Stock Broker Programming

2tier   vs   3tier

by HA SEUNG HYUN

Database Programming(using JDBC)
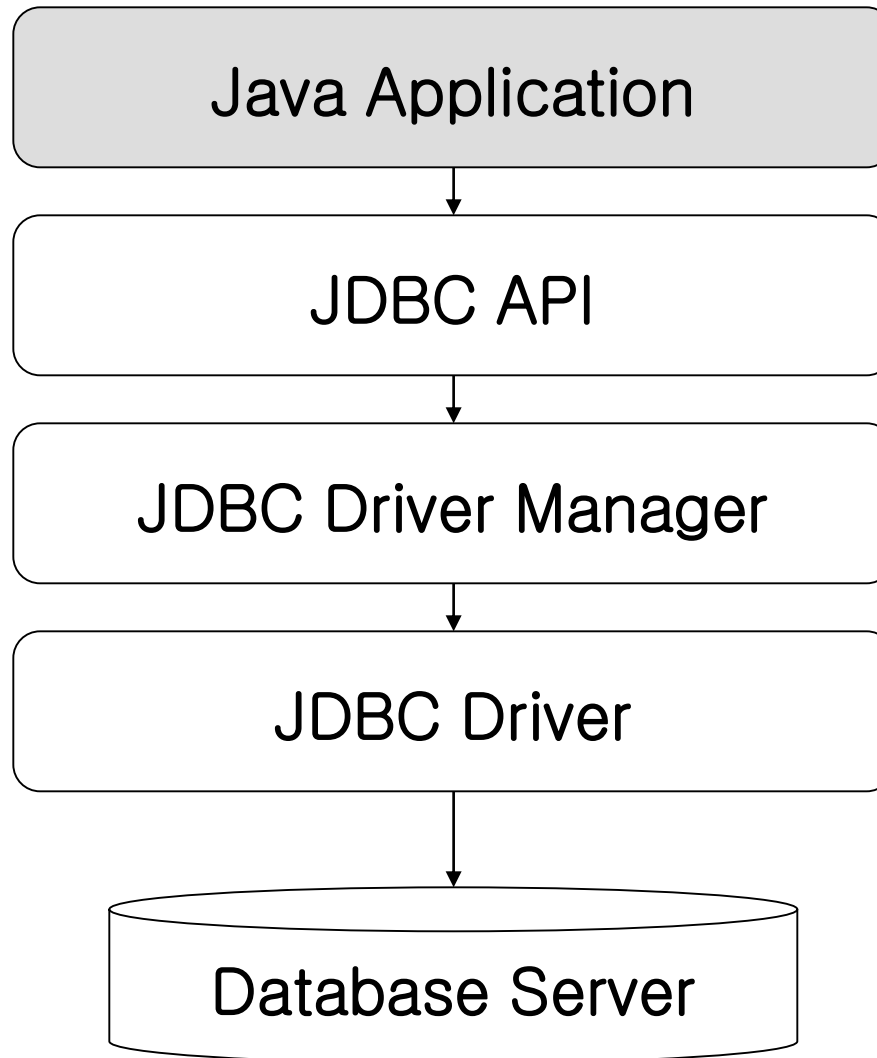
