

## LAB 7: HIBERNATE



### Mục tiêu:

Kết thúc bài thực hành này bạn có khả năng

- ✓ Tạo web app Hibernate – MVC có các chức năng thêm, xóa, sửa, update, tìm kiếm

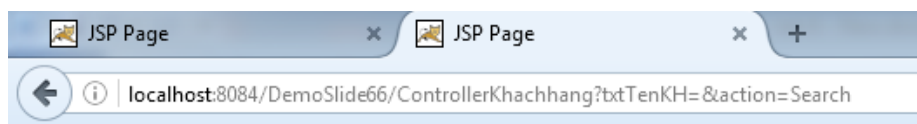
### PHẦN I

#### Bài 1: Tạo web app dùng hibernate – MVC có các chức năng như sau(6 điểm)



### Khách hàng

MaKH	HoTen	MatKhau	Email	SoDT
KH01	Nguyen Van Teo	123	teonv@gmail.com	01683314129
KH02	Le Van Tam	321	tamlv@gmail.com	0903414749
KH03	Phan Van Bi	123	bipv@gmail.com	0903936117
KH04	Le Van Phung	abc	phunglv@fpt.edu.vn	01683314129

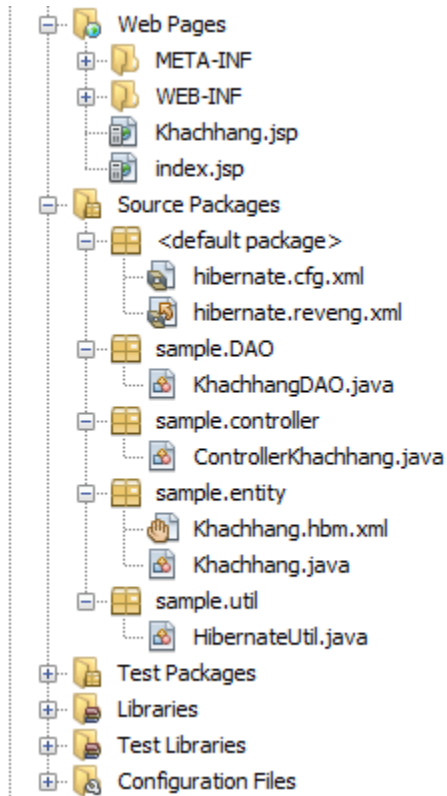


### Hello World!

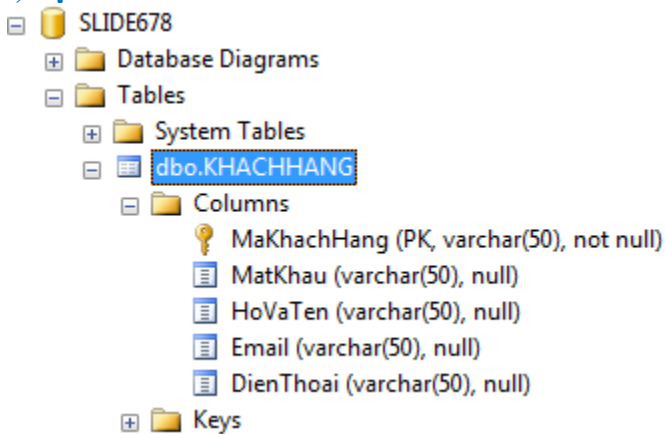
Ten KH:   ✓

MaKH	HoTen	MatKhau	Email	SoDT	Delete
KH01	Nguyen Van Teo	123	teonv@gmail.com	01683314129	<input type="button" value="Delete"/>
KH02	Le Van Tam	321	tamlv@gmail.com	0903414749	<input type="button" value="Delete"/>
KH03	Phan Van Bi	123	bipv@gmail.com	0903936117	<input type="button" value="Delete"/>
KH04	Le Van Phung	abc	phunglv@fpt.edu.vn	01683314129	<input type="button" value="Delete"/>

## Cấu trúc chương trình

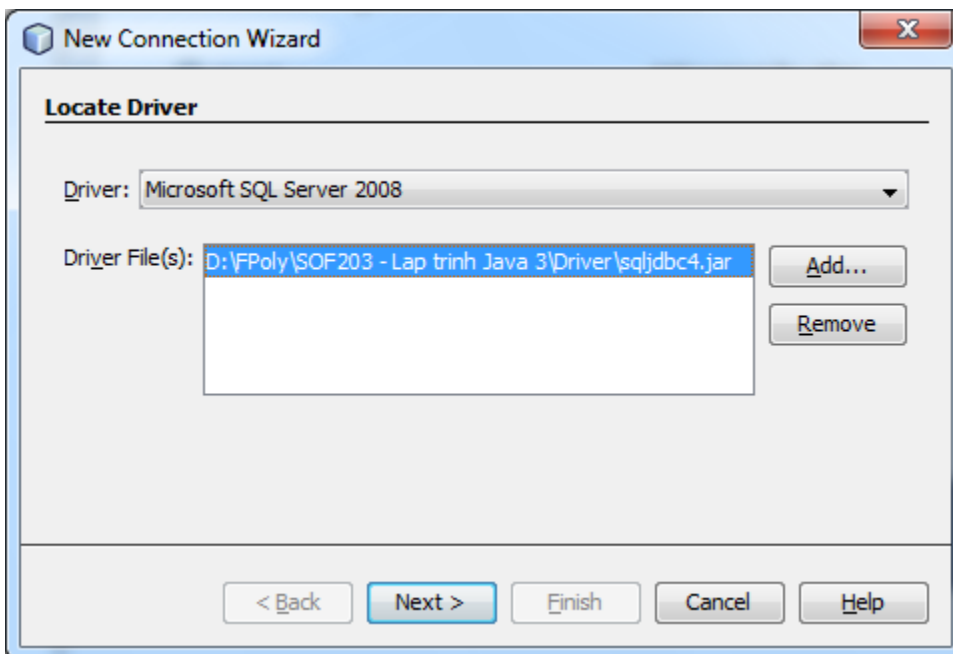
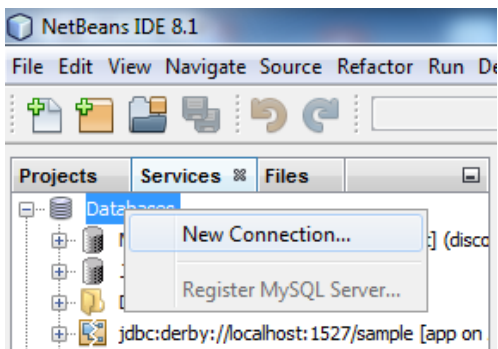


