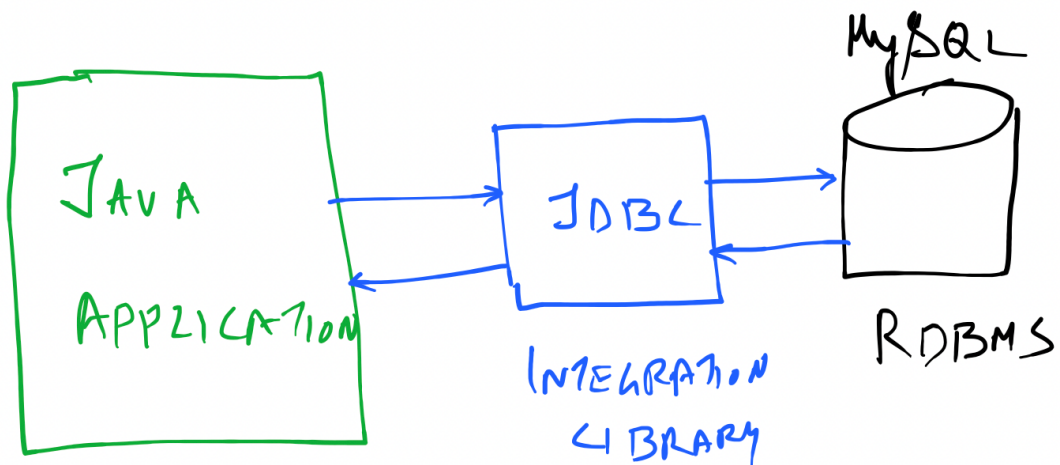
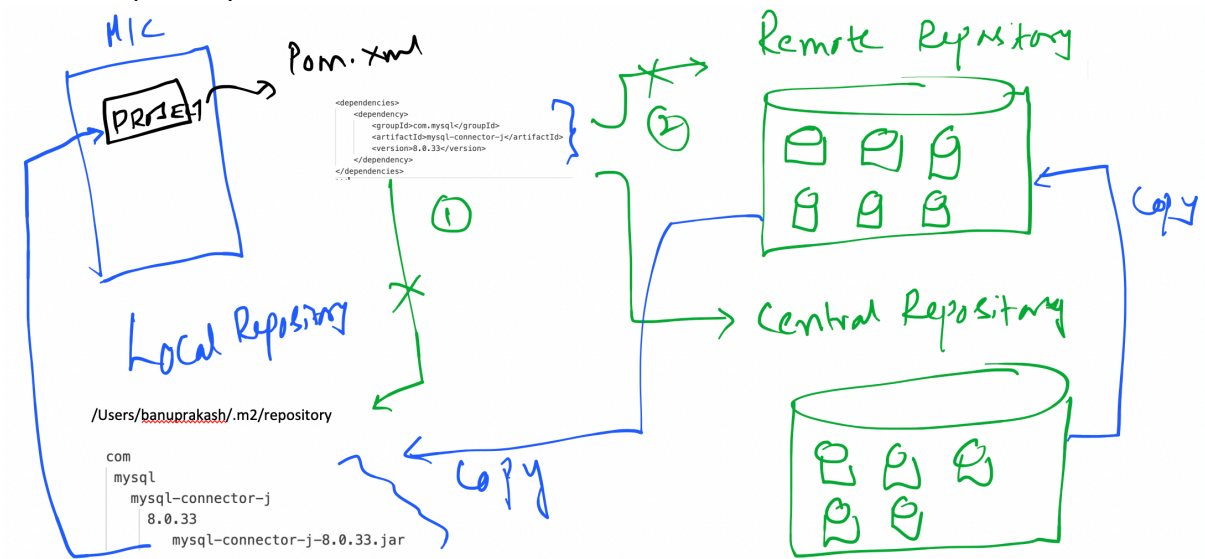


Maven Repository



client code:
 ProductDao productDao = new ProductDaoJdbcImpl();
 Product p = new Product(..);
 productDao.addProduct(p);

```

interface ProductDao {
  void addProduct(Product p);
}
  
```

SERVER

```

class ProductDaoJdbcImpl implements ProductDao {
  public void addProduct(Product p) {
    try {
      // SQL
    } catch (SQLException ex) {
      ex.printStackTrace();
    }
  }
}
  
```



Exception

```

client code:
ProductDao productDao = new ProductDaoJdbcImpl();

```

```

Product p = new Product(..);
try {
    productDao.addProduct(p);
} catch(SQLException ex) {
    ex.getMessage();
    ex.printStackTrace();
}

```

```

interface ProductDao {
    void addProduct(Product p) throws SQLException;
}

```

```

class ProductDaoJdbcImpl implements ProductDao {
    public void addProduct(Product p) throws SQLException {
        // SQL
    }
}

```

PROBLEMS:

1) EXCEPTION ORA9001 UNIQUE CONSTRAINT VIOLATION

2) EXPOSE BACKEND → User | table | column

3) TIGHTLY COUPLED

EXCEPTION

SERIALIZABLE

```

public class PersistenceException extends Exception {
    public PersistenceException(String msg) {
        ...
    }
}

```

```

ProductDao productDao = new ProductDaoJdbcImpl();

Product p = new Product(..);
try {
    productDao.addProduct(p);
} catch(PersistenceException ex) {
    ex.getMessage();
    ex.printStackTrace();
}

```

```

interface ProductDao {
    void addProduct(Product p) throws PersistenceException;
}

```

```

class ProductDaoJdbcImpl implements ProductDao {
    public void addProduct(Product p) throws PersistenceException {
        try {
            // SQL
        } catch(SQLException ex) {
            throw new PersistenceException("unable to add product");
        }
    }
}

```

```

class ProductDaoMongoDbImpl implements ProductDao {
    public void addProduct(Product p) throws PersistenceException {
        try {
            // SQL
        } catch(MongoException ex) {
            throw new PersistenceException("unable to add product");
        }
    }
}

```