

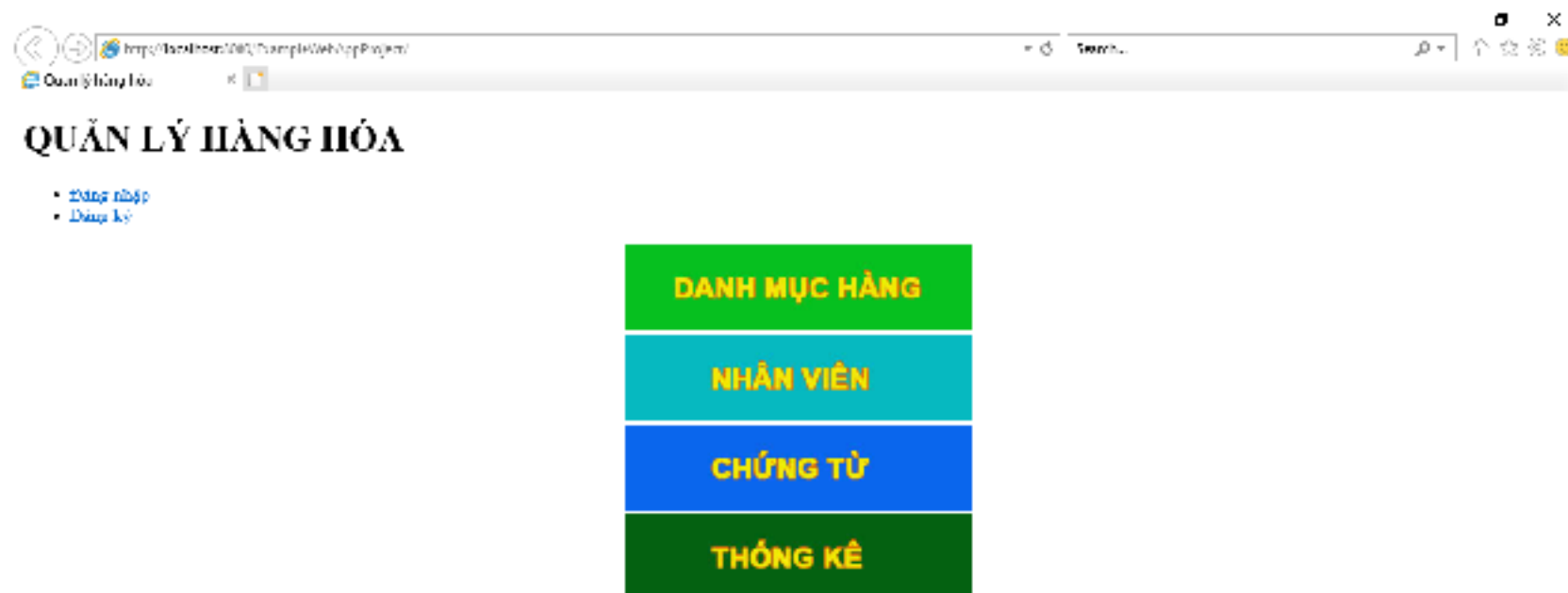
BÀI THỰC HÀNH TUẦN 2

MỤC TIÊU:

- Lập trình được với mô hình Servlet / JSP
- Xây dựng được ứng dụng Java EE quản lý hàng hóa

Câu 1. Xây dựng các trang JSP

Trang Index.jsp



Hướng dẫn:

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <title>Quản lý hàng hóa</title>
  </head>
  <body>

    <div class="container">
```

```
<header>
  <h1>QUẢN LÝ HÀNG HÓA</h1>
</header>
<nav>
  <h4>${username}</h4>
  <ul>
    <li><a href="Login.jsp">Đăng nhập</a></li>
    <li><a href="Signup.jsp">Đăng ký</a></li>
  </ul>
</nav>
<section>
  <div class="level1">
    <center><a href="#"></a></center>
  </div>
  <div class="level2">
    <center><a href="#"></a></center>
  </div>
  <div class="vp">
    <center><a href="#"></a></center>
  </div>
  <div class="mos">
    <center><a href="#"></a></center>
  </div>
</section>
</div>
</body>
</html>
```

Xây dựng Trang Đăng Nhập**Trang Login.jsp**

Hướng dẫn:

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <title>Đăng nhập</title>
  </head>
  <body>
    <center>
      <h1>DĂNG NHẬP</h1>
      <form method="POST" action="LoginServlet">
        <table>
          <tr>
            <td>Tên đăng nhập</td>
```