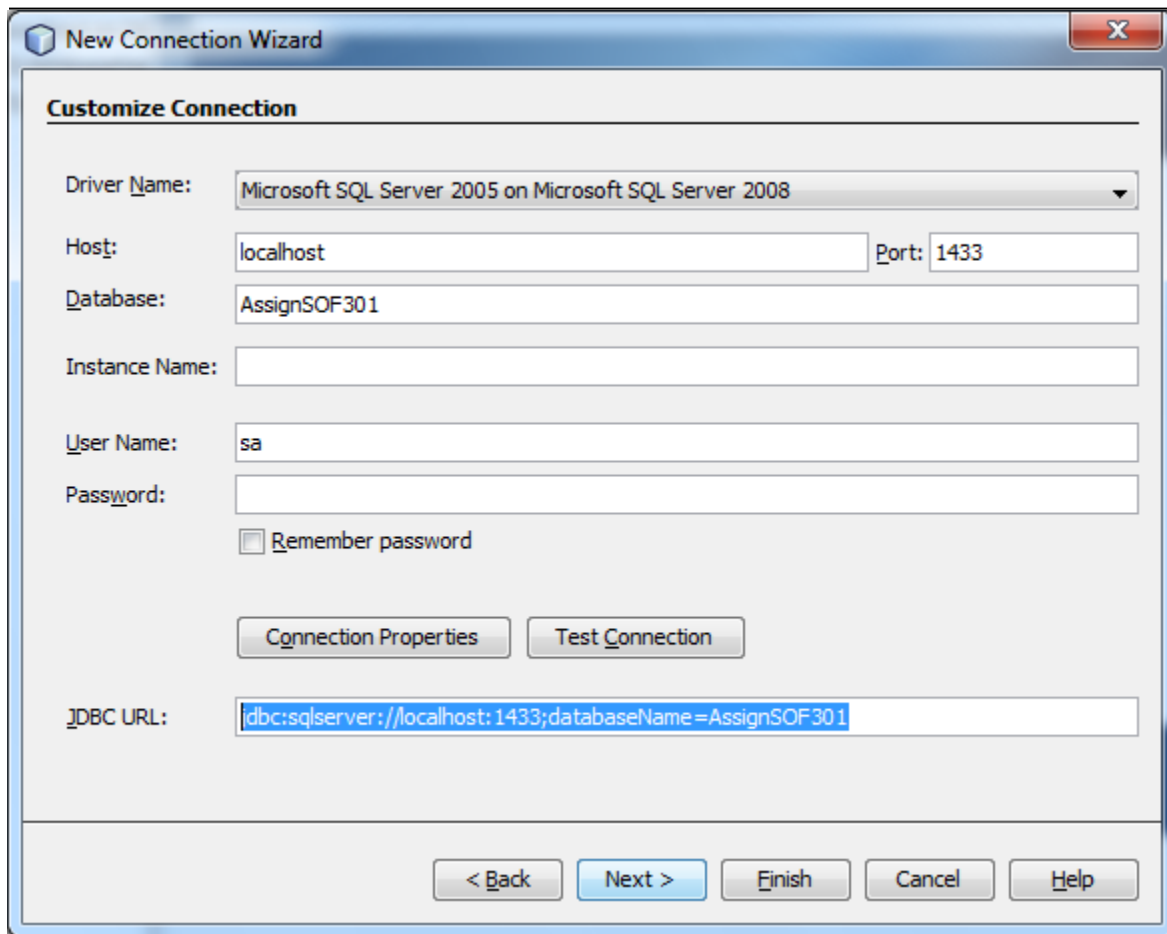
## 1, Tạo Database



SCD050718.SLID... dbo.KHACHHANG					
	MaKhachHang	MatKhau	HoVaTen	Email	DienThoai
	KH01	123	Nguyen Van Teo	teonv@gmail.com	01683314129
	KH02	321	Le Van Tam	tamlv@gmail.com	0903414749
	KH03	123	Phan Van Bi	bipv@gmail.com	0903936117
	KH04	abc	Le Van Phung	phunglv@fpt.edu.vn	01683314129
▶*	NULL	NULL	NULL	NULL	NULL

## 2, Tạo kết nối





**New Connection Wizard**

**Customize Connection**

Driver Name: Microsoft SQL Server 2005 on Microsoft SQL Server 2008

Host: localhost Port: 1433

Database: AssignSOF301

Instance Name:

