Assisted project 2: Configure Hibernate using XML in Eclipse IDE.

Index.html:
```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>HIBERNATE2</title>
</head>
<body>
<a href="ListProducts">List Product</a><br>
</body>
</html>
```

Hibernate.cfg.xml:

```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>
   <!-- Database connection settings -->
   <property name="connection.driver_class">com.mysql.jdbc.Driver</property>
   <property name="connection.url">jdbc:mysql://localhost:3306/ecommerce</property>
   <property name="connection.username">root</property>
   <property name="connection.password">Vinny@12345</property>
<mapping  resource="com/ecommerce/Eproduct.hbm.xml"/>
 </session-factory>
```

</hibernate-configuration>

Eproduct.hbm.xml:
```xml
<?xml version="1.0"?>
<!DOCTYPE hibernate-mapping PUBLIC
"-//Hibernate/Hibernate Mapping DTD 3.0//EN"
"http://www.hibernate.org/dtd/hibernate-mapping-3.0.dtd">
<hibernate-mapping package="com.ecommerce">
  <class name="EProduct" table="eproduct">
    <id name="ID" column="ID">
      <generator class="increment"/>
    </id>
```

```xml
        <property name="name" type="string" column="NAME"/>
        <property name="price" type="big_decimal" column="PRICE"/>
        <property name="dateAdded" type="timestamp" column="DATE_ADDED"/>

    </class>
</hibernate-mapping>
```

HibernateUtil.java:
```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").build();
            Metadata metaData = new
MetadataSources(standardRegistry).getMetadataBuilder().build();
            sessionFactory = metaData.getSessionFactoryBuilder().build();
        } catch (Throwable th) {
            throw new ExceptionInInitializerError(th);
        }
    }

    public static SessionFactory getSessionFactory() {
        return sessionFactory;
    }
}
```
EProduct.java:
```java
package com.ecommerce;

import java.math.BigDecimal;
import java.util.Date;
```

```java
public class EProduct {
    private long ID;
    private String name;
    private BigDecimal price;
    private Date dateAdded;

    public EProduct() {

    }
    public EProduct(long id, String name, BigDecimal price, Date dateAdded) {
        this.ID = id;
        this.name = name;
        this.price = price;
        this.dateAdded = 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;}


}
```

ListProducts.java:

```java
import java.io.IOException;
import java.io.PrintWriter;
import java.util.List;

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 org.hibernate.Session;
import org.hibernate.SessionFactory;
```

```java
import com.ecommerce.EProduct;
import com.ecommerce.HibernateUtil;

/**
 * Servlet implementation class ListProducts
 */
@WebServlet("/ListProducts")
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)
     */
    @SuppressWarnings("deprecation")
    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
            @SuppressWarnings("unchecked")
            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>");
```

```java
			}

		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);
	}

}
```