**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:File**

<?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"*>mysql user id</property>

<property name=*"connection.password"*>mysql password</property>

</session-factory>

</hibernate-configuration>

**log4j.properties:File**

# Direct log messages to a log file

log4j.appender.file=org.apache.log4j.RollingFileAppender

log4j.appender.file.File=/E:/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

**com.ecommerce package:**

**HibernateUtil Class:**

**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 Servlet:**

**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** javax.xml.bind.\*;

**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.HibernateUtil;

@WebServlet("/InitHibernate")

**public** **class** InitHibernate **extends** HttpServlet {

**private** **static** **final** **long** ***serialVersionUID*** = 1L;

**public** InitHibernate() {

**super**();

// **TODO** Auto-generated constructor stub

}

**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;

}

}

**protected** **void** doPost(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, IOException {

// **TODO** Auto-generated method stub

doGet(request, response);

}

}

**Web.xml:**

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<web-app xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xmlns=*"http://java.sun.com/xml/ns/javaee"* xsi:schemaLocation=*"http://java.sun.com/xml/ns/javaee http://java.sun.com/xml/ns/javaee/web-app\_3\_0.xsd"* id=*"WebApp\_ID"* version=*"3.0"*>

<display-name>HibernateLog4j</display-name>

<welcome-file-list>

<welcome-file>index.html</welcome-file>

<welcome-file>index.jsp</welcome-file>

<welcome-file>index.htm</welcome-file>

<welcome-file>default.html</welcome-file>

<welcome-file>default.jsp</welcome-file>

<welcome-file>default.htm</welcome-file>

</welcome-file-list>

<servlet>

<servlet-name>InitHibernate</servlet-name>

<servlet-class>InitHibernate</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>InitHibernate</servlet-name>

<url-pattern>/init</url-pattern>

</servlet-mapping>

</web-app>