User Name: sa

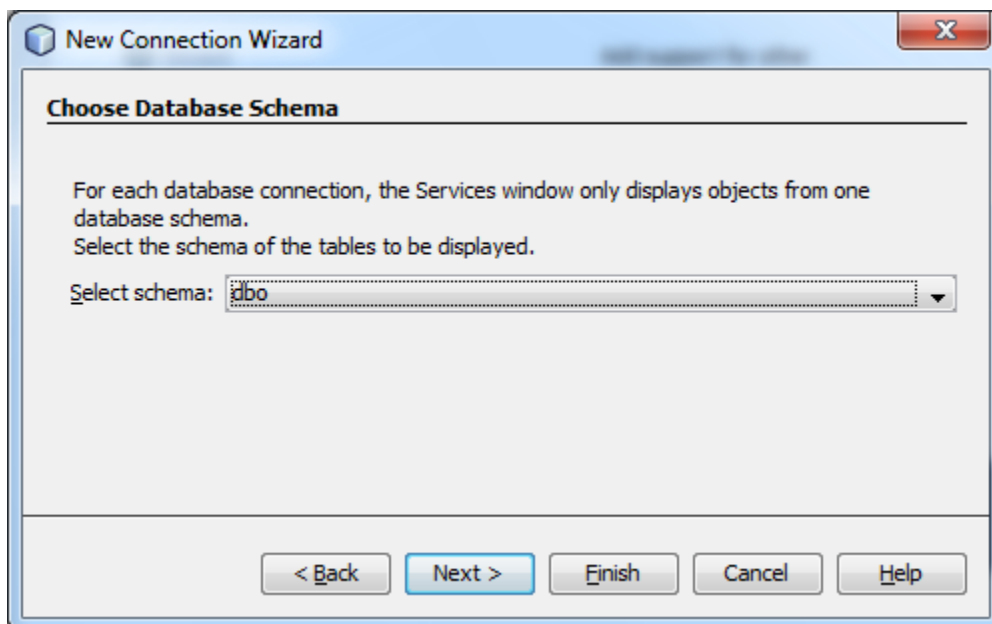
Password:

