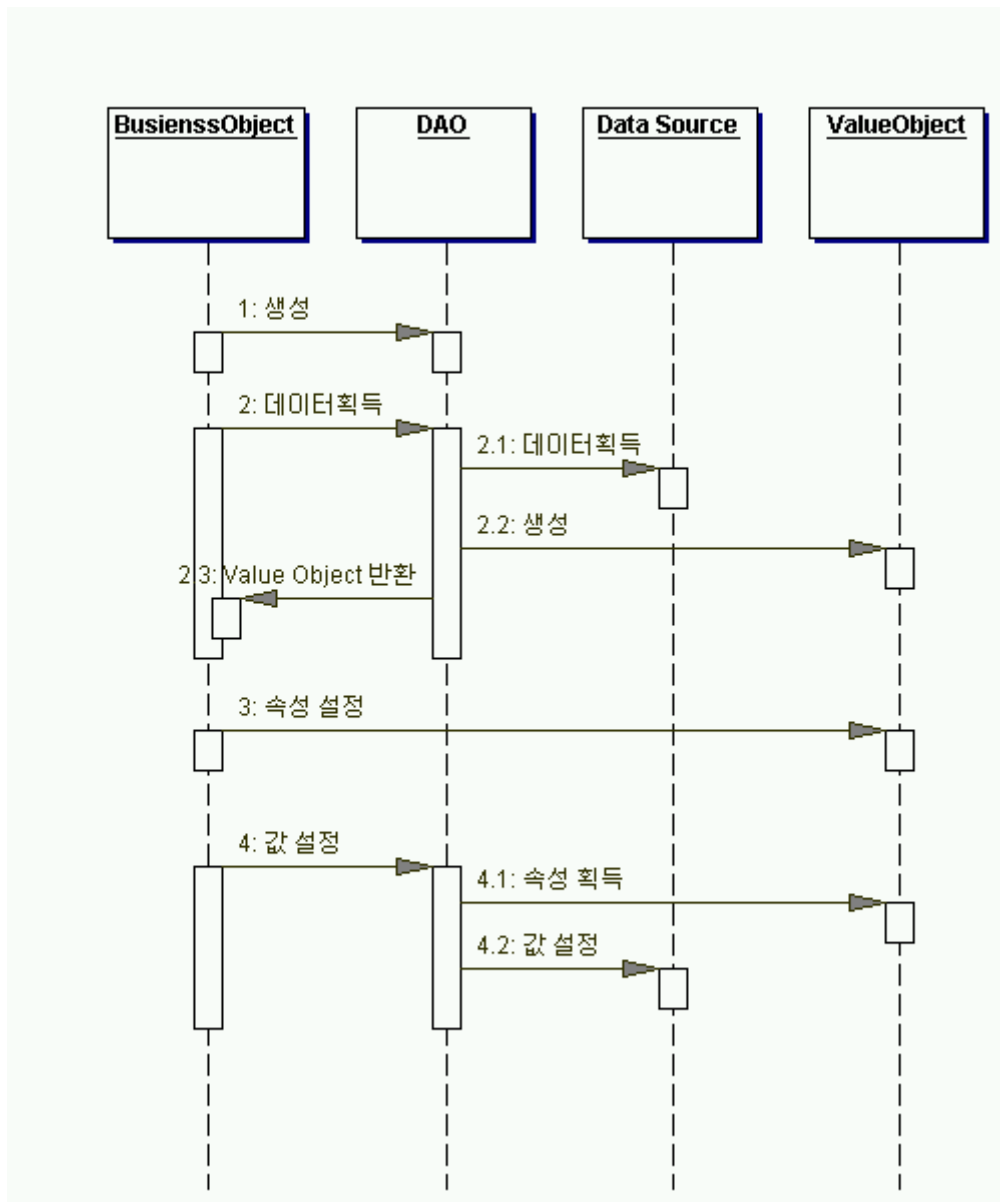
Class Diagram    DAO    . Business Object

