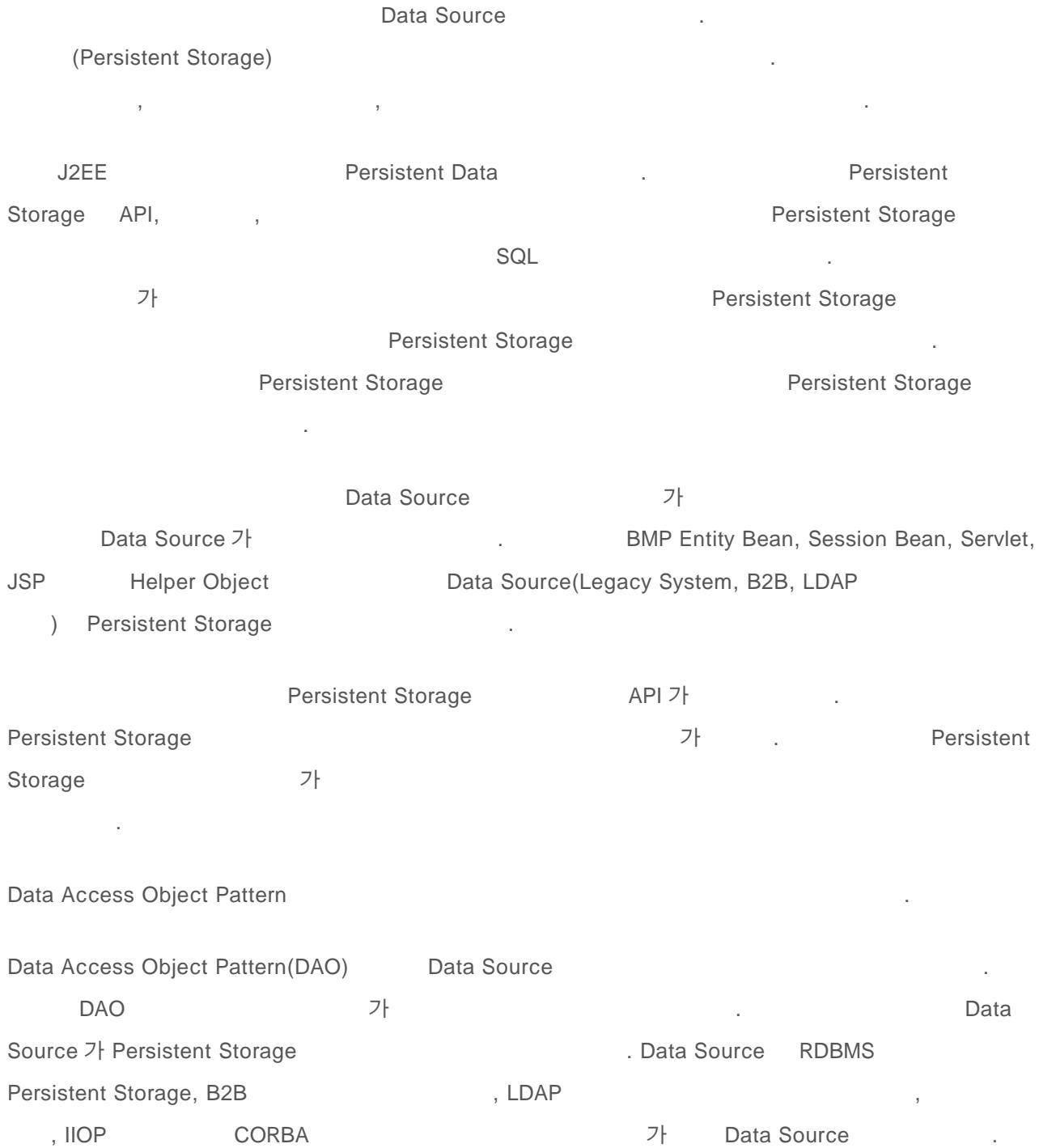
