**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">

<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:**

# Direct log messages to a log file

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

**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**>

* Create Package Name, enter **com.ecommerce** and in **Name** enter **HibernateUtil** and click on **Finish**

**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;

}

}

create an servlet and name as **InitHibernate:**

**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.transaction.**\***;

**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.EProduct;

**import** com.ecommerce.HibernateUtil;

/\*\*

**\*** Servlet implementation class InitHibernate

\*/

**@WebServlet("/InitHibernate")**

**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);

}

}

**web.xml:**

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

<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://xmlns.jcp.org/xml/ns/javaee" xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-app\_4\_0.xsd" id="WebApp\_ID" version="4.0">

<display-name>HibernateLogging</display-name>

<welcome-file-list>

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

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

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

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

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

<welcome-file>default.jsp</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>