Hibernate Configuration Using XML in Eclipse.

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>
    <!-- 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">Mgokulakrishnan@12</property>
  </session-factory>
</hibernate-configuration>
```

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").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;
        }
}
```

Index.html:

```
<!DOCTYPE html>
<html>
```

```
<head>
<meta charset="UTF-8">
<title>Hibernate With XML</title>
</head>
<body>
<a href="list">List Products</a><br>

</body>
</html>
```

EProduct.java:

```
package com.ecommerce;

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

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;}


}
```

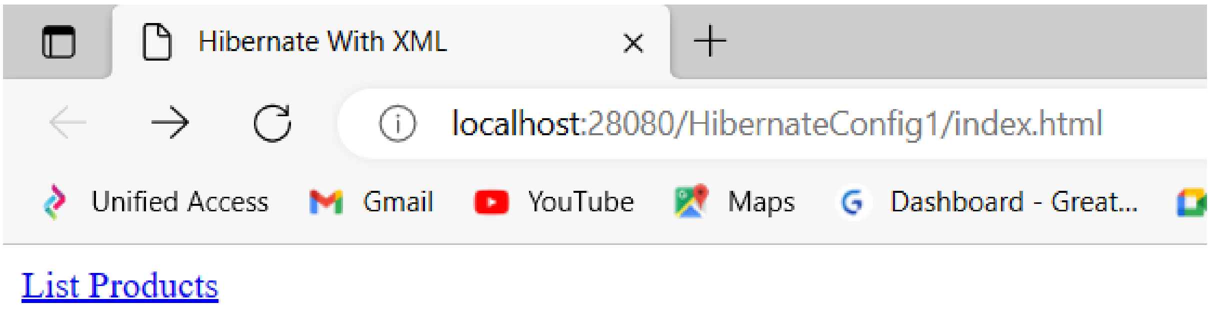
ListProduct.java:

```
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 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("/ListProducts")
public class ListProduct extends HttpServlet {
        private static final long serialVersionUID = 1L;



    /**
* @see HttpServlet#HttpServlet()
*/
    public ListProduct() {
        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) {
```

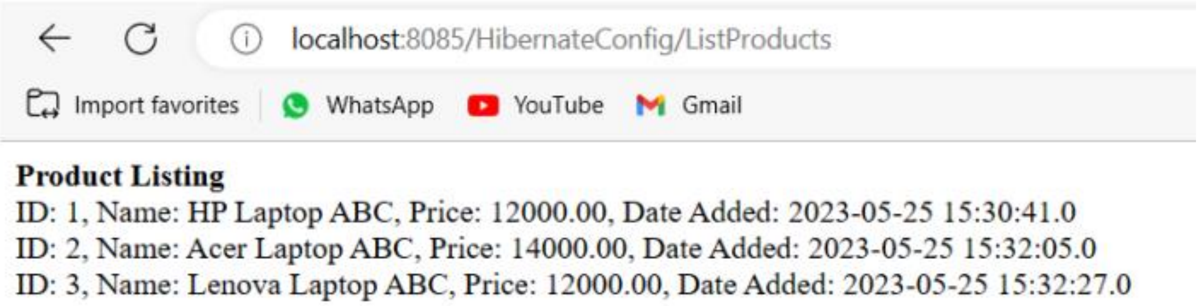
```
                                throw ex;
                        }

                }

                /**
                 * @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.hbm.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>
        <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>
```



List Products



```
Product Listing
ID: 1, Name: HP Laptop ABC, Price: 12000.00, Date Added: 2023-05-25 15:30:41.0
ID: 2, Name: Acer Laptop ABC, Price: 14000.00, Date Added: 2023-05-25 15:32:05.0
ID: 3, Name: Lenova Laptop ABC, Price: 12000.00, Date Added: 2023-05-25 15:32:27.0
```