Session Bean    Entity Bean    가    . Business Object 가

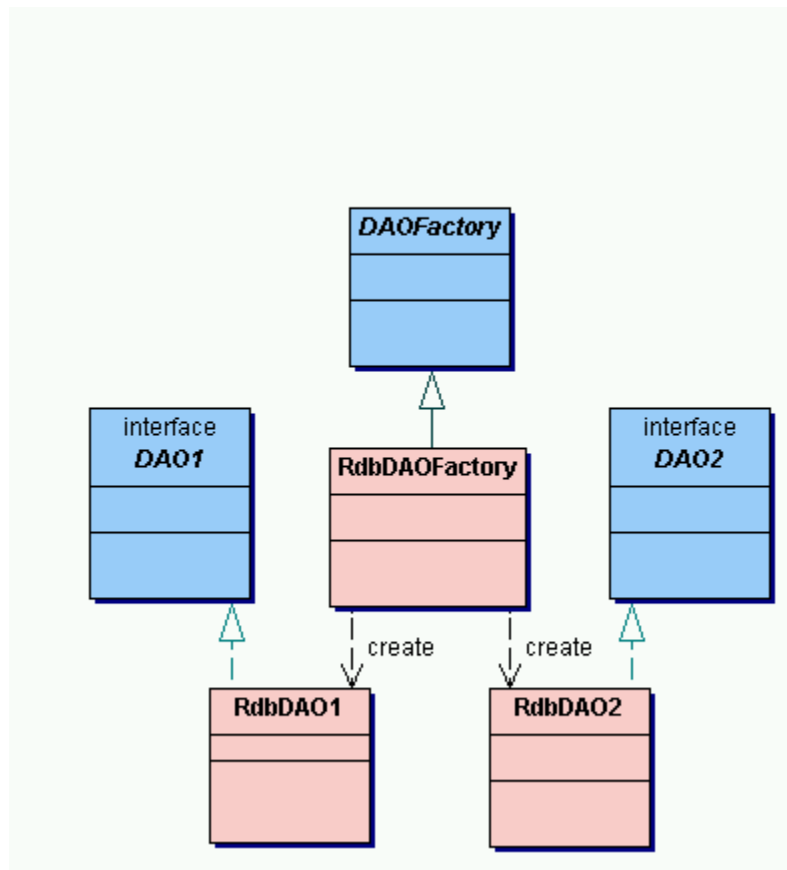
DAO    DAO    . DAO    Data Source

Value Object    Business Object    Business Object    Value

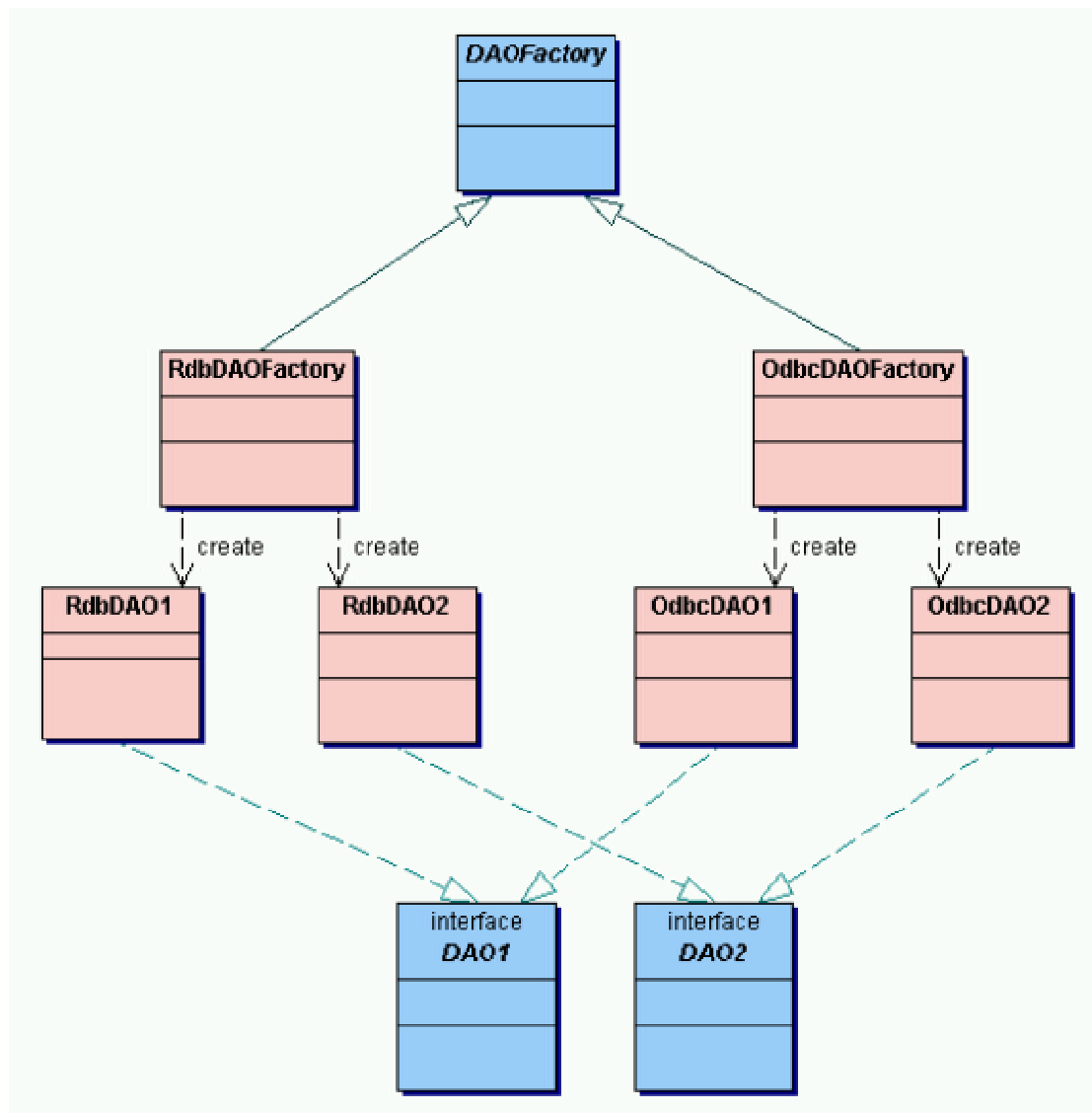
Object    Data Source    .