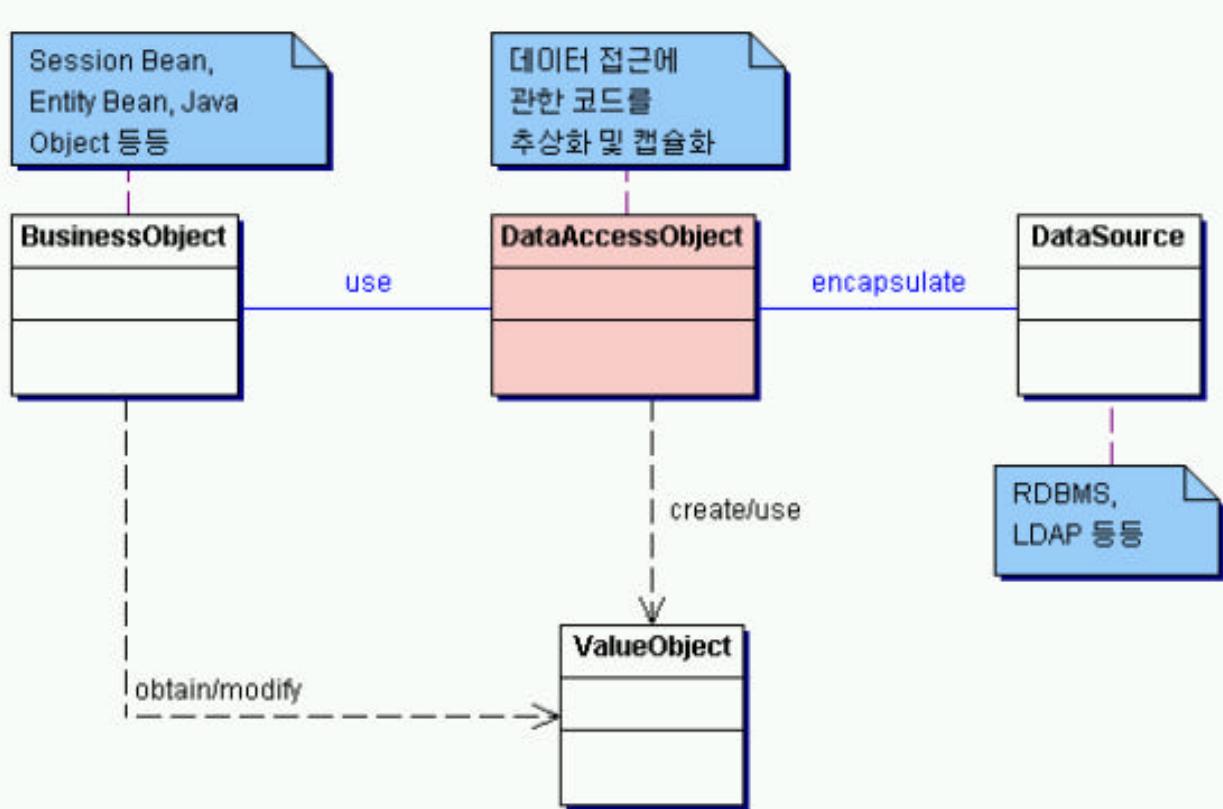


