**Configure Hibernate using Annotations in Eclipse IDE**

**ListProducts.java**

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.ServletConfig;

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 javax.transaction.\*;

import javax.xml.bind.\*;

import java.io.Serializable;

import java.util.List;

import org.hibernate.Session;

import org.hibernate.SessionFactory;

import org.hibernate.Transaction;

import org.hibernate.cfg.Configuration;

import com.ecommerce.EProduct;

import com.ecommerce.HibernateUtil;

/\*\*

\* Servlet implementation class ListProducts

\*/

@WebServlet("/*list*")

public class ListProducts extends HttpServlet {

private static final long *serialVersionUID* = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public ListProducts() {

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

try {

SessionFactory factory = HibernateUtil.*getSessionFactory*();

Session session = factory.openSession();

// using HQL

List<EProduct> list = session.createQuery("from EProduct").list();

session.close();

PrintWriter out = response.getWriter();

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

out.println("<b>Product Listing</b><br>");

for (EProduct p : list) {

out.println("ID: " + String.*valueOf*(p.getID()) + ", Name: " + p.getName() + ", Price: "

+ String.*valueOf*(p.getPrice()) + ", Date Added: " + p.getDateAdded().toString() + "<br>");

}

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

} catch (Exception ex) {

throw ex;

}

}

/\*\*

\* @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse

\* response)

\*/

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

// TODO Auto-generated method stub

doGet(request, response);

}

}

**EProduct.java**

package com.ecommerce;

import java.math.BigDecimal;

import java.util.Date;

import javax.persistence.Column;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.Id;

import javax.persistence.Table;

@Entity

@Table(name= "eproduct")

public class EProduct {

@Id @GeneratedValue

@Column(name = "ID")

private long ID;

@Column(name = "name")

private String name;

@Column(name = "price")

private BigDecimal price;

@Column(name = "date\_added")

private Date dateAdded;

public long getID() {return this.ID; }

public String getName() { return this.name;}

public BigDecimal getPrice() { return this.price;}

public Date getDateAdded() { return this.dateAdded;}

public void setID(long id) { this.ID = id;}

public void setName(String name) { this.name = name;}

public void setPrice(BigDecimal price) { this.price = price;}

public void setDateAdded(Date date) { this.dateAdded = date;}

}

**HibernateUtil.java**

package com.ecommerce;

import org.hibernate.SessionFactory;

import org.hibernate.boot.Metadata;

import org.hibernate.boot.MetadataSources;

import org.hibernate.boot.registry.StandardServiceRegistry;

import org.hibernate.boot.registry.StandardServiceRegistryBuilder;

public class HibernateUtil {

private static final SessionFactory *sessionFactory*;

static {

try {

StandardServiceRegistry standardRegistry = new StandardServiceRegistryBuilder()

.configure("hibernate.cfg.xml") // No need to specify "hibernate.cfg.xml"

.build();

Metadata metaData = new MetadataSources(standardRegistry)

.addAnnotatedClass(EProduct.class)

.getMetadataBuilder()

.build();

*sessionFactory* = metaData.getSessionFactoryBuilder().build();

} catch (Throwable th) {

throw new ExceptionInInitializerError(th);

}

}

public static SessionFactory getSessionFactory() {

return *sessionFactory*;

}

}

**Eproduct.hbm.xml**

**hibernate.cfg.xml**

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<!DOCTYPE hibernate-configuration PUBLIC

"-//Hibernate/Hibernate Configuration DTD 3.0//EN"

"http://www.hibernate.org/dtd/hibernate-configuration-3.0.dtd">

<hibernate-configuration>

<session-factory>

<property name=*"hibernate.connection.driver\_class"*>com.mysql.jdbc.Driver</property>

<property name=*"hibernate.connection.password"*>root</property>

<property name=*"hibernate.connection.url"*>jdbc:mysql://localhost:3306/ecommerce</property>

<property name=*"hibernate.connection.username"*>root</property>

<property name=*"hibernate.dialect"*>org.hibernate.dialect.MySQLDialect</property>

</session-factory>

</hibernate-configuration>

**index.html**

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<a href=*"list"*>List Products</a><br>

</body>

</html>

**OUTPUT**