DAO Pattern    Abstract Factory[GoF]    Factory Method[GoF]



	Factory Method	DAO Pattern	DAOFactory	Abstract
Class	Data Source	DAOFactory	가	
	RdbDAOFactory	DAO1, DAO2		RDBS
	,	가		
RdbDAO1	RdbDAO2			



- Abstract Factory      DAO Pattern
- ODBC      가
- DAO
- -      Data Source      가      Data Source
  - ,      DAO      가
  - - DAO      DAO
  - - DAO 가      , SQL

DAO 가 가

가

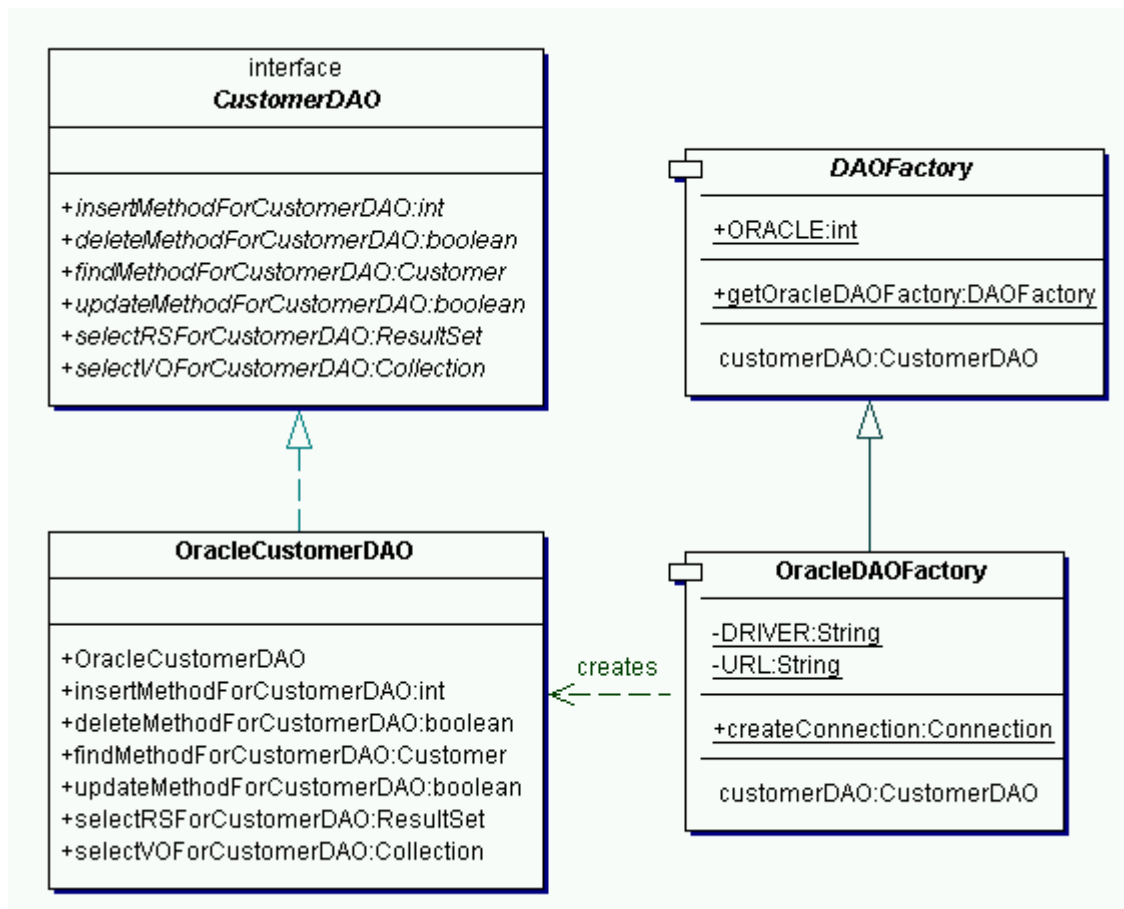
가

- 
- 
- 
- Container - Managed Persistence 가 - CMP 가  
Persistent Storage DAO CMP 가 가

