## **Assignment-Hibernate**

#### ตาราง Account

#### 1.หน้าจอ



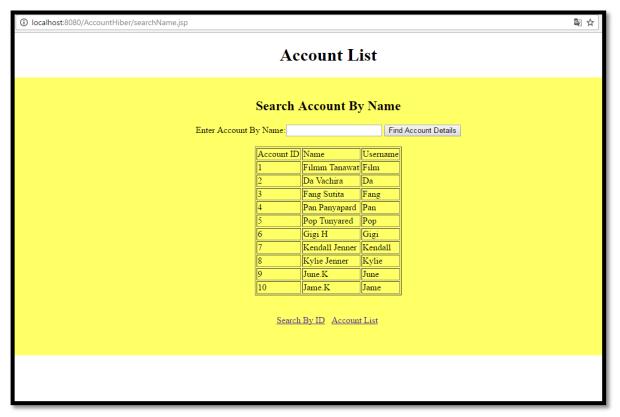
แสดงรายการข้อมูลในตาราง



ฟอร์มหน้าค้นหาด้วยID



ผลการค้นหาด้วยID



ฟอร์มหน้าค้นหาด้วยชื่อ



ผลการค้นหาด้วยชื่อ

① localhost:8080/AccountHiber/addAcc.jsp		⊠ ☆				
Train Account						
Add	New Account					
AccountID:						
Name:						
Tel:						
Email:						
Usemame:						
Password:						
	Submit					
Account Search						
Enter Account ID:	Fine	nd Account Details				
	Account List					

ฟอร์มหน้าเพิ่มข้อมูล

localhost:8080/AccountHiber/addAcc.jsp	☆					
Train Account						
Add New Account						
AccountID: 11						
Name: Somsri G						
Tel: 0904857957						
Email: Somsri@hotmail.com						
Usemame: SomSri						
Password: 2345						
Submit						
Account Search						
Enter Account ID: Find Account Details						
Account List						

# เพิ่มข้อมูล

① localhost:8080/AccountHiber/SearchController?searchValue=11&searchButton=Find+Account+Details				
Tain Accour	nt			
Search Account B	y <b>ID</b>			
Enter Account ID: 11	Find Account Details			
Account ID 11				
Name Somsri.G Username SomSri				
Password 2345				
Search By Name Account	List			

เมื่อเพิ่มข้อมูลแล้วก็สามารถค้นหาข้อมูลที่เพิ่มไว้ได้

1. โครงสร้างตาราง + ตัวอย่างข้อมูลในตาราง

#### ตาราง Account

ActId	Tel	Email	Username	Name	Password
1	0833919391	film@gmail.com	Film	Filmm Tanawat	12345
2	0811111111	Da@gmail.com	Da	Da Vachira	12345
3	082222222	Fang@gmail.com	Fang	Fang Sutita	12345
4	0833333333	Pan@gmail.com	Pan	Pan Panyapard	12345
5	084444444	Pop@gmail.com	Pop	Pop Tunyared	12345

2. ไฟล์ที่เป็น model ของตาราง (ชื่อตาราง.java)

### ไฟล์ Account.java

```
package tAccount;
// Generated Oct 30, 2016 9:57:44 PM by Hibernate Tools 4.3.1
* Account generated by hbm2java
public class Account implements java.io.Serializable {
  private int actId;
  private String username;
  private String password;
  private String name;
  private String tel;
  private String email;
  public Account() {
  }
  public Account(int actId, String username, String password, String name, String tel) {
    this.actId = actId;
    this.username = username;
    this.password = password;
    this.name = name;
    this.tel = tel;
  }
  public Account(int actId, String username, String password, String name, String tel, String email) {
```

```
this.actId = actId;
  this.username = username;
 this.password = password;
 this.name = name;
 this.tel = tel;
 this.email = email;
}
public int getActId() {
  return this.actId;
}
public void setActId(int actId) {
  this.actId = actId;
public String getUsername() {
  return this.username;
}
public void setUsername(String username) {
  this.username = username;
public String getPassword() {
  return this.password;
}
public void setPassword(String password) {
  this.password = password;
}
public String getName() {
  return this.name;
}
public void setName(String name) {
  this.name = name;
}
public String getTel() {
  return this.tel;
}
public void setTel(String tel) {
  this.tel = tel;
}
public String getEmail() {
  return this.email;
}
public void setEmail(String email) {
  this.email = email;
}
```