Data Access Object Pattern



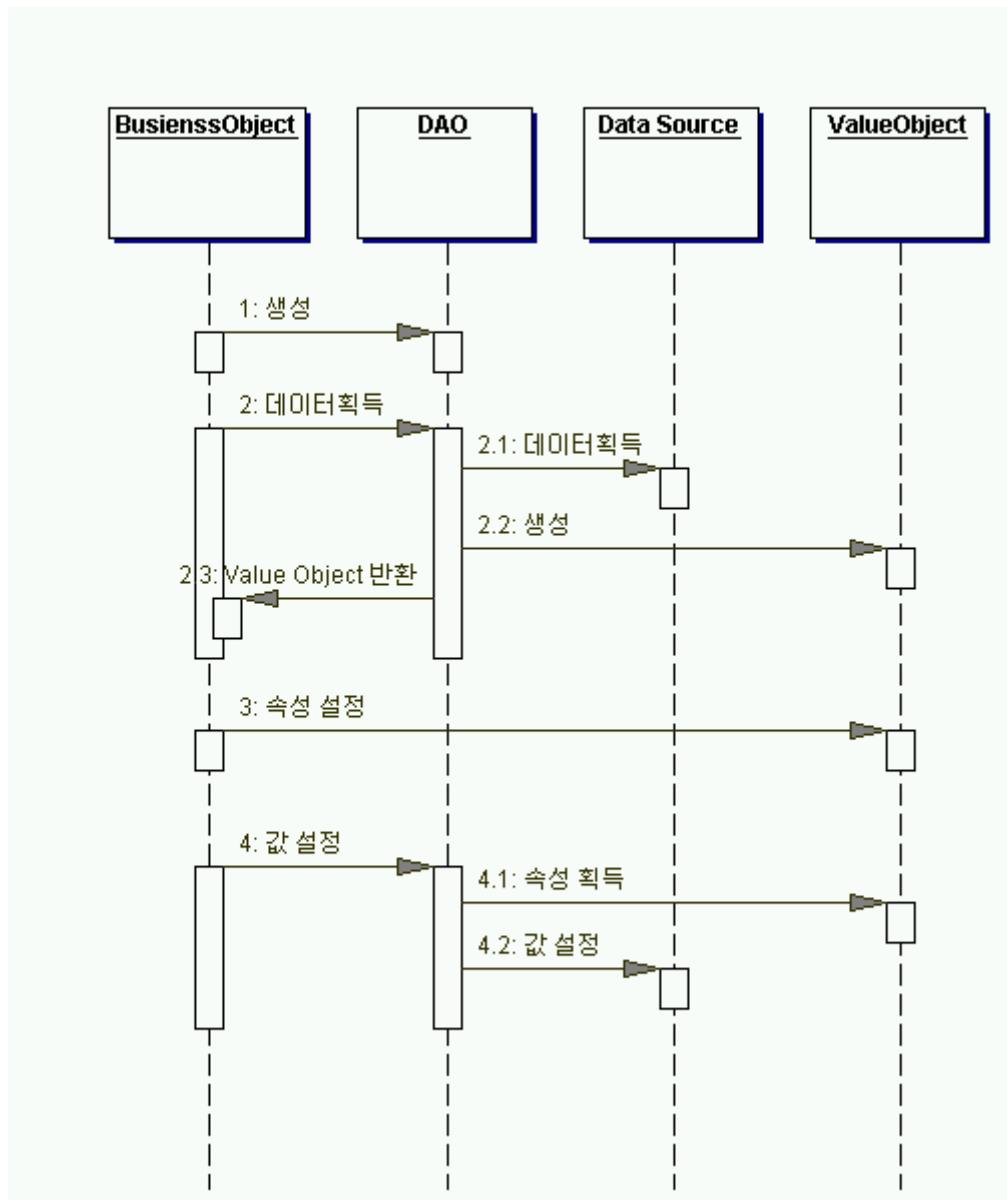


Class Diagram DAO

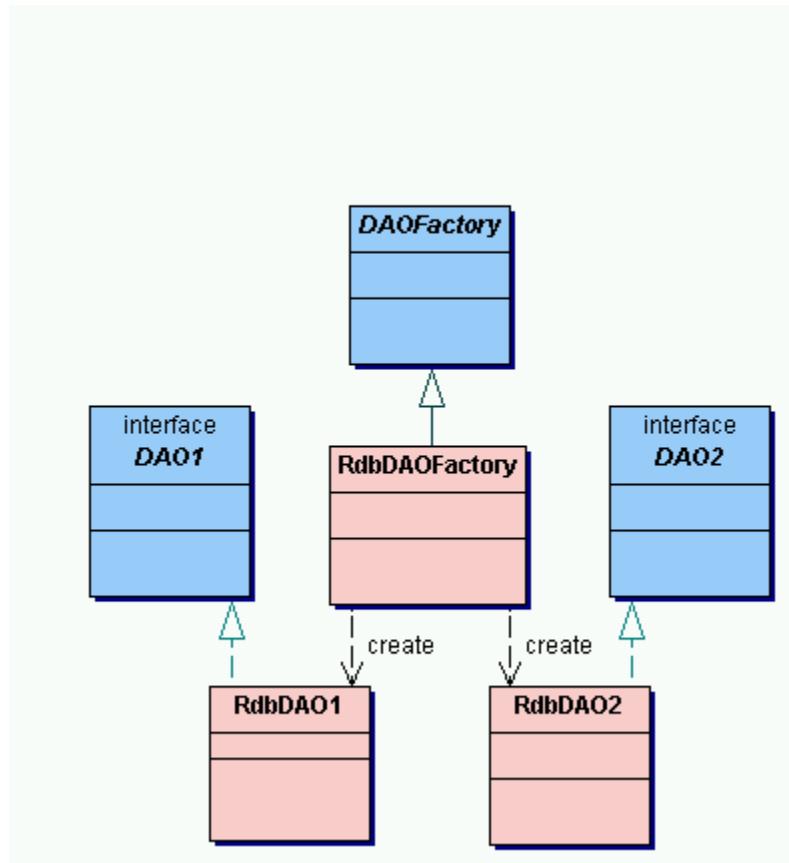
Session Bean	Entity Bean
DAO	DAO
Value Object	Business Object
Object	Data Source