☐ Remember password

Connection Properties Test Connection

JDBC URL: jdbc:sqlserver://localhost:1433;databaseName=AssignSOF301

< Back Next > Finish Cancel Help



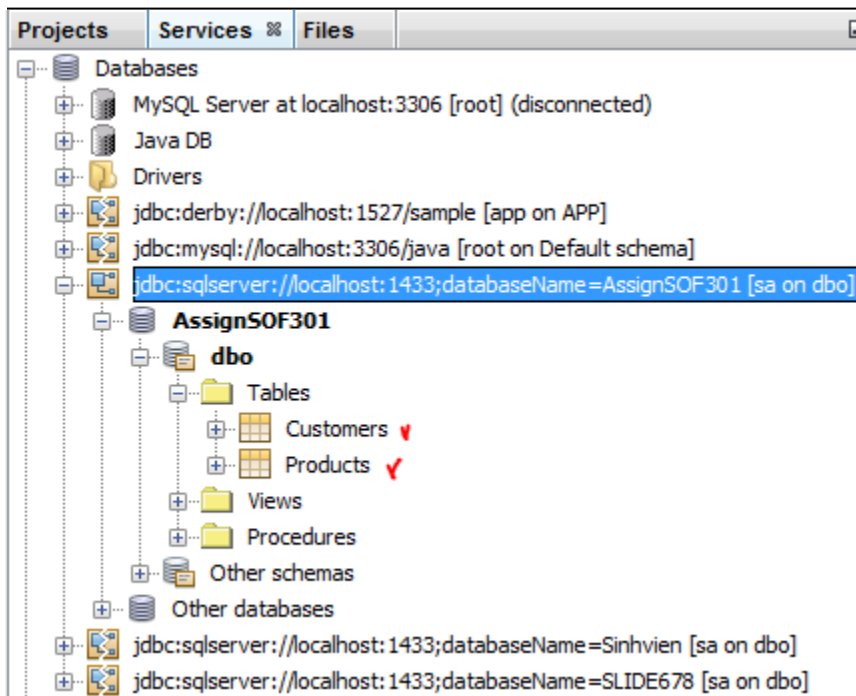
**New Connection Wizard**

**Choose Database Schema**

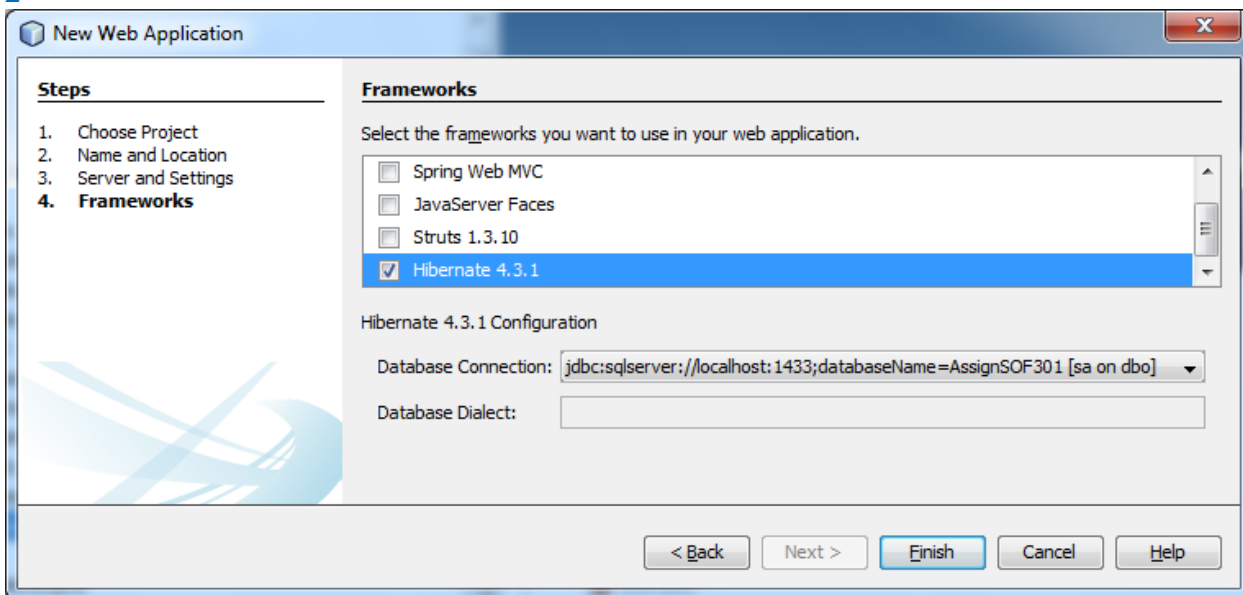
For each database connection, the Services window only displays objects from one database schema.  
Select the schema of the tables to be displayed.

Select schema: dbo

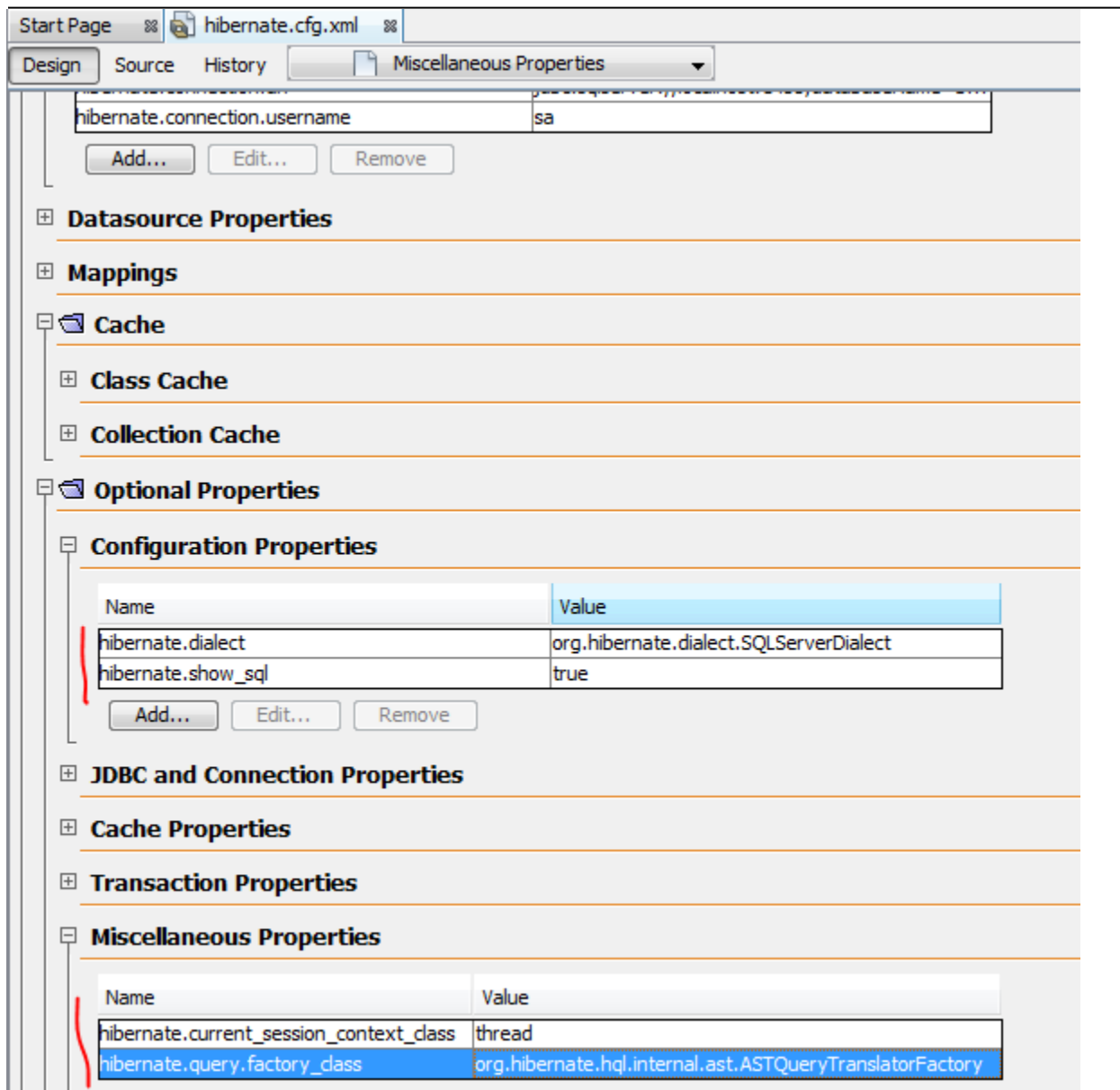
< Back Next > Finish Cancel Help



3, Tạo Project mới như các lab trước, phần Frameworks, chọn Hibernate và chuỗi kết nối đã tạo ở bước 2



4, Edit file hibernate.cfg.xml như hình



The screenshot shows the Eclipse IDE with the `hibernate.cfg.xml` file open. The **Miscellaneous Properties** tab is selected, displaying a table of configuration properties:

Name	Value
hibernate.connection.username	sa
hibernate.dialect	org.hibernate.dialect.SQLServerDialect
hibernate.show_sql	true
hibernate.current_session_context_class	thread
hibernate.query.factory_class	org.hibernate.hql.internal.ast.ASTQueryTranslatorFactory

Below the table are buttons for **Add...**, **Edit...**, and **Remove**.