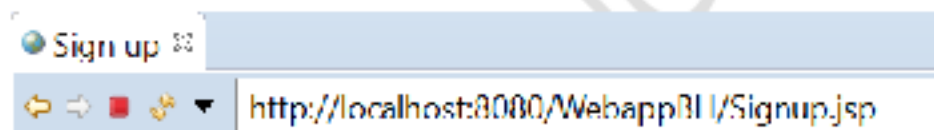
```

        <td><input type="text" name="username"/></td>
    </tr>
    <tr>
        <td>Mật khẩu</td>
        <td><input type="password" name="password"/></td>
    </tr>
    <tr>
        <td colspan="2"><button>Đăng nhập</button><input type="reset" value="Nhập lại"></td>
    </tr>
</table>
</form>
</center>
</body>
</html>

```

Xây dựng Trang Đăng Ký

Trang Signup.jsp



Sign Up

User Name	<input type="text"/>
Gender	<input type="text"/>
PassWord	<input type="password"/>
<input type="button" value="Submit"/>	<input type="button" value="Reset"/>

Thông tin đăng ký của bạn

Hướng dẫn

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
```

```
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <title>Sign In</title>
  </head>
  <body>
    <h1>Sign In</h1>
    <form method="POST" action="SignUpServlet">
      <table>
        <tr>
          <td>User Name</td>
          <td><input type="text" name="username"/></td>
        </tr>
        <tr>
          <td>Gender</td>
          <td><input type="text" name="gender"/></td>
        </tr>
        <tr>
          <td>PassWord</td>
          <td><input type="password" name="password"/></td>
        </tr>
        <tr>
          <td colspan="2"><button>Submit</button><input type="reset"></td>
        </tr>
      </table>
    </form>
  </div>
```

```

<h4>Thông tin đăng ký của bạn</h4>
<h5>${username}</h5>

</div>
</body>
</html>

```

Câu 2: XỬ LÝ ĐĂNG KÝ, ĐĂNG NHẬP BẰNG SERVLET

- Thiết kế cơ sở dữ liệu Quanlybanhang trên MySQL có 2 table:
USER_ACCOUNT

Field	Data Type	Length	Index
Username	Varchar	30	Primary key
Gender	Varchar	5	
Password	Varchar	15	

PRODUCT

Field	Data Type	Length	Index
Id	Varchar	10	Primary key
Name	Varchar	50	
Type	Varchar	20	
Price	Int	10	
Image	Varchar	70	

- Tạo package Servlet và tạo các file Java sau:

UserAccount.java

```

package Servlets;

public class UserAccount {
    public static final String GENDER_MALE="M";
    public static final String GENDER_FEMALE="F";

    private String userName;
    private String gender;
    private String password;

    public UserAccount(){

```

```
}  
public UserAccount(String username, String gender, String password){  
    this.userName=username;  
    this.gender=gender;  
    this.password=password;  
}  
public UserAccount(String username, String password){  
    this.userName=username;  
    this.password=password;  
}  
public UserAccount(UserAccount us){  
    this.userName=us.userName;  
    this.gender=us.gender;  
    this.password=us.password;  
}  
  
public String getUserName() {  
    return userName;  
}  
  
public String getGender() {  
    return gender;  
}  
  
public String getPassword() {  
    return password;  
}  
  
public void setUserName(String userName) {  
    this.userName = userName;  
}  
  
public void setGender(String gender) {  
    this.gender = gender;  
}  
  
public void setPassword(String password) {  
    this.password = password;  
}  
}
```

File MySQLConntUtils.java

```
package Servlets;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;

public class MySQLConntUtils {

    public static Connection getMySQLConnection() throws ClassNotFoundException,
    SQLException{
        String hostname="localhost";
        String dbName=" Quanlybanhang";
        String username="root";
        String password="";
        return getMySQLConnection(hostname,dbName,username, password);
    }

    private static Connection getMySQLConnection(String hostname, String dbName,
    String username, String password)
        throws ClassNotFoundException, SQLException {
        Class.forName("com.mysql.jdbc.Driver");
        String connectionURL="jdbc:mysql://" +hostname+":3306/" +dbName;
        Connection conn=DriverManager.getConnection(connectionURL, username,
        password);
        return conn;
    }

}
```

File SignupServlet.java

```
package Servlets;

import static Servlets.DBUtils.insertUserAccount;
import java.io.IOException;
```



```

import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

@WebServlet(name = "SignupServlet", urlPatterns = {"/SignupServlet"})
public class SignInServlet extends HttpServlet {

    @Override
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        Connection conn = null; //connect SQL
        try {
            conn = MySQLConntUtils.getMySQLConnection();
            //xử lý tham số từ form
            String username=request.getParameter("username");
            String gender=request.getParameter("gender");
            String password=request.getParameter("password");

            UserAccount usr=new UserAccount(username, gender,password); //tạo đối tượng
            user
            //thêm đối tượng vào CSDL
            DBUtils.insertUserAccount(conn, usr);
            request.setAttribute("username", username);
            request.getRequestDispatcher("/Signup.jsp").forward(request, response);
        } catch (ClassNotFoundException ex) {
            Logger.getLogger(SignInServlet.class.getName()).log(Level.SEVERE, null, ex);
        } catch (SQLException ex) {
            Logger.getLogger(SignInServlet.class.getName()).log(Level.SEVERE, null, ex);
        } finally{
            if(conn != null){
                try {
                    conn.close();
                } catch (SQLException ex) {
                    Logger.getLogger(SignInServlet.class.getName()).log(Level.SEVERE, null,
ex);

```

