

Assisted project4: Demonstrate Hibernate logging by Log4j.

Index.html:

```
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Hibernate Configuration Example</title>
</head>
<body>
<a href="init">Initialize Hibernate</a><br>
</body>
</html>
```

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">#Vinny123</property>
</session-factory>
</hibernate-configuration>
```

Log4j.properties:

```
log4j.appender.file=org.apache.log4j.RollingFileAppender
log4j.appender.file.File=/home/oem/Downloads/hibernate.log
log4j.appender.file.MaxFileSize=1MB
log4j.appender.file.MaxBackupIndex=1
log4j.appender.file.layout=org.apache.log4j.PatternLayout
log4j.appender.file.layout.ConversionPattern=%d{ABSOLUTE} %5p %c{1}:%L -
%m%n
# Direct log messages to stdout
log4j.appender.stdout=org.apache.log4j.ConsoleAppender
log4j.appender.stdout.Target=System.out
log4j.appender.stdout.layout=org.apache.log4j.PatternLayout
log4j.appender.stdout.layout.ConversionPattern=%d{ABSOLUTE} %5p %c{1}:%L -
```

```
%m%n
# Root logger option
log4j.rootLogger=INFO, file, stdout
# Log everything. Good for troubleshooting
log4j.logger.org.hibernate=INFO
# Log all JDBC parameters
log4j.logger.org.hibernate.type=ALL
```

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;
    }
}
```

InitHibernate.java:

```
import java.io.IOException;
import java.io.PrintWriter;
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;
import com.ecommerce.HibernateUtil;
/**
 * Servlet implementation class InitHibernate
 */
@WebServlet("/init")
public class InitHibernate extends HttpServlet {
    private static final long serialVersionUID = 1L;

    /**
     * @see HttpServlet#HttpServlet()
     */
    public InitHibernate() {
        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 {
            PrintWriter out = response.getWriter();
            out.println("<html><body>");
            SessionFactory factory =
                HibernateUtil.getSessionFactory();

            Session session = factory.openSession();
            out.println("Hibernate Session opened.<br>");
            session.close();
            out.println("Hibernate Session closed.<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);  
}  
}
```