Xem file dạng xml, chọn tab source

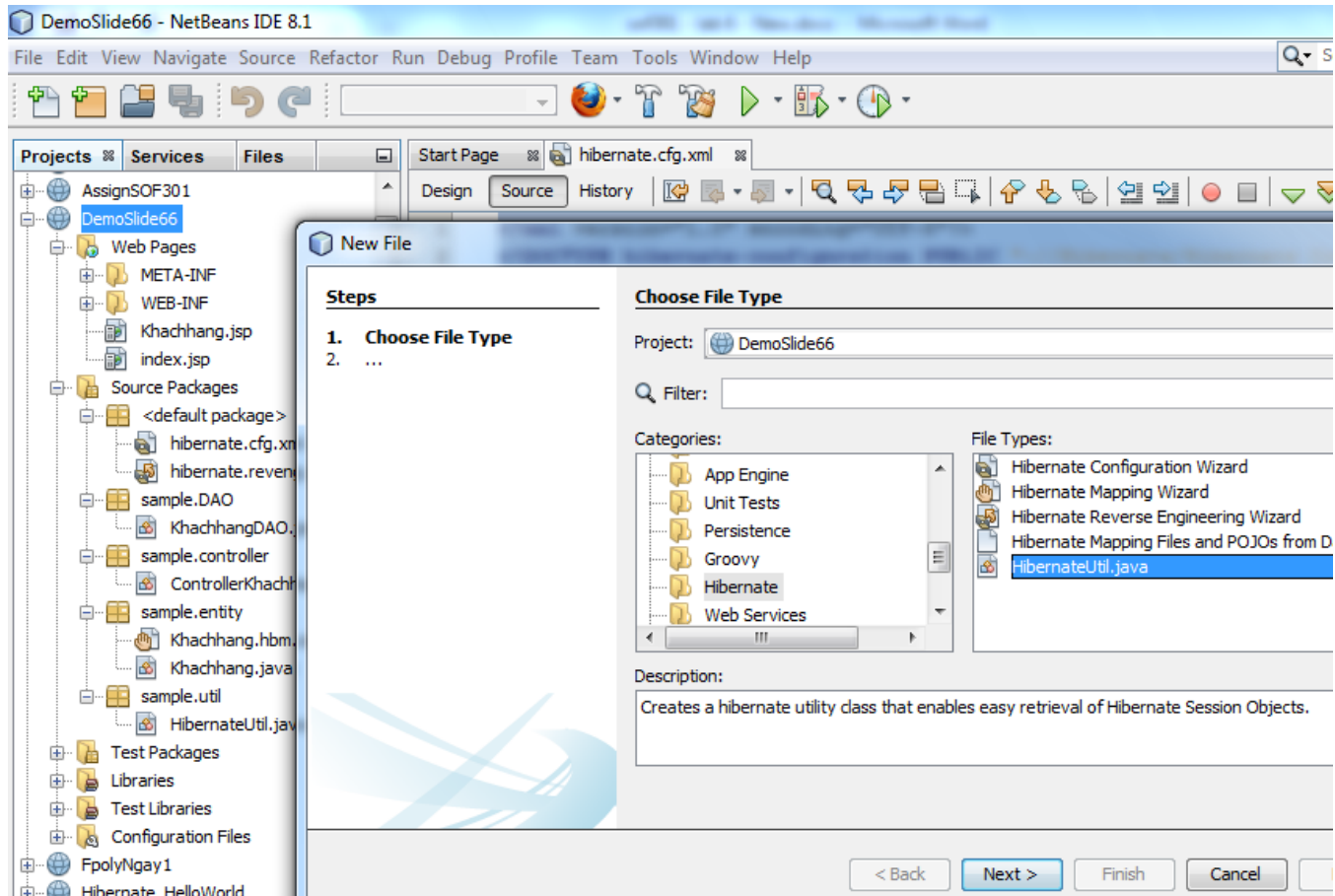
```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE hibernate-configuration PUBLIC "-//Hibernate/Hibernate Configuration DTD 3.0//EN"
"http://hibernate.sourceforge.net/hibernate-configuration-3.0.dtd">
<hibernate-configuration>
  <session-factory>
    <property
name="hibernate.connection.driver_class">com.microsoft.sqlserver.jdbc.SQLServerDriver</property>
    <property
name="hibernate.connection.url">jdbc:sqlserver://localhost:1433;databaseName=SLIDE678</property>
