

Phase-2 Practice Project: Assisted Practice

3.Configure Hibernate using Annotations in Eclipse IDE.

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.cj.jdbc.Driver</property>

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

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

        <property name="connection.password">Simplilearn</property>


        <mapping class="com.ecommerce.EProduct" />

    </session-factory>

</hibernate-configuration>
```

HibernateUtil.java

```
package com.simpli;
```

```
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) {

            System.out.println(th);

            throw new ExceptionInInitializerError(th);

        }

    }

}
```

```
        public static SessionFactory getSessionFactory() {  
            return sessionFactory;  
        }  
  
    }  
  
}
```

HibernateQueryDemo.java

```
package com.simpli;  
  
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>");
```

```
}
```

```
}
```

EPRODUCT.JAVA

```
package com.ecommerce;
```

```
import java.math.BigDecimal;
```

```
import java.util.Date;
```

```
import javax.persistence.*;
```

```
@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 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;  
        }  
  
    }  
}
```

Index.html

```
<title>Hibernate Demo </title>
```

```
<br><br>
```

```
<h3>Hibernate Annotation Query Demo </h3>
```

```
<a href="query-demo">Query Here and get the data</a><br>
```

Output



Hibernate Annotation Query Demo

[Query Here and get the data](#)

Hibernate Session opened.

1	HP Laptop ABC	12000.00	2023-05-26 06:51:09.0
2	DELL PC ABC	19000.00	2023-05-26 06:51:09.0
3	Samsung Laptop PQR	22000.00	2023-05-26 06:51:09.0
4	Phillips Mixer	7000.00	2023-05-26 07:14:31.0
6	Apple Ipad	20000.50	2023-05-26 10:27:16.0
7	Apple Ipad	20000.50	2023-05-26 10:28:07.0
8	HP Gaming Laptop	100000.00	2023-05-26 11:06:40.0
9	HP Gaming Laptop 2	200000.00	2023-05-26 11:07:39.0
10	Mac PC	1.00	2023-05-26 11:22:00.0
11	HP Camera	2500.00	2023-05-26 11:22:15.0
12	Mac PC	2.00	2023-05-29 04:54:35.0
13	MAC PC 2	3.00	2023-05-29 05:15:22.0
14	HP Gaming PC	1.00	2023-05-29 05:28:36.0

Hibernate Session closed.