}

#### 3. code ไฟล์ Hibernate.cfg.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE hibernate-configuration PUBLIC "-//Hibernate/Hibernate Configuration DTD 3.0//EN"</p>
"http://hibernate.sourceforge.net/hibernate-configuration-3.0.dtd">
<hibernate-configuration>
 <session-factory>
  cyroperty name="hibernate.dialect">org.hibernate.dialect.MySQLDialect/property>
  <property name="hibernate.connection.driver_class">com.mysql.jdbc.Driver</property>
  property
name="hibernate.connection.url">jdbc:mysql://localhost:3306/trainticket?zeroDateTimeBehavior=convertTo
Null</property>
  cproperty name="hibernate.connection.username">root/property>
  cproperty name="hibernate.show_sql">true/property>
  cproperty name="hibernate.current_session_context_class">thread/property>
  property
name="hibernate.query.factory class">org.hibernate.hql.internal.classic.ClassicQueryTranslatorFactory</prop
erty>
  <mapping resource="tAccount/Payment.hbm.xml"/>
  <mapping resource="tAccount/Train.hbm.xml"/>
  <mapping resource="tAccount/Timetrain.hbm.xml"/>
  <mapping resource="tAccount/Account.hbm.xml"/>
  <mapping resource="tAccount/Ticket.hbm.xml"/>
 </session-factory>
</hibernate-configuration>
```

# 4.code ไฟล์ Servlet ทั้งหมด

### ใฟล์ AccountService.java

## ทำหน้าที่จัดการ Business Logic สร้าง Method การแสดงข้อมูล ค้นหาข้อมูลและเพิ่มข้อมูล

```
package tAccount;

import java.io.IOException;
import java.io.PrintWriter;
import java.util.List;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
```

```
import javax.servlet.http.HttpServletResponse;
import org.hibernate.Query;
import org.hibernate.Session;
import org.hibernate.Transaction;
* @author Home
public class AccountService extends HttpServlet {
 /**
  * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
  * methods.
  * @param request servlet request
  * @param response servlet response
  * @throws ServletException if a servlet-specific error occurs
  * @throws IOException if an I/O error occurs
    public List getAccount(int startID, int endID) {
    List actList = null;
    Session session = null;
    try {
      session = HibernateUtil.getSessionFactory().openSession();
      org.hibernate.Transaction tx = session.beginTransaction();
      Query q = session.createQuery("from Account where ActId between "" + startID + "" and ""
        + endID + """);
       actList = (List<Account>) q.list();
```

```
} catch (Exception e) {
    e.printStackTrace();
  }
  return actList;
}
    public Account searchAct(short search_ActID)
{
   String message=null;
  Session session=null;
 Transaction tx = null;
     Account act = null;
     try {
       session=HibernateUtil.getSessionFactory().openSession();
             tx = session.getTransaction();
             tx.begin();
             Query query = session.createQuery("from Account where ActId ="+search_ActID);
             act = (Account)query.uniqueResult();
             tx.commit();
      } catch (Exception e) {
             if (tx != null) {
                     tx.rollback();
             }
             e.printStackTrace();
      } finally {
             session.close();
      }
      return act;
}
```

```
public String addAcc(Account ActId) {
  String message = null;
  Session session = null;
  try {
    session
     = HibernateUtil.getSessionFactory().openSession();
    Transaction tx = session.getTransaction();
    tx.begin();
    session.save(ActId);
    tx.commit();
    message = "Saved Data";
    return message;
  } catch (Exception e) {
    return (e.getMessage());
  } finally {
    session.close();
  }
}
public List searchAccByName(String searchKeyword) {
List actList = null;
Session session = null;
try {
  session
    = HibernateUtil.getSessionFactory().openSession();
  org.hibernate.Transaction tx
    = session.beginTransaction();
  Query query = session.createQuery(
```

edit the code.">

```
* Handles the HTTP <code>GET</code> method.
* @param request servlet request
* @param response servlet response
* @throws ServletException if a servlet-specific error occurs
* @throws IOException if an I/O error occurs
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
  processRequest(request, response);
}
* Handles the HTTP <code>POST</code> method.
* @param request servlet request
* @param response servlet response
* @throws ServletException if a servlet-specific error occurs
* @throws IOException if an I/O error occurs
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
  processRequest(request, response);
}
```

```
* Returns a short description of the servlet.
         * @return a String containing servlet description
         @Override
         public String getServletInfo() {
            return "Short description";
         }// </editor-fold>
       }
 ไฟล์ ListController.java
ทำหน้าเป็น Controller ให้ Method getAccount ในการแสดงข้อมูลในดาต้าเบสทั้งหมด
package tAccount;
import java.io.IOException;
import java.io.PrintWriter;
import java.util.List;
import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
```

\* @author Home

