

## Configure Hibernate using Annotations in Eclipse IDE

Com.ecommerce:

```
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 ID;
    }

    public void setID(long iD) {
        ID = iD;
    }

    public String getName() {
        return name;
    }

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

    public BigDecimal getPrice() {
        return price;
    }

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

    public Date getDateAdded() {
        return dateAdded;
    }

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

}
```

HibernateQuerydemo:

```
package practice;

import java.io.*;

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

import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.*;

import org.hibernate.*;

import com.ecommerce.Eproduct;

@WebServlet("/query-demo")
public class HibernateQueryDemo extends HttpServlet {

    protected void doGet(HttpServletRequest request, HttpServletResponse
response)
        throws ServletException, IOException {
        PrintWriter out = response.getWriter();
        out.println("<html><body>");

        // STEP 1: Get a Session (connection) from the Session Factory
class
        SessionFactory factory = HibernateUtil.getSessionFactory();

        // STE2 Create the session object
        Session session = factory.openSession();

        out.println("Hibernate Session opened.<br>");

        // STEP 3 Query the DB and get the data
        List<Eproduct> eproducts = session.createQuery("from
Eproduct").list();

        out.println("<table border=1>");
        for (Eproduct prod : eproducts) {
            out.println("<tr>" + "<td>" + prod.getID() + "<td>" +
prod.getName() + "<td>" + prod.getPrice() + "<td>"
                + prod.getDateAdded());
        }
        out.println("</table>");

        session.close();

        out.println("Hibernate Session closed.<br>");

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

## Util.com

```
package practice;

import org.hibernate.SessionFactory;
import org.hibernate.boot.*;
import org.hibernate.boot.registry.*;

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;
    }
}
```

## Web.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.cj.jdbc.Driver</property>
        <property
name="connection.url">jdbc:mysql://localhost:3306/ecommerce</property>
        <property name="connection.username">root</property>
        <property name="connection.password">SalmaSaleem04</property>

        <mapping resource="com.ecommerce.Eproduct.hbm.xml"/>
    </session-factory>
```

```
</hibernate-configuration>
```

## Index.html:

```
<html>
<head> </head>
<body>
<h3>Hibernate Configuration Example </h3>
<a href="init">Initialize Hibernate</a>
<br>
<br>
<br>
<h3>Hibernate Query Demo </h3> $0 ==
<a href="query-demo">Query Here and get the data</a> <br>
</body>
</html>
```