    <property name="hibernate.connection.username">sa</property>
    <property name="hibernate.dialect">org.hibernate.dialect.SQLServerDialect</property>
    <property name="hibernate.show_sql">true</property>
```

```

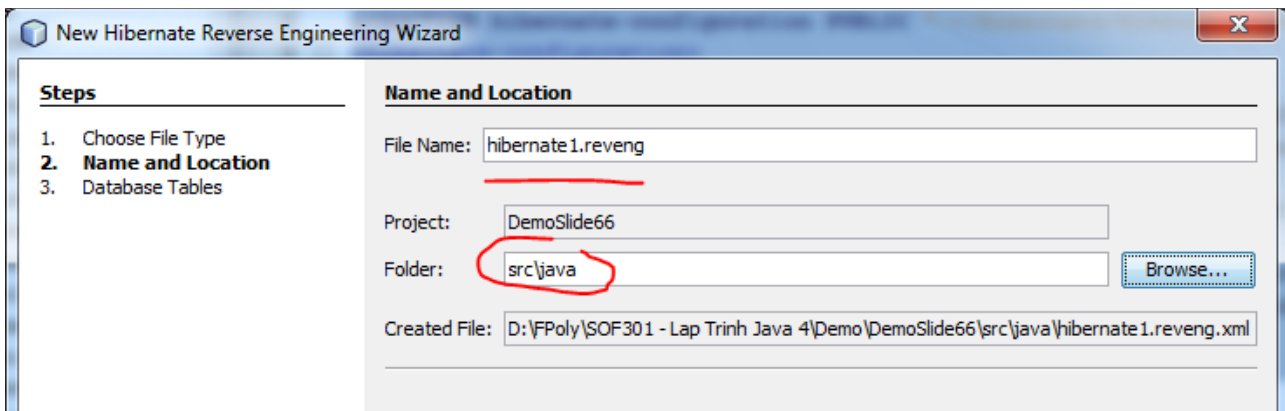
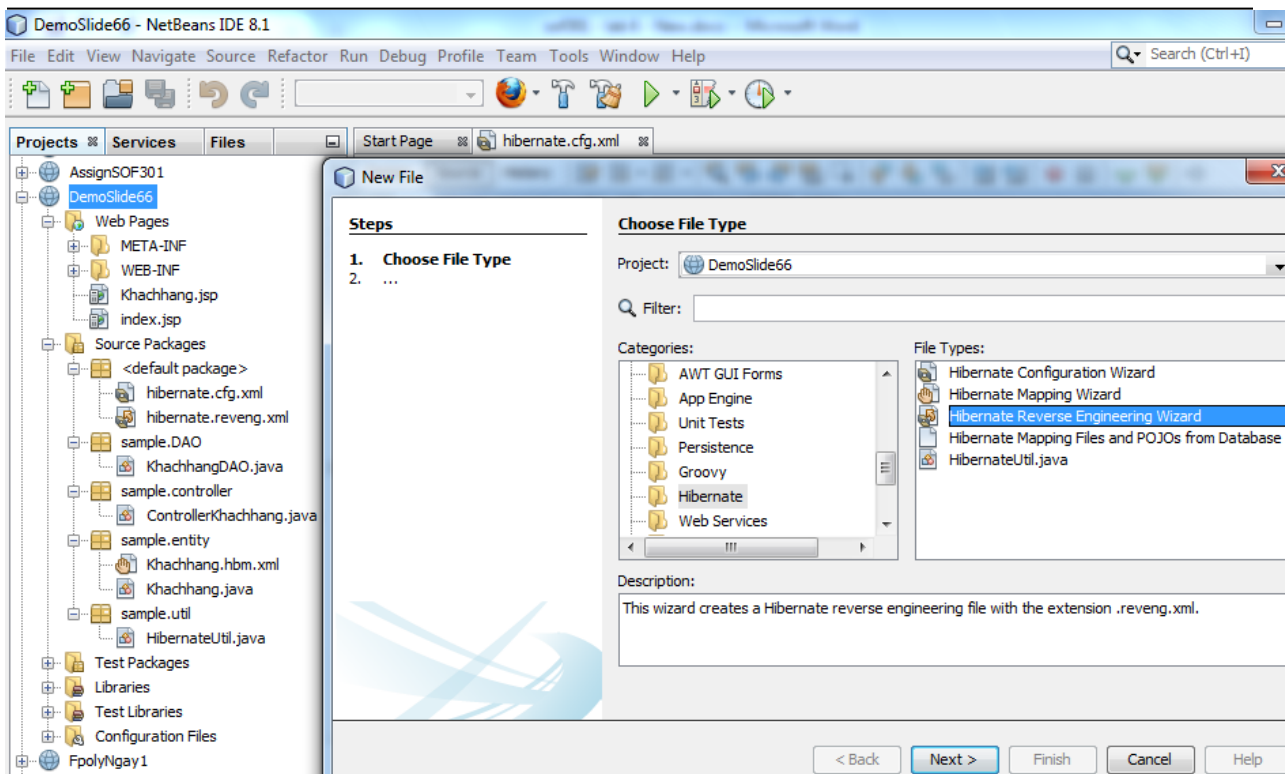
<property name="hibernate.current_session_context_class">thread</property>
</property>
name="hibernate.query.factory_class">org.hibernate.hql.internal.ast.ASTQueryTranslatorFactory</property>
  <mapping resource="sample/entity/Khachhang.hbm.xml"/>
</session-factory>
</hibernate-configuration>