```
    }  
    }  
    }  
}
```

File DBUtils.java

```
import java.sql.Connection;  
import java.sql.PreparedStatement;  
import java.sql.ResultSet;  
import java.sql.SQLException;  
import java.util.ArrayList;  
import java.util.List;  
  
public class DBUtils {  
    public static UserAccount findUser(Connection conn, //  
        String userName, String password) throws SQLException {  
  
        String sql = "Select a.User_Name, a.Password, a.Gender from User_Account a "  
//  
        + " where a.User_Name = ? and a.password= ?";  
  
        PreparedStatement pstmt = conn.prepareStatement(sql);  
        pstmt.setString(1, userName);  
        pstmt.setString(2, password);  
        ResultSet rs = pstmt.executeQuery();  
  
        if (rs.next()) {
```

```
        String gender = rs.getString("Gender");
        UserAccount user = new UserAccount();
        user.setUserName(userName);
        user.setPassword(password);
        user.setGender(gender);
        return user;
    }
    return null;
}

public static UserAccount findUser(Connection conn, String userName) throws
SQLException {

    String sql = "Select a.User_Name, a.Password, a.Gender from User_Account a "//
        + " where a.User_Name = ? ";

    PreparedStatement pstmt = conn.prepareStatement(sql);
    pstmt.setString(1, userName);

    ResultSet rs = pstmt.executeQuery();

    if (rs.next()) {
        String password = rs.getString("Password");
        String gender = rs.getString("Gender");
        UserAccount user = new UserAccount();
        user.setUserName(userName);
        user.setPassword(password);
        user.setGender(gender);
    }
}
```

```
        return user;
    }
    return null;
}

public static void insertUserAccount(Connection conn, UserAccount user) throws
SQLException {
    String sql = "Insert into UserAccount(Username, Gender, Password) values
(?,?,?)";

    PreparedStatement pstmt = conn.prepareStatement(sql);

    pstmt.setString(1, user.getUserName());
    pstmt.setString(2, user.getGender());
    pstmt.setString(3, user.getPassword());

    pstmt.executeUpdate();
}
}
```

File LoginServlet

```
package Servlets;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;

import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
```

```
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import model.MySQLConntUtils;
import model.UserAccount;
import model.DBUtils;

/**
 * Servlet implementation class LoginServlet
 */
@WebServlet("/LoginServlet")
public class LoginServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;

    /**
     * @see HttpServlet#HttpServlet()
     */
    public LoginServlet() {
        super();
        // TODO Auto-generated constructor stub
    }

    /**
     * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
     */
    protected void doGet(HttpServletRequest request,
        HttpServletResponse response) throws
        ServletException, IOException {
        // TODO Auto-generated method stub
        response.getWriter().append("Served at:
") .append(request.getContextPath());
    }

    /**
     * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
     */
}
```

```
protected void doPost(HttpServletRequest request,
HttpServletRequest response) throws
ServletException, IOException {
    // TODO Auto-generated method stub
    Connection conn;
    try {
        conn =
MySQLConntUtils.getMySQLConnection();
        //xử lý tham số từ form
        String
username=request.getParameter("username");
        String
password=request.getParameter("password");

        UserAccount usr=new
UserAccount(username,password); //tạo đối tượng user
với username và password
        //thêm đối tượng vào CSDL

        UserAccount u=DBUtils.findUser(conn,
usr.getUserName(),usr.getPassword());

        if (u != null)
        {
            UserAccount user=new UserAccount(u);
            request.setAttribute("username",
"Chào bạn: "+ user.getUserName());
request.getRequestDispatcher("/index.jsp").forward(r
equest, response);
        }
        else
        {

//request.getRequestDispatcher("/LogIn.jsp").forward
(request, response);

response.setContentType("text/html;charset=UTF-8");
        try (PrintWriter out =
response.getWriter()) {
```



```
        /* TODO output your page here.
        You may use following sample code. */
        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Thông
báo</title>");

        out.println("</head>");
        out.println("<body>");
        out.println("<h1>Thông tin đăng
nhập không chính xác <a href=LogIn.jsp>Nhập
lại</a></h1>");

        out.println("</body>");
        out.println("</html>");
    }
}

} catch (ClassNotFoundException ex) {
    Logger.getLogger(LoginServlet.class.getName()).log(L
evel.SEVERE, null, ex);
} catch (SQLException ex) {
    Logger.getLogger(LoginServlet.class.getName()).log(L
evel.SEVERE, null, ex);
}
}
```