Business Object

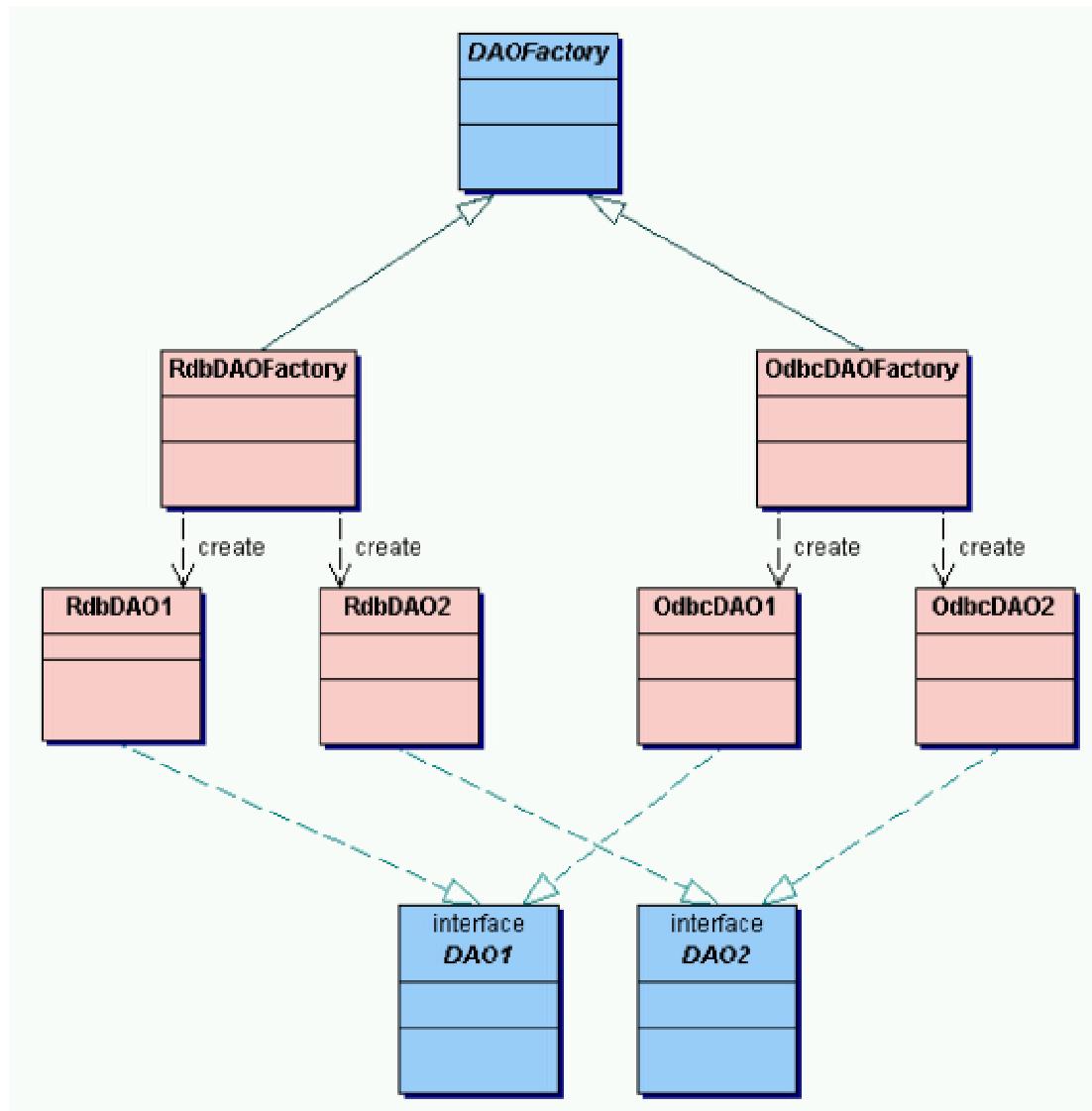
가	Business Object 가
Business Object	Value
Business Object	Data Source



