

## Demonstrate Hibernate logging by Log4j.

### 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
```

### 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>

## Log4j.properties

# LOG4J configuration

log4j.rootLogger=DEBUG, Appender1,Appender2

log4j.appender.Appender1=org.apache.log4j.ConsoleAppender

log4j.appender.Appender1.layout=org.apache.log4j.PatternLayout

log4j.appender.Appender1.layout.ConversionPattern=%-7p %d [%t] %c %x - %m%n

log4j.appender.Appender2=org.apache.log4j.FileAppender

log4j.appender.Appender2.File=/home/jyotidevadigamp/Desktop/Mylog.txt

log4j.appender.Appender2.layout=org.apache.log4j.PatternLayout

log4j.appender.Appender2.layout.ConversionPattern=%-7p %d [%t] %c %x - %m%n

# Log everything. Good for troubleshooting

log4j.logger.org.hibernate=INFO

# Log all JDBC parameters

log4j.logger.org.hibernate.type=ALL

**Output:**



[illegible]

| id | name              | version | release    | type        | url         | source | target |
|----|-------------------|---------|------------|-------------|-------------|--------|--------|
| 1  | HP Laptop ACB     | 12000   | 00         | 2023-05-26  | 06.51.09.00 |        |        |
| 2  | DELL PC ACB       | 19000   | 00         | 2023-05-26  | 06.51.09.00 |        |        |
| 3  | Samung Laptop P04 | 22000   | 00         | 2023-05-26  | 06.51.09.00 |        |        |
| 4  | Philips Mueer     | 7000    | 00         | 2023-05-27  | 07.14.31.00 |        |        |
| 5  | Apple iPad        | 20000   | 50         | 2023-05-26  | 10.27.16.00 |        |        |
| 6  | Apple iPad        | 20000   | 50         | 2023-05-26  | 10.28.07.00 |        |        |
| 7  | HP Gaming Laptop  | 100000  | 00         | 2023-05-26  | 11.06.40.00 |        |        |
| 8  | HP Gaming Laptop  | 100000  | 00         | 2023-05-26  | 11.07.39.00 |        |        |
| 9  | MAC PC            | 1.00    | 2023-05-26 | 11.22.00.00 |             |        |        |
| 10 | MAC Camera        | 2500    | 00         | 2023-05-26  | 11.22.15.00 |        |        |
| 11 | MAC PC            | 2500    | 00         | 2023-05-26  | 04.54.35.00 |        |        |
| 12 | MAC PC            | 2500    | 00         | 2023-05-26  | 05.28.26.00 |        |        |
| 13 | HP Gaming PC      | 1.00    | 2023-05-29 | 05.28.36.00 |             |        |        |
| 14 | HP Gaming PC      | 1.00    | 2023-05-29 | 05.28.36.00 |             |        |        |
| 15 | HP Laptop ACB     | 12000   | 00         | 2023-05-26  | 06.51.09.00 |        |        |
| 16 | DELL PC ACB       | 19000   | 00         | 2023-05-26  | 06.51.09.00 |        |        |
| 17 | Samung Laptop P04 | 22000   | 00         | 2023-05-26  | 06.51.09.00 |        |        |
| 18 | Philips Mueer     | 7000    | 00         | 2023-05-27  | 07.14.31.00 |        |        |
| 19 | Apple iPad        | 20000   | 50         | 2023-05-26  | 10.27.16.00 |        |        |
| 20 | Apple iPad        | 20000   | 50         | 2023-05-26  | 10.28.07.00 |        |        |
| 21 | HP Gaming Laptop  | 100000  | 00         | 2023-05-26  | 11.06.40.00 |        |        |
| 22 | HP Gaming Laptop  | 100000  | 00         | 2023-05-26  | 11.07.39.00 |        |        |
| 23 | MAC PC            | 1.00    | 2023-05-26 | 11.22.00.00 |             |        |        |
| 24 | MAC Camera        | 2500    | 00         | 2023-05-26  | 11.22.15.00 |        |        |
| 25 | MAC PC            | 2500    | 00         | 2023-05-26  | 04.54.35.00 |        |        |
| 26 | MAC PC            | 2500    | 00         | 2023-05-26  | 05.28.26.00 |        |        |
| 27 | HP Gaming PC      | 1.00    | 2023-05-29 | 05.28.36.00 |             |        |        |
| 28 | HP Gaming PC      | 1.00    | 2023-05-29 | 05.28.36.00 |             |        |        |
| 29 | HP Laptop ACB     | 12000   | 00         | 2023-05-26  | 06.51.09.00 |        |        |
| 30 | DELL PC ACB       | 19000   | 00         | 2023-05-26  | 06.51.09.00 |        |        |
| 31 | Samung Laptop P04 | 22000   | 00         | 2023-05-26  | 06.51.09.00 |        |        |
| 32 | Philips Mueer     | 7000    | 00         | 2023-05-27  | 07.14.31.00 |        |        |
| 33 | Apple iPad        | 20000   | 50         | 2023-05-26  | 10.27.16.00 |        |        |
| 34 | Apple iPad        | 20000   | 50         | 2023-05-26  | 10.28.07.00 |        |        |
| 35 | HP Gaming Laptop  | 100000  | 00         | 2023-05-26  | 11.06.40.00 |        |        |
| 36 | HP Gaming Laptop  | 100000  | 00         | 2023-05-26  | 11.07.39.00 |        |        |
| 37 | MAC PC            | 1.00    | 2023-05-26 | 11.22.00.00 |             |        |        |
| 38 | MAC Camera        | 2500    | 00         | 2023-05-26  | 11.22.15.00 |        |        |
| 39 | MAC PC            | 2500    | 00         | 2023-05-26  | 04.54.35.00 |        |        |
| 40 | MAC PC            | 2500    | 00         | 2023-05-26  | 05.28.26.00 |        |        |
| 41 | HP Gaming PC      | 1.00    | 2023-05-29 | 05.28.36.00 |             |        |        |
| 42 | HP Gaming PC      | 1.00    | 2023-05-29 | 05.28.36.00 |             |        |        |
| 43 | HP Laptop ACB     | 12000   | 00         | 2023-05-26  | 06.51.09.00 |        |        |
| 44 | DELL PC ACB       | 19000   | 00         | 2023-05-26  | 06.51.09.00 |        |        |
| 45 | Samung Laptop P04 | 22000   | 00         | 2023-05-26  | 06.51.09.00 |        |        |
| 46 | Philips Mueer     | 7000    | 00         | 2023-05-27  | 07.14.31.00 |        |        |
| 47 | Apple iPad        | 20000   | 50         | 2023-05-26  | 10.27.16.00 |        |        |
| 48 | Apple iPad        | 20000   | 50         | 2023-05-26  | 10.28.07.00 |        |        |
| 49 | HP Gaming Laptop  | 100000  | 00         | 2023-05-26  | 11.06.40.00 |        |        |
| 50 | HP Gaming Laptop  | 100000  | 00         | 2023-05-26  | 11.07.39.00 |        |        |
| 51 | MAC PC            | 1.00    | 2023-05-26 | 11.22.00.00 |             |        |        |
| 52 | MAC Camera        | 2500    | 00         | 2023-05-26  | 11.22.15.00 |        |        |
| 53 | MAC PC            | 2500    | 00         | 2023-05-26  | 04.54.35.00 |        |        |