Database Programming(using JDBC)
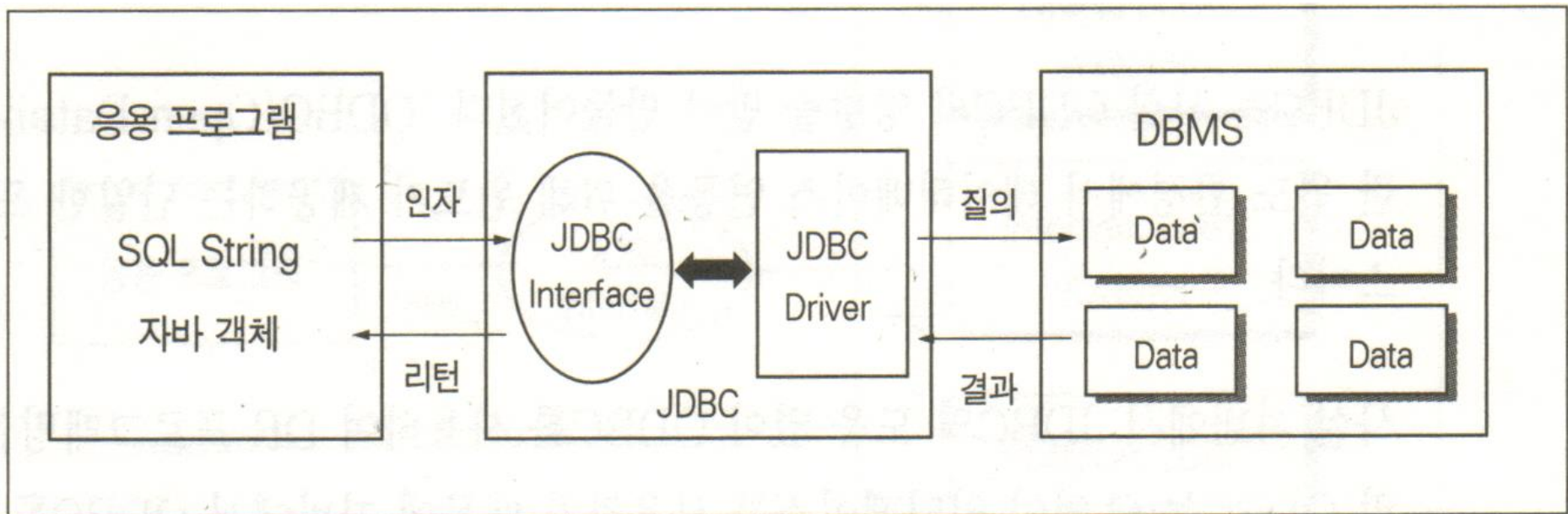
JDBC Programming Pattern