```

## 5, Tạo file HibernateUtil.java trong packages sample.util

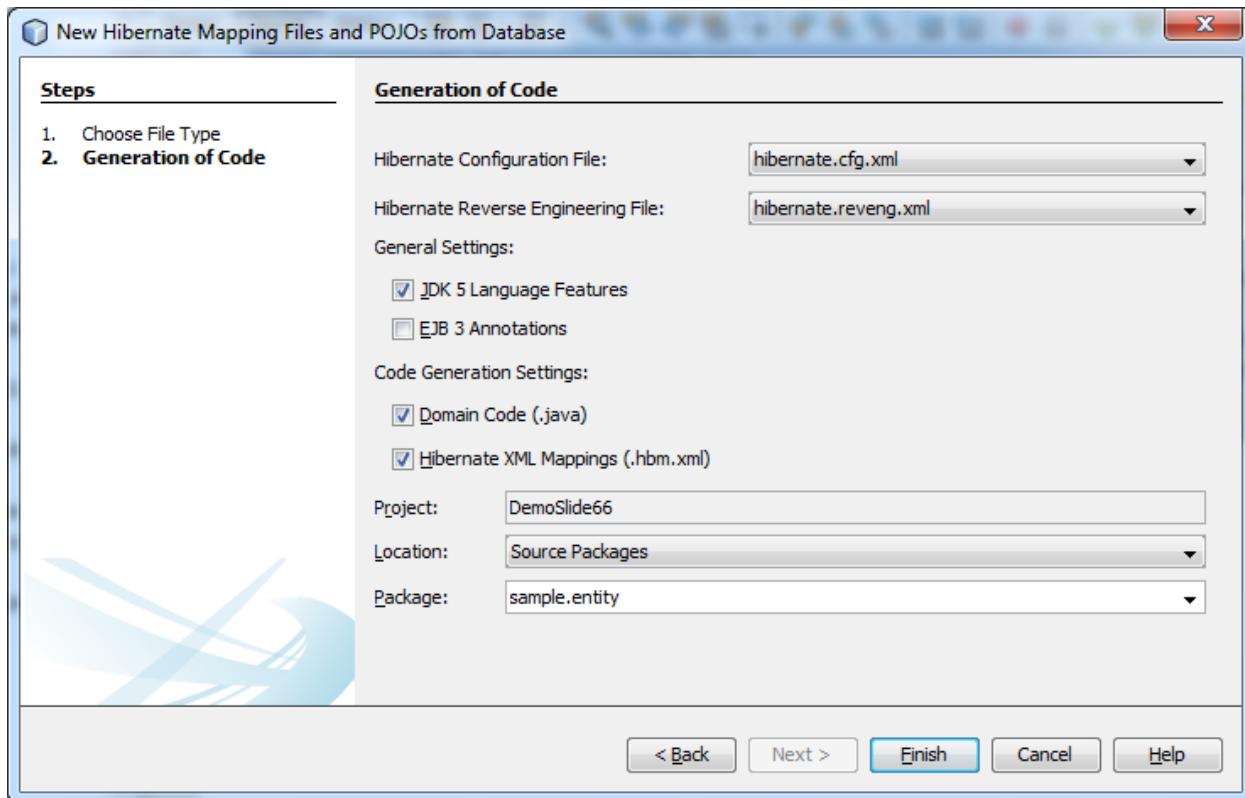
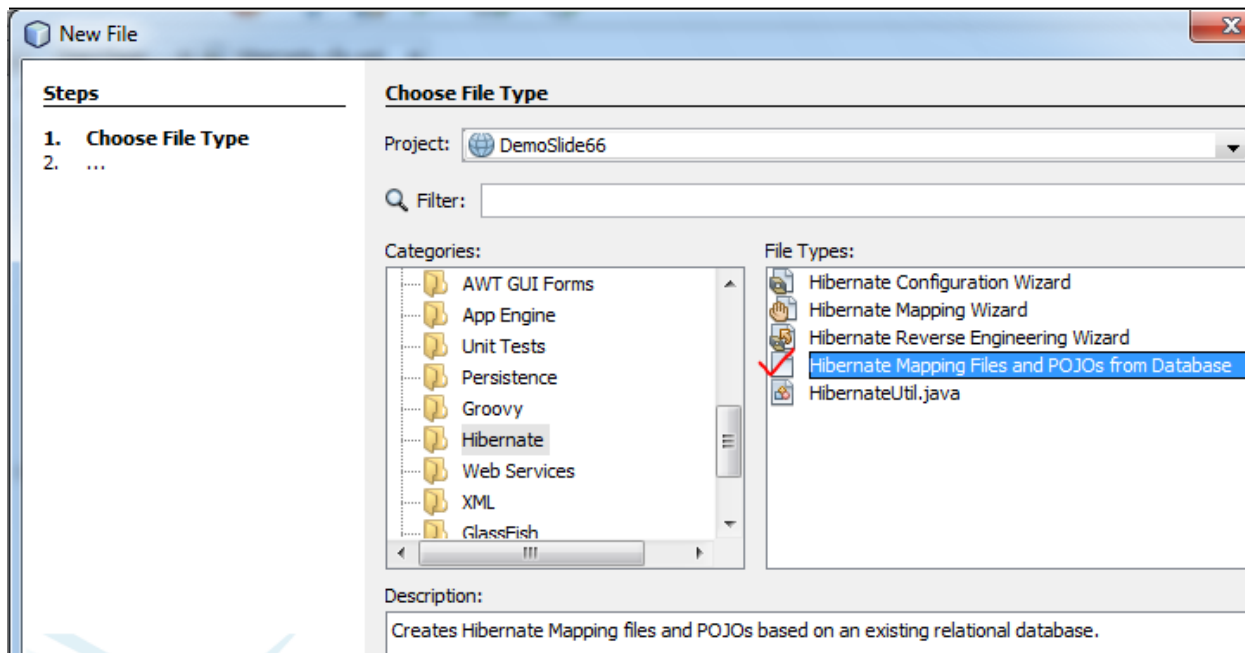


