Java SQL SELECT

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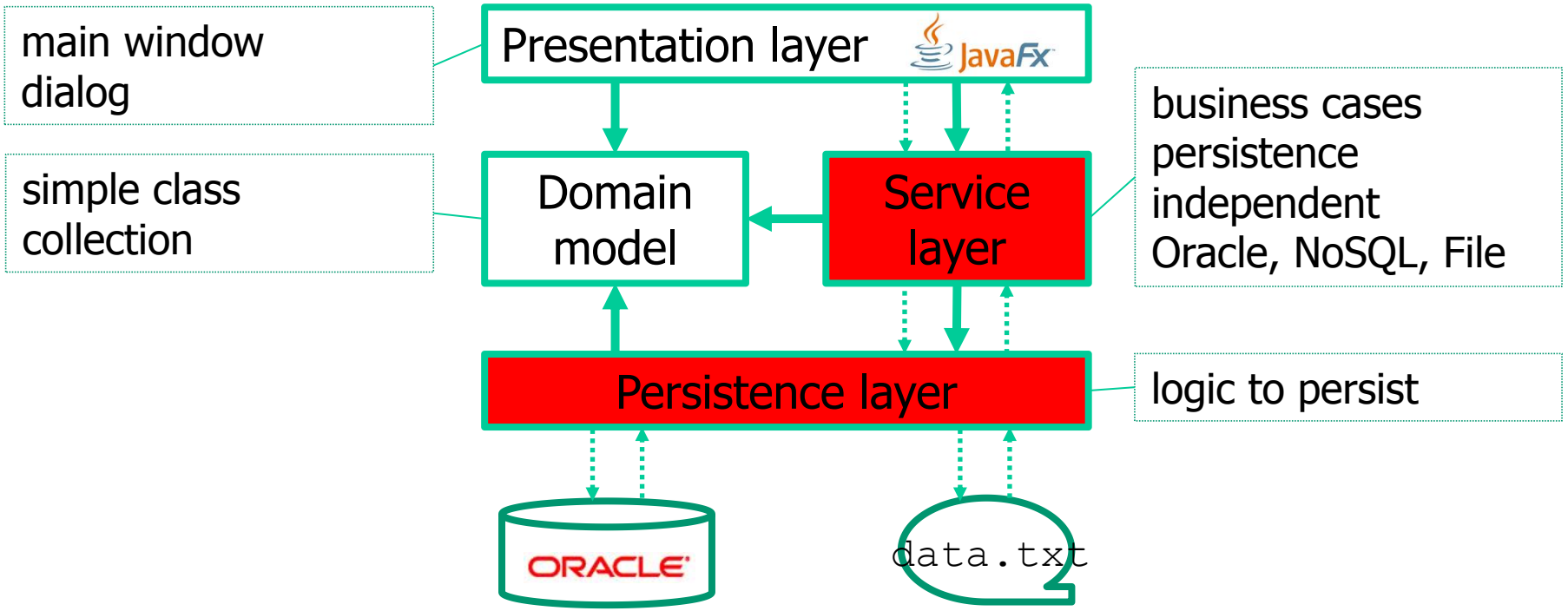
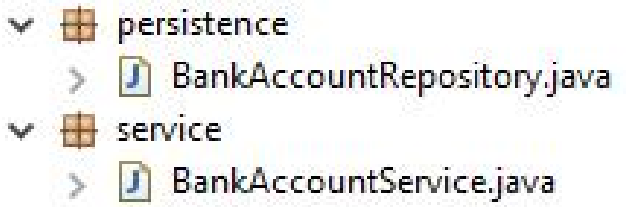
Architecture





knows

calls

```
package persistence;
public class BankAccountRepository {
  private final static String SQL_SELECT_ALL =
    "SELECT ACCOUNTNUMBER, ... FROM   BANKACCOUNT";
  private PreparedStatement selStmt;

  public List<BankAccount> selectAll( Connection con ) {
    if ( selStmt == null )
      selStmt = con.prepareStatement( SQL_SELECT_ALL );
    ResultSet resSet = selStmt.executeQuery();
    if ( resSet != null ) {
      List<BankAccount> accounts = new ArrayList<>();
      while( resultSet.next() ) {
        Long accNum = resultSet.getLong( 1 );
        String fname = resultSet.getString( 2 );
        LocalDateTime opDate = resultSet.getTimestamp( 3 )
                                        .toLocalDateTime();
        accounts.add( new BankAccount( accNum, ...));
      }
      return accounts;
    }
    else throw new BankAccountException("Could not read");
  }
}
```

```
package service;

public class BankAccountService {
  private Connection con;
  private BankAccountRepository bankAccountRep;

  public BankAccountService( Connection con ) {
    this.con = con;
    this.bankAccountRep = new BankAccountRepository();
  }

  public void getBankAccounts( Bank bank )
                                 throws BankAccountException {
    bank.clear();
    bank.addAll( bankAccountRep.selectAll( con ));
  }
}
```

```
package test;

public class TestSelect {
  public static void main(String[] args) {
    try {
      Bank bank = new Bank();
      OracleConnection oracon = new OracleConnection();
      BankAccountService bankAccountServ =
         new BankAccountService( oracon.getConnection() );
      bankAccountServ.getBankAccounts( bank );
      System.out.println( bank );
      oracon.close();
    }
    catch ( BankAccountException e ) {
       System.out.println( e.getMessage() );
    }
  }
}
```