1. JDBC Driver Loading (thorws ClassNotFoundException)

```
String driver = "jdbc_driver_name";
Class.forName(driver);
```

```
new jdbc_driver_name();
```

```
DriverManager.registerDriver(new jdbc_driver_name());
```

```
prompt>java –Djdbc.drivers=jdbc_driver_name class_name
```
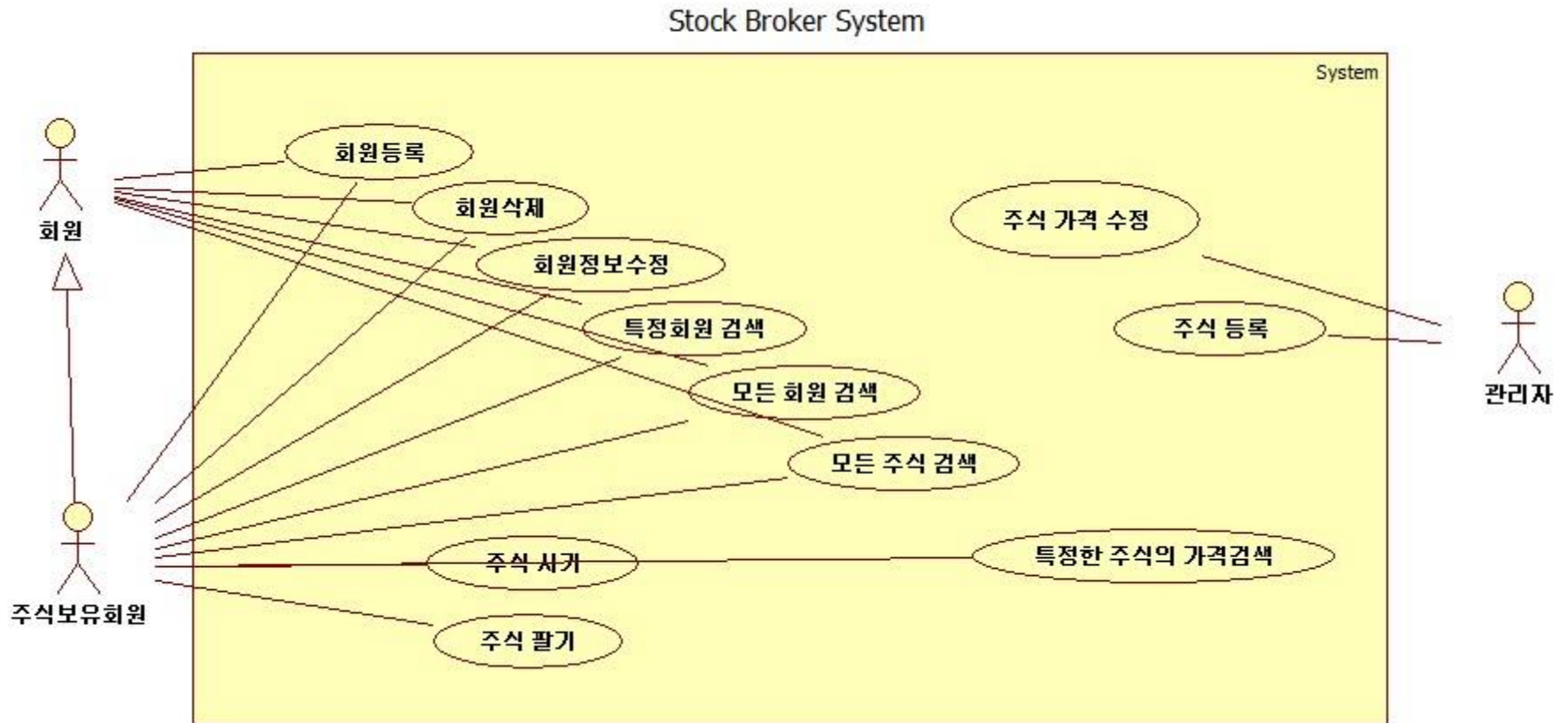
<jdbc_driver_name>
MySql : *org.gjt.mm.mysql.Driver*
Oracle-thin : *oracle.jdbc.driver.OracleDriver*
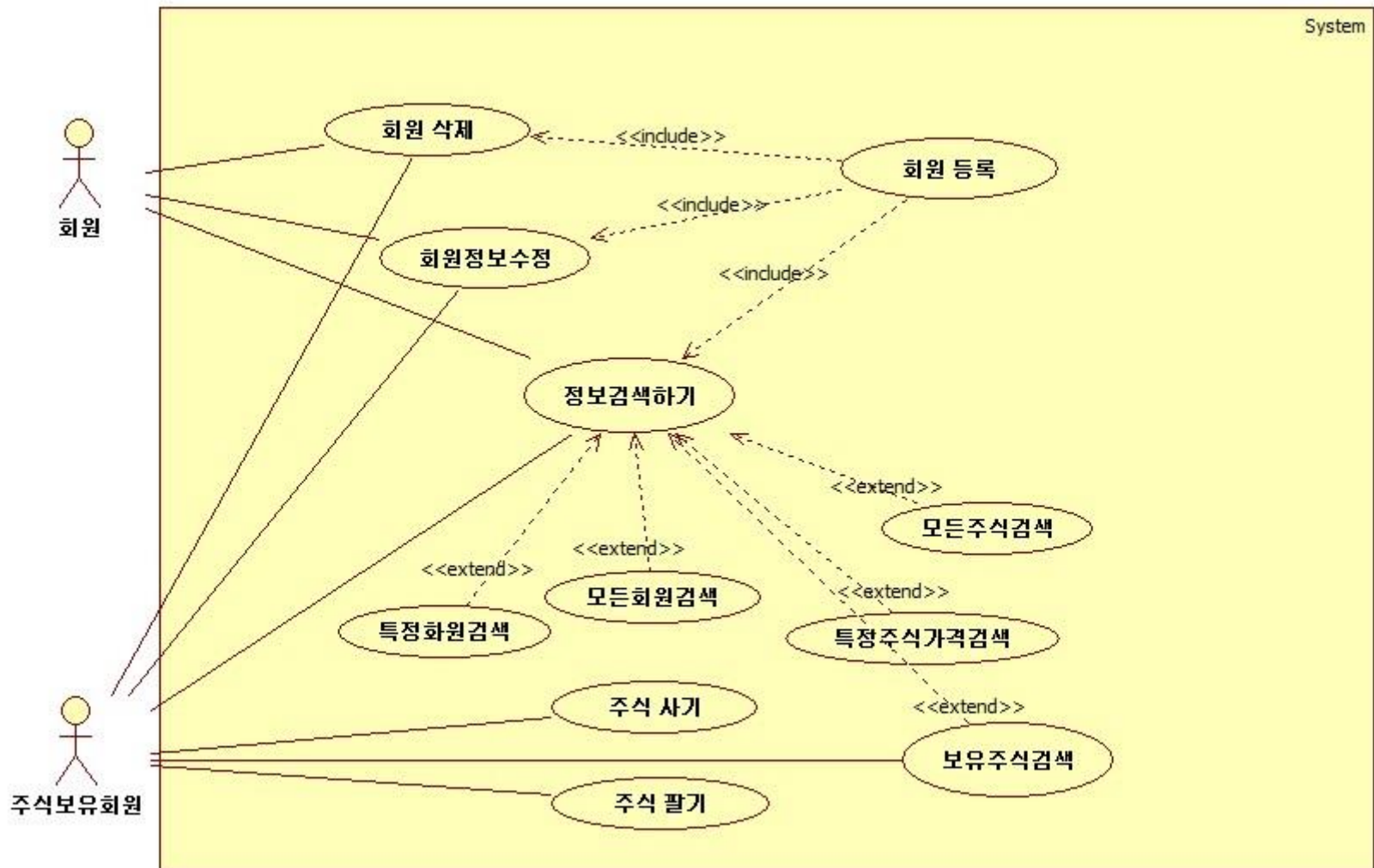Oracle-oci : *oracle.jdbc.driver.OracleDriver*
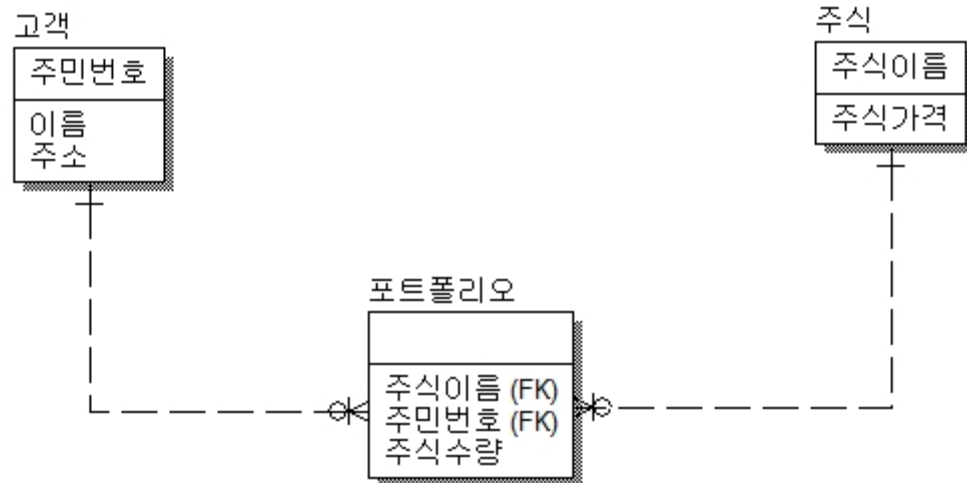JDBC-ODBC : *sun.jdbc.odbc.JdbcOdbcDriver*