## Example Code

Oracle

DAO



DAOFactory

## DAOFactory.java

```
abstract public class DAOFactory {
    public static DAOFactory getOracleDAOFactory(int whichFactory){
        switch (whichFactory) {
            case ORACLE:
                return new OracleDAOFactory();
            default:
                return null;
        }
    }
    public abstract CustomerDAO getCustomerDAO();
    public final static int ORACLE = 1;
}
```

DAOFactory

```
DAOFactory daoFactory = DAOFactory.getOracleDAOFactory(DAOFactory.ORACLE);
```

daoFactory ORACLE OracleDAOFactory 가  
OracleDAOFactory Oracle  
, , 가, OracleCustomerDAO  
Connection Pool

## OracleDAOFactory.java

```
import java.sql.Connection;

public class OracleDAOFactory extends DAOFactory {
    public static Connection createConnection(){
        // DRIVER DBURL
        // Connection Pool
        return null;
    }

    public CustomerDAO getCustomerDAO(){
        return new OracleCustomerDAO();
    }

    public final static String DRIVER = "oracle.jdbc.driver.OracleDriver";
    public final static String URL = "jdbc:oracle:thin:@[ ]:[port1521]:[ ]";
}
```

```
daoFactory, daoFactory, 가,  
OracleCustomerDAO
```

```
CustomerDAO customerDAO = daoFactory.getCustomerDAO();
```

customerDAO                      Oracle                      ,    가,                      ,

   CustomerDAO                      .                      ,

,    가,                      가                      .

## CustomerDAO.java

```
import java.sql.ResultSet;

import java.util.Collection;

public interface CustomerDAO {

    int insertMethodForCustomerDAO();

    boolean deleteMethodForCustomerDAO();

    Customer findMethodForCustomerDAO();

    boolean updateMethodForCustomerDAO();

    ResultSet selectRSForCustomerDAO();

    Collection selectVOForCustomerDAO();

}
```

가 . 가

## OracleCustomerDAO.java

```
import java.sql.ResultSet;

import java.util.Collection;

public class OracleCustomerDAO implements CustomerDAO {

    public OracleCustomerDAO() {

        //

    }

    public int insertMethodForCustomerDAO(){

        //          가
```

```

}

public boolean deleteMethodForCustomerDAO(){
    //
}

public Customer findMethodForCustomerDAO(){ } //
public boolean updateMethodForCustomerDAO(){
    //
}

public ResultSet selectRSForCustomerDAO(){
    //          Result Set
}

public Collection selectVOForCustomerDAO(){
    //          Value Object
}
}

```

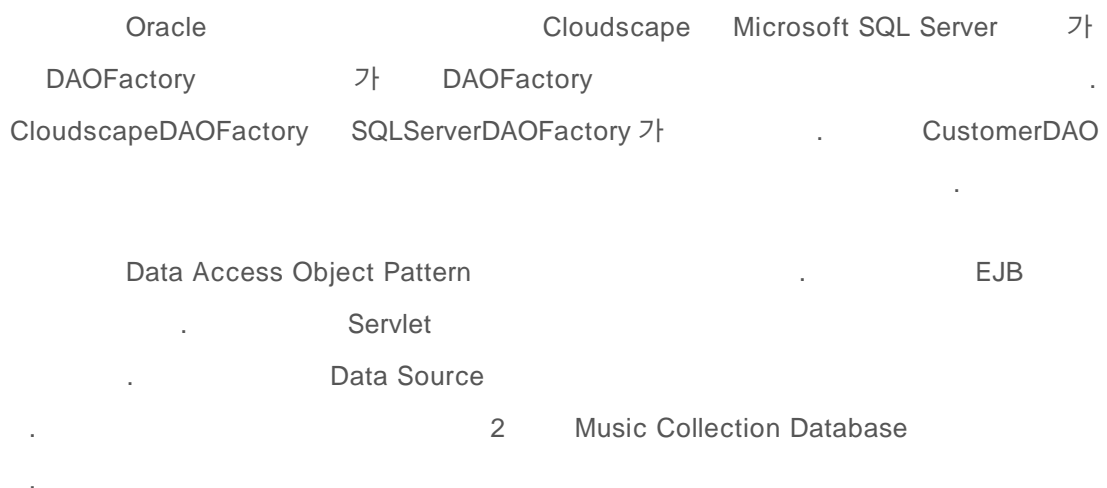
daoFactory

customerDAO

```

int newCustNo = customerDAO.insertMethodForCustomerDAO();
Customer customer = customerDAO.findMethodForCustomerDAO();

```



## Conclusion