```
public class ListController extends HttpServlet {
  * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
  * methods.
  * @param request servlet request
  * @param response servlet response
  * @throws ServletException if a servlet-specific error occurs
  * @throws IOException if an I/O error occurs
  */
  protected void processRequest(HttpServletRequest request, HttpServletResponse response)
      throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
            HttpSession session = request.getSession(true);
      try {
        AccountService acs = new AccountService();
        List ActList = acs.getAccount(1, 100);
      // int num = filmList.size();
        session.setAttribute("listResult", ActList);
      } catch (Exception e) {
        e.printStackTrace();
```

```
}
       RequestDispatcher rd = request.getRequestDispatcher("actlist.jsp");
       rd.forward(request, response);
    }
    }
 // <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit
the code.">
 /**
  * Handles the HTTP <code>GET</code> method.
  * @param request servlet request
  * @param response servlet response
  * @throws ServletException if a servlet-specific error occurs
  * @throws IOException if an I/O error occurs
 */
  @Override
  protected void doGet(HttpServletRequest request, HttpServletResponse response)
      throws ServletException, IOException {
    processRequest(request, response);
 }
 /**
  * Handles the HTTP <code>POST</code> method.
  * @param request servlet request
```

```
* @param response servlet response
 * @throws ServletException if a servlet-specific error occurs
 * @throws IOException if an I/O error occurs
  */
  @Override
  protected void doPost(HttpServletRequest request, HttpServletResponse response)
      throws ServletException, IOException {
    processRequest(request, response);
 }
 /**
 * Returns a short description of the servlet.
 * @return a String containing servlet description
  */
  @Override
  public String getServletInfo() {
    return "Short description";
  }// </editor-fold>
}
```

### ไฟล์ SearchController.java

ทำหน้าเป็น Controller ให้ Method searchAct ในการก้นหาข้อมูล โดยID

```
package tAccount;
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
* @author Home
*/
public class SearchController extends HttpServlet {
  /**
  * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
  * methods.
  * @param request servlet request
  * @param response servlet response
  * @throws ServletException if a servlet-specific error occurs
  * @throws IOException if an I/O error occurs
```

```
*/
  protected void processRequest(HttpServletRequest request, HttpServletResponse response)
      throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
      HttpSession session = request.getSession(true);
      try {
        short search_ActID = Short.parseShort(request.getParameter("searchValue"));
        AccountService acs = new AccountService();
        Account act obj = acs.searchAct(search ActID);
        session.setAttribute("searchResult", act_obj);
        RequestDispatcher rd = request.getRequestDispatcher("AccountShow.jsp");
        rd.forward(request, response);
      } finally {
        out.close();
      }
    }
    }
 // <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit
the code.">
```

/\*\*

```
* Handles the HTTP <code>GET</code> method.
* @param request servlet request
* @param response servlet response
* @throws ServletException if a servlet-specific error occurs
* @throws IOException if an I/O error occurs
*/
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
  processRequest(request, response);
}
/**
* Handles the HTTP <code>POST</code> method.
* @param request servlet request
* @param response servlet response
* @throws ServletException if a servlet-specific error occurs
* @throws IOException if an I/O error occurs
*/
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
  processRequest(request, response);
}
```

```
* Returns a short description of the servlet.

*
    * @return a String containing servlet description
    */
    @Override
    public String getServletInfo() {
        return "Short description";
    }// </editor-fold>
}
```

## ใฟล์ SearchNameController.java

```
ทำหน้าเป็น Controller ให้ Method searchAccByName ในการค้นหาข้อมูลด้วยชื่อ
package tAccount;
import java.io.IOException;
import java.io.PrintWriter;
import java.util.List;
import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
* @author Home
```

```
* Processes requests for both HTTP <code>GET</code> and <code>POST</code>
* methods.
* @param request servlet request
* @param response servlet response
* @throws ServletException if a servlet-specific error occurs
* @throws IOException if an I/O error occurs
*/
protected void processRequest(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
  response.setContentType("text/html;charset=UTF-8");
  try (PrintWriter out = response.getWriter()) {
  // Create a session object if it is already not created.
    HttpSession session = request.getSession(true);
    try {
      String searchValue
        = request.getParameter("searchValue");
      AccountService acs = new AccountService();
       List actList
        = acs.searchAccByName(searchValue);
      int num = actList.size();
      session.setAttribute("listResult",actList);
```

public class SearchNameController extends HttpServlet {

```
} catch (Exception e) {
        e.printStackTrace();
      }
      RequestDispatcher rd
        = request.getRequestDispatcher("searchName.jsp");
      rd.forward(request, response);
    }
 }
 // <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit
the code.">
  * Handles the HTTP <code>GET</code> method.
  * @param request servlet request
  * @param response servlet response
  * @throws ServletException if a servlet-specific error occurs
  * @throws IOException if an I/O error occurs
  */
  @Override
  protected void doGet(HttpServletRequest request, HttpServletResponse response)
      throws ServletException, IOException {
    processRequest(request, response);
  }
```

\* Handles the HTTP <code>POST</code> method.

