=> Hibernate :- ORM

=> Hard code sql queries X => Taken care By Hibernate

⇓

{
    inform Hibernate —y
        Xml

       ⇓

    configuration
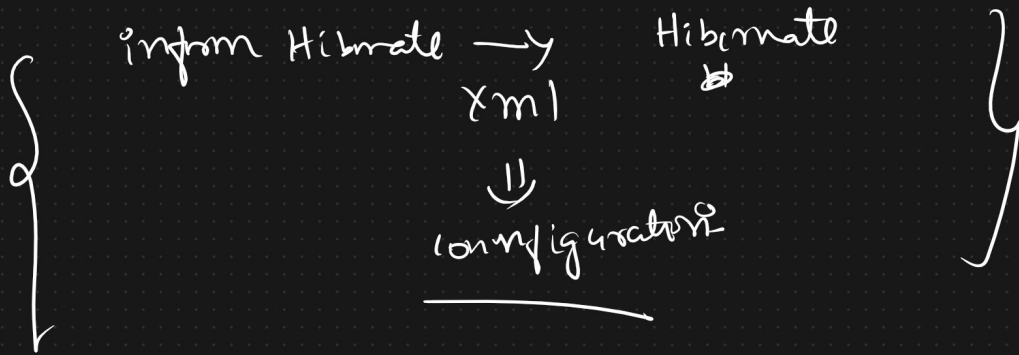
               Hibernate
                   do
}

Hibernate => Third party =y JAR => project

JDBC => mysql — (jar) • class file

                       ⇓

              compiled java file

Hibernate => JAR => Add to our project ecosystem

=> Hibernate => internally uses JDBC API &
                     Transaction.

Transaction

{ ≡y { ⊜}y Money Deducted

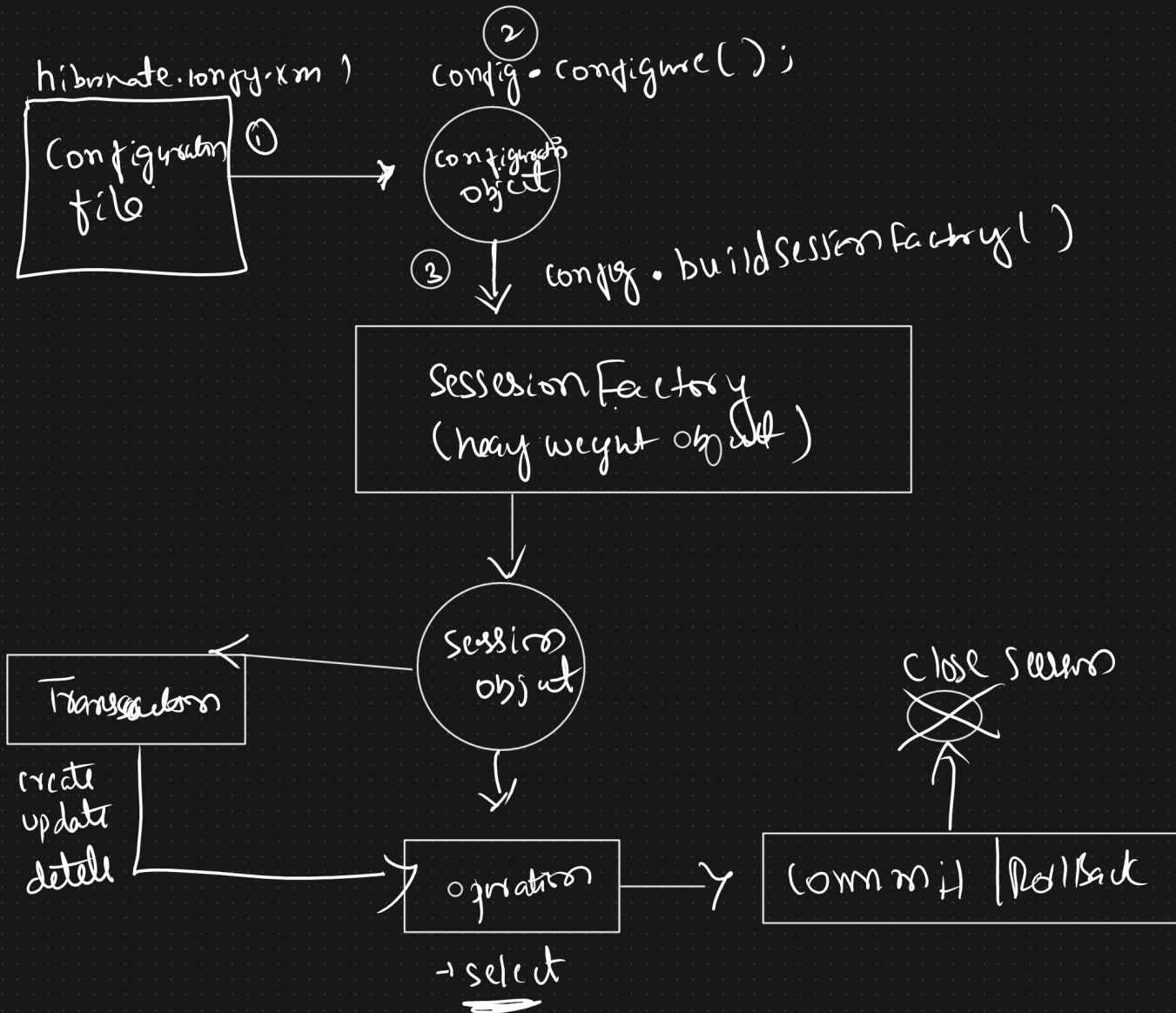   ≡y update

           ≡y → credited Target account

After creating a class which we want to map with DB

Annotations:-

@Entity ==> To Specify the class name to map with table name
@Id ==> To Specify primary key column name, which mapped to field of an entity
@Column ==>To Specify the column name which is mapped with field of an entity .

hibernate.config.xml

Configuration file ①

config.configure(); ②

Configuration Object

config.buildSessionFactory() ③

Session Factory
(heavy weight object)

Session object

Transaction

create
update
delete

operation

→ select

commit | Rollback

Close session

To perform insertion operation we can use save() of session Object.
Also in hibernate configuration file we must use create property

```xml
<!-- To infrom Hibernate to use existing table or to create new table . -->
<property name="hbm2ddl.auto">create</property>
```

To perform update operation we can two of the following methods
a) update()
b)saveOrUpdate();

a) update()==> we need to ensure primary key value used for searching thr record should be available otherwise it would result in Exception `org.hibernate.StaleObjectStateException`

```
b) saveOrUpdate()  ==> this method first perform select operation:

            ==> if record is found based on id then it will update
            ==> if record is not found then it will perform insert operation
```

Retreival operation : it means selecting record based on primary key of the table
using two methods we can do it :
a)get()
b)load()