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



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



Abstract Factory

DAO Pattern

ODBC

가

DAO

Data Source

가

Data Source

가

•

-

- DAO

DAO

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-

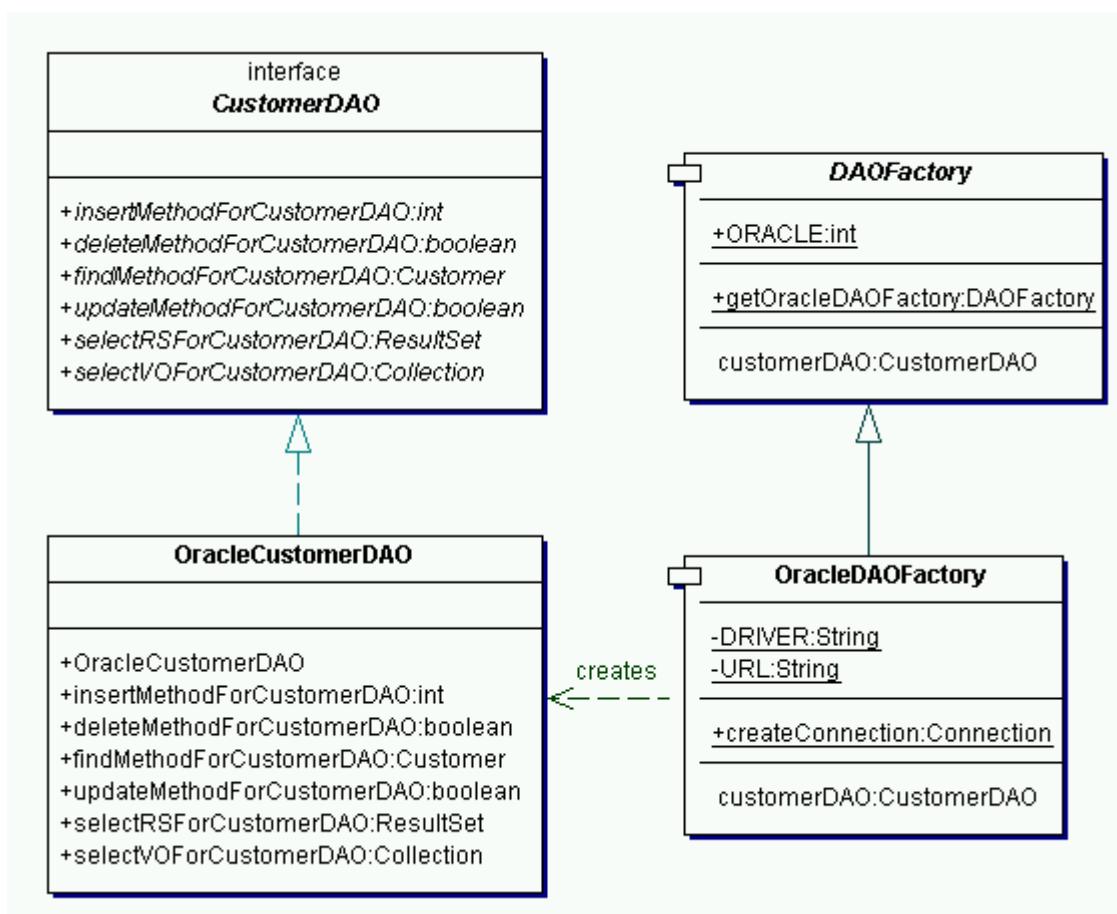
- DAO 가

, SQL

- DAO 가 가 가
- 가 DAO
- 가 - DAO Data Source Data Client 가
- Container-Managed Persistence 가 - CMP 가
Persistent Storage DAO CMP 가 가

Example Code

Oracle DAO



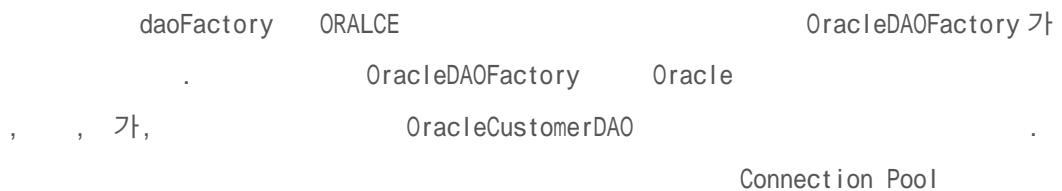
DAOFactory

DAOFactor.java

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

DAOFactor

```
DAOFactor daoFactory = DAOFactor.getOracleDAOFactor(DAOFactor.ORACLE);
```



OracleDAOFactor.java

```
import java.sql.Connection;  
  
public class OracleDAOFactor extends DAOFactor {  
    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:@[<br/> ]:[port1521]:[<br/> ]";  
}
```

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(){
        //
    }
}
```

```
}

public boolean deleteMethodForCustomerDAO(){
    //
}

public Customer findMethodForCustomerDAO(){    } //

public boolean updateMethodForCustomerDAO(){

    //
}

public ResultSet selectRSForCustomerDAO(){

    //          Result Set
}

public Collection selectVOForCustomerDAO(){

    //          Value Object
}
```

daoFactory customerDAO

customerDAO

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

Oracle	Cloudscape	Microsoft SQL Server	가
DAOFactory	가 DAOFactory		.
CloudscapeDAOFactory	SQLServerDAOFactory	가 .	CustomerDAO

Data Access Object Pattern . EJB

Servlet

Data Source

2 Music Collection Database

Conclusion

Data Access Object Pattern

EJB

Servlet

Data Source

2 Music Collection Database