```
* @param request servlet request
* @param response servlet response
* @throws ServletException if a servlet-specific error occurs
* @throws IOException if an I/O error occurs
*/
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
  processRequest(request, response);
}
* Returns a short description of the servlet.
* @return a String containing servlet description
*/
@Override
public String getServletInfo() {
  return "Short description";
}// </editor-fold>
```

}

### ไฟล์ AddAccController.java

### ทำหน้าเป็น Controller ให้ Method addAcc ในการเพิ่มข้อมูลในคาต้าเบส

```
package tAccount;
import java.io.IOException;
import java.io.PrintWriter;
import java.util.Date;
import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
/**
* @author Home
*/
public class AddAccController extends HttpServlet {
  /**
   * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
  * methods.
  * @param request servlet request
  * @param response servlet response
   * @throws ServletException if a servlet-specific error occurs
  * @throws IOException if an I/O error occurs
  */
  protected void processRequest(HttpServletRequest request, HttpServletResponse response)
      throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
      out.println("add new account");
      HttpSession session = request.getSession(true);
      int ActId = Integer.parseInt(request.getParameter("ActId"));
       String Username = request.getParameter("Username");
       String Password = request.getParameter("Password");
       String Name = request.getParameter("Name");
       String Tel = request.getParameter("Tel");
       String Email = request.getParameter("Email");
      Date now = new Date();
      Account ac = new Account(ActId, Username, Password, Name, Tel, Email);
```

```
//ac.setFirstName(firstname);
      //ac.setLastName(lastname);
      AccountService acs = new AccountService();
      String resultMessage = acs.addAcc(ac);
      RequestDispatcher rd
           = request.getRequestDispatcher("AccountShow.jsp?message=" + resultMessage
      );
     request.setAttribute("searchResult", null);
      rd.forward(request, response);
    }
  }
  // <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to
edit the code.">
  /**
  * Handles the HTTP <code>GET</code> method.
  * @param request servlet request
  * @param response servlet response
  * @throws ServletException if a servlet-specific error occurs
  * @throws IOException if an I/O error occurs
  */
  @Override
  protected void doGet(HttpServletRequest request, HttpServletResponse response)
      throws ServletException, IOException {
    processRequest(request, response);
  }
  /**
  * Handles the HTTP <code>POST</code> method.
  * @param request servlet request
  * @param response servlet response
  * @throws ServletException if a servlet-specific error occurs
  * @throws IOException if an I/O error occurs
  */
  @Override
  protected void doPost(HttpServletRequest request, HttpServletResponse response)
      throws ServletException, IOException {
    processRequest(request, response);
  }
   * Returns a short description of the servlet.
  * @return a String containing servlet description
   */
  @Override
```

```
public String getServletInfo() {
    return "Short description";
  }// </editor-fold>
}
6. code ไฟล์ JSP ทั้งหมด
         ไฟล์ actlist.jsp
         ทำหน้าที่เป็น View หรือหน้าฟอร์มที่ใช้แสดงผลของ ListController
       <%@page import="java.util.List"%>
       <%@page import="tAccount.Account"%>
       <%@page contentType="text/html" pageEncoding="UTF-8"%>
       <!DOCTYPE html>
       <html>
         <head>
           <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
           <title>JSP Page</title>
         </head>
         <body>
         <center>
           <h1>Account List</h1>
           <div style="background-color:#CC99FF; width:100%;"><br>
           <%
             try {
               List<Account> actList = (List<Account>) session.getAttribute("listResult");
               if (actList != null) {
                  // out.println("not null");
```

```
%>
Account ID
    Name
    Username
    Password
    Email
     Tel
  <%
            for (Account acc : actList) {
  %>
  <% out.println(acc.getActId()); %>
    <% out.println(acc.getName()); %>
    <% out.println(acc.getUsername()); %>
    <% out.println(acc.getPassword()); %>
    <% out.println(acc.getEmail()); %>
    <% out.println(acc.getTel()); %>
  <% } %>
 <%
```

// out.println(filmList.size());