UseCase Diagram

Stock Broker System

System

회원

주식보유회원

회원등록

회원삭제

회원정보수정

특정회원 검색

모든 회원 검색

모든 주식 검색

주식 사기

주식 팔기

주식 가격 수정

주식 등록

특정한 주식의 가격검색

관리자

UseCase Diagram

Entity Relation

Client

Server

Database (MySQL) ↔ **3306** ↔ JDBC Driver

Database.java ↔ BrokerGUI.java

CustomerRec.java

SharesRec.java

StockRec.java

RecordNotFoundException.java

DuplicateIDException.java

InvalidTransactionException.java

<<2Tier-Model>>

2-tier Model

Server

Client

Broker.java

DB

Listener

JDBC
Driver

Database

CustomerRec

SharesRec

StockRec

Exception
classes

GUI

<<Database Table 구조>>
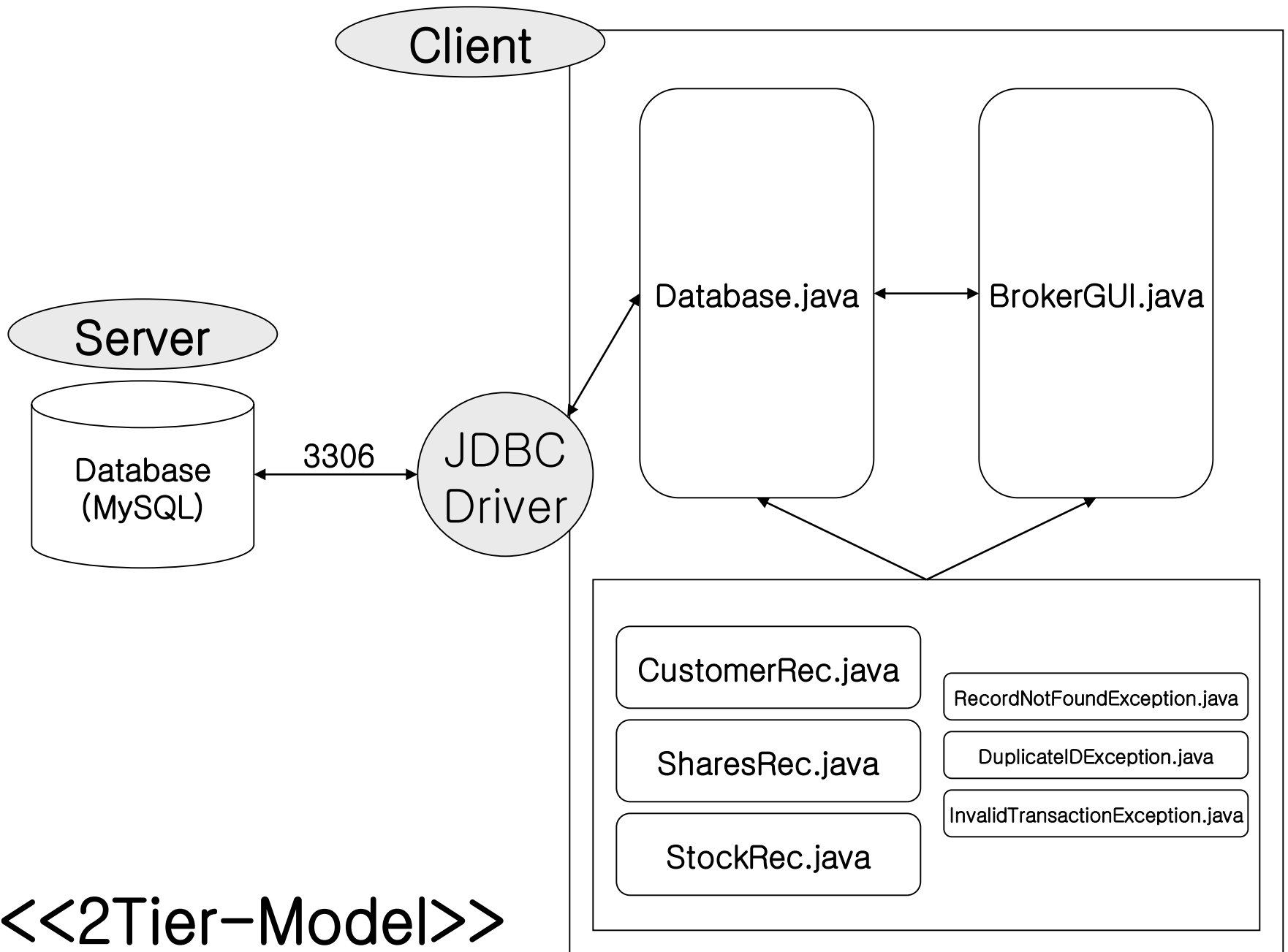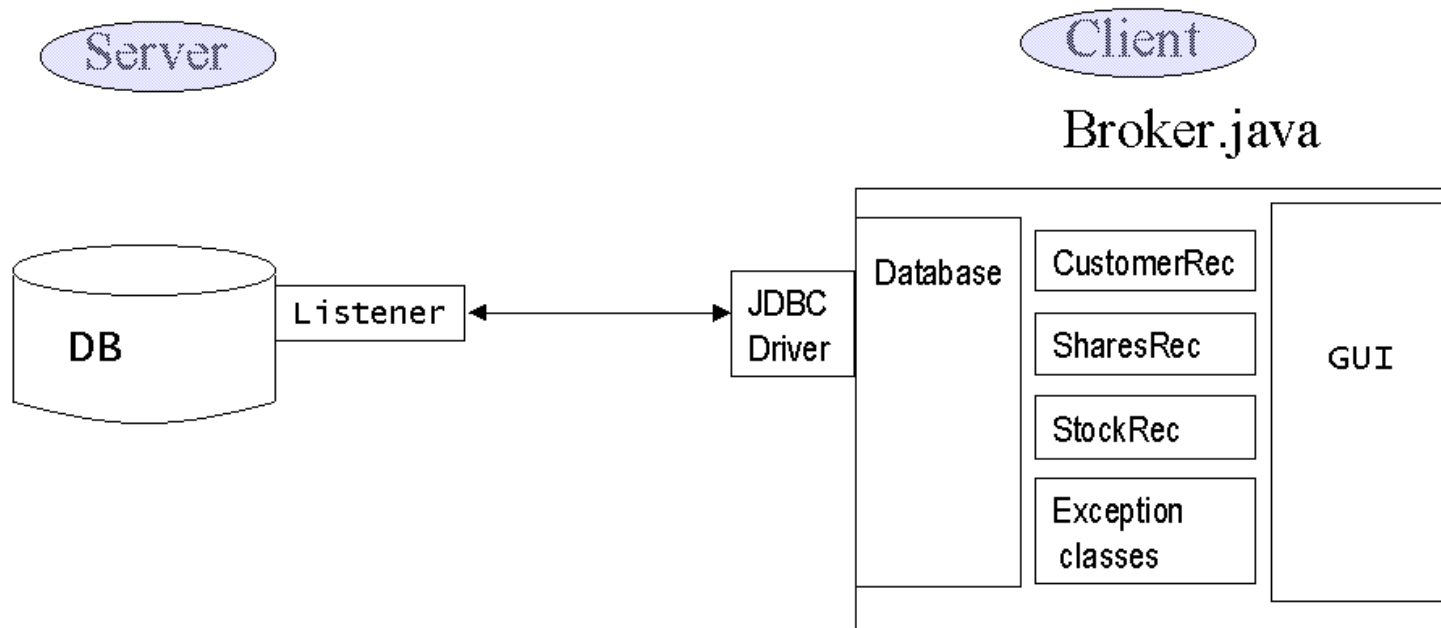
Customer	
ssn	char(15) primary key
cust_name	char(40)
address	char(100)

Shares	
ssn	char(15)
symbol	char(8)
quantity	int(4)

Stock	
symbol	char(8) primary key
price	float

ABC Stock

Customer Information

ADD DELETE UPDATE apply cancel

Name 하바리

SSN 777-777

Address 서현동

Stock Portfolio
DUKE 2300
JDK 6666

All Customers
111-111 Yufirst1 S
111-112 Yufirst2 S
111-113 Yufirst3 S
111-114 Yufirst4 S
111-115 yufirst5 Je
111-116 Yufirst6 S
111-117 Yufirst7 S
111-118 Yufirst8 S
111-119 Yufirst9 S
777-777 하바리 서

Buy Sell

Stock Information

Available Stocks
SUNW 68.75
CyAs 22.68
DUKE 6.25
ABStk 18.5
JSVco 9.13
TMAs 82.38
BWInc 11.38
GMEnt 44.63
PMLtd 203.38
JDK 33.5

Get Current Stock Price

Stock

Current Price