## 6, Tạo file Hibernate.reveng.xml



## 7, Tạo file Hibernate Mapping File trong packages sample.entity





## 8, Tạo class KhachhangDAO.java trong packages sample.dao

```

18 public class KhachhangDAO {
19     public static List<Khachhang> layDanhSachKH(String tenkh){
20         List<Khachhang> list = null;
21         Session session = HibernateUtil.getSessionFactory().getCurrentSession();
22         session.beginTransaction();
23         String sql="from Khachhang";
24         if(tenkh.length()>0){
25             sql += " where hoVaTen like '%" +tenkh+"%'";
26         }
27         Query query = session.createQuery(sql);
28         list = query.list();
29         return list;
30     }
31     public KhachhangDAO() {
32     }
33     public static boolean xoaKhachHang(String maKhachHang)
34     {
35         Khachhang kh = KhachhangDAO.layThongTinKH(maKhachHang);
36         if(kh == null)
37             return false;
38         Session session=HibernateUtil.getSessionFactory().getCurrentSession();
39         try {
40             session.getTransaction().begin();
41             session.delete(kh);
42             session.getTransaction().commit();
43             return true;
44         } catch (Exception e) {
45             session.getTransaction().rollback();
46             System.out.print(e);
47             return false;
48         }
49     }
50     public static Khachhang layThongTinKH(String makh){
51         Session session = HibernateUtil.getSessionFactory().openSession();
52         session.beginTransaction();
53         Khachhang kh = (Khachhang) session.get(Khachhang.class, makh);
54         session.close();
55         return kh;
56     }
57 }

```

## 9, Trang index.jsp

```

Start Page  hibernate.cfg.xml  KhachhangDAO.java  Khachhang.jsp  index.jsp
Source  History  [Icons]
6  <%@page import="sample.DAO.KhachhangDAO"%>
7  <%@page import="java.util.List"%>
8  <%@page import="sample.entity.Khachhang"%>
9  <%@page contentType="text/html" pageEncoding="UTF-8"%>
10 <!DOCTYPE html>
11 <html>
12 <head>
13 <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
14 <title>JSP Page</title>
15 </head>
16 <body>
17 <h1>Khach hang</h1>
18 <table border="1">
19 <tr>
20 <td>MaKH</td>
21 <td>HoTen</td>
22 <td>MatKhau</td>
23 <td>Email</td>
24 <td>SoDT</td>
25 </tr>
26 <%
27 List<Khachhang> list= KhachhangDAO.layDanhSachKH("");
28 for (Khachhang kh:list) {
29 out.println("<tr><td>"+kh.getMaKhachHang()+"</td><td>"+kh.getHoVaTen()+
30 "</td><td>"+kh.getMatKhau()+"</td><td>"+kh.getEmail()+"</td><td>"+
31 kh.getDienThoai()+"</td></tr>");
32 }
33 %>
34 </table>
35 </body>
36 </html>

```

## 10, Trang Khachhang.jsp

```

Start Page  hibernate.cfg.xml  KhachhangDAO.java  Khachhang.jsp  index.jsp
Source  History
16  <h1>Hello World!</h1>
17  <form action="ControllerKhachhang">
18      Ten KH: <input type="text" name="txtTenKH" value=""/>
19      <input type="submit" name="action" value="Search"/>
20  </form>
21  <table border="1">
22      <tr>
23          <td>MaKH</td>
24          <td>HoTen</td>
25          <td>MatKhau</td>
26          <td>Email</td>
27          <td>SoDI</td>
28          <td>Delete</td>
29      </tr>
30      <c:forEach var="rows" items="${listKH}">
31          <form action="ControllerKhachhang">
32              <tr>
33                  <td>${rows.maKhachHang}</td>
34                  <td>${rows.hoVaTen}</td>
35                  <td>${rows.matKhau}</td>
36                  <td>${rows.email}</td>
37                  <td>${rows.dienThoai}</td>
38                  <td>
39                      <input type="hidden" name="txtMaKH" value="${rows.maKhachHang}"/>
40                      <input type="submit" name="action" value="Delete"/>
41                  </td>
42              </tr>
43          </form>
44      </c:forEach>
45  </table>
46  </body>
47  </html>

```

## 11, Controller ControllerKhachhang.java

```

Start Page  hibernate.cfg.xml  KhachhangDAO.java  Khachhang.jsp  index.jsp  ControllerKhachhang.java
Source  History  [Icons]
34  */
35  protected void processRequest(HttpServletRequest request, HttpServletResponse response)
36      throws ServletException, IOException {
37      response.setContentType("text/html;charset=UTF-8");
38      PrintWriter out = response.getWriter();
39      try{
40          String action = request.getParameter("action");
41          if(action.equals("Search")){
42              String tenkh = request.getParameter("txtTenKH");
43              List<Khachhang> list = KhachhangDAO.layDanhSachKH(tenkh);
44              request.setAttribute("listKH", list);
45              String url="Khachhang.jsp";
46              RequestDispatcher rd = request.getRequestDispatcher(url);
47              rd.forward(request, response);
48          }else if(action.equals("Delete")){
49              String makh = request.getParameter("txtMaKH");
50              boolean daxoa = KhachhangDAO.xoaKhachHang(makh);
51              if(daxoa){
52                  String url="ControllerKhachhang?txtTenKH=&action=Search";
53                  RequestDispatcher rd = request.getRequestDispatcher(url);
54                  rd.forward(request, response);
55              }
56          }
57      }catch(Exception e){
58          e.printStackTrace();
59      }
60  }
61
62  HttpServlet methods. Click on the + sign on the left to edit the code.
100
101  }

```

## PHẦN II

### Bài 2: Phát triển thêm chức năng insert và update cho ứng dụng trên(4 điểm)