```
} else {
          out.println("return null");
        }
      } catch (Exception e) {
        e.printStackTrace();
        out.println("error");
      }
    %>
    <br><br><
    <a href="addAcc.jsp">Add new Account</a>&nbsp;&nbsp;
    <a href="AccountShow.jsp">Search By ID</a>&nbsp;&nbsp;
    <a href="searchName.jsp">Search By Name</a>
    <br><br>>
  </center>
  </body>
</html>
```

### ไฟล์ AccountShow.jsp

ทำหน้าที่เป็น View หรือหน้าฟอร์มที่ใช้แสดงผลของ SearchController.java (การค้นหาด้วยID)

```
</head>
<body>
<center>
 <h1>Tain Account </h1>
 <div style="background-color: #33FFFF; width:100%;">
   <br />
   <h2>Search Account By ID</h2>
   <form name="searchForm" action="SearchController">
     Enter Account ID:<input type="text" name="searchValue" value="" >
     <input type="submit" value="Find Account Details" name="searchButton" /><br>
   </form>
   <%
     try {
   // Create a session object if it is already not created.
       Account acc = (Account) session.getAttribute("searchResult");
       if (acc != null) {
   %>
   Account ID
         <% out.println(acc.getActId()); %>
       Name
         <% out.println(acc.getName()); %>
```

```
Username
         <% out.println(acc.getUsername()); %>
        Password
         <% out.println(acc.getPassword()); %>
        <%
        }
      } catch (Exception e) {
        out.println(e.getMessage());
      }
     %>
     <br><br>
     <a href="searchName.jsp">Search By Name</a>&nbsp;&nbsp;
     <a href="ListController">Account List</a> <br><br>
     <br><br>
 </center>
 </body>
</html>
```

### ไฟล์ SearchName.jsp

ทำหน้าที่เป็น View หรือหน้าฟอร์มที่ใช้แสดงผลของ SearchNameController.java (การค้นหาด้วยชื่อ)

```
<@page import="tAccount.Account"%>
<%@page import="java.util.List"%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <title>JSP Page</title>
  </head>
  <body>
  <center>
    <h1>Account List</h1>
    <div style="background-color: #FFFF66; width:100%;">
      <br />
      <h2>Search Account By Name</h2>
      <form name="searchForm" action="SearchNameController">
        Enter Account By Name:<input type="text" name="searchValue" value="">
        <input type="submit" value="Find Account Details" name="searchButton" /><br>
      </form>
    <%
      try {
        List<Account> actList = (List<Account>) session.getAttribute("listResult");
        if (actList != null) {
       //out.println("not null");
```

```
//out.println(actList.size());
%>
Account ID
     Name
     Username
    <% for (Account acc
     : actList) {
  %>
    <% out.println(acc.getActId()); %>
      <% out.println(acc.getName()); %>
     <% out.println(acc.getUsername()); %>
    <% } %>
  <%
   } else {
     out.println("return null");
    }
  } catch (Exception e) {
    e.printStackTrace();
    out.println("error");
```

```
}

%>

<br>
<br>
<a href="AccountShow.jsp">Search By ID</a>&nbsp;&nbsp;

<a href="ListController">Account List</a> <br>
<br>
<br>
<br>
<br>
</center>
</body>
</html>
```

### ไฟล์ addAcc.jsp

ทำหน้าที่เป็น View หรือหน้าฟอร์มที่ใช้แสดงผลของ AddAccController.java (การเพิ่มข้อมูล)

```
<form name="formAddAcc" action="AddAccController">
         <h2>Add New Account </h2>
     AccountID: <input type="text" name="ActId"
            value="" /><br><br>
     Name:       <input type="text" name="Name"
          value="" /><br><br>
     Tel:          <input type="text"
name="Tel"
          value=""/><br><br>
     Email:      <input type="text" name="Email"
           value=""/><br><br>
     Username: <input type="text" name="Username"
            value=""/><br><br>
     Password: <input type="text" name="Password"
            value=""/><br><br>
     <input type="submit" value="Submit"
        name="AddAcc" />
   </form>
   <br><br>>
     </form>
     <h2>Account Search </h2>
     <form name="searchForm" action="SearchController">
      Enter Account ID:<input type="text" name="searchValue" value="" >
      <input type="submit" value="Find Account Details" name="searchButton" /><br>
     <%
```

try {

```
// Create a session object if it is already not created.
          Account acc = (Account) session.getAttribute("searchResult");
          if (acc != null) {
%>
      <%
           }
        } catch (Exception e) {
          out.println(e.getMessage());
        }
    %>
      <br><br>>
    <a href="ListController">Account List</a> <br>
      <br><br>
      </center>
  </body>
</html>
```