Searching for a Specific User and Updating the User Information :

Source code:

UserDao.java :

```java
public interface UserDao {
 User getUserById(int userId);
 void updateUser(User user);
}
```

HibernateUserDao.java :

```java
@Repository
public class HibernateUserDao implements UserDao {
 @Autowired
 private SessionFactory sessionFactory;
 @Override
 public User getUserById(int userId) {
 Session session = sessionFactory.getCurrentSession();
 return session.get(User.class, userId);
 }
 @Override
 public void updateUser(User user) {
 Session session = sessionFactory.getCurrentSession();
 session.update(user);
 }
}
```

UserService.java :

```java
public interface UserService {
 User getUserById(int userId);
 void updateUser(User user);
}
```

ServiceImpl.java :

```java
@Service
public class UserServiceImpl implements UserService {
 @Autowired
 private UserDao userDao;
 @Override
 public User getUserById(int userId) {
 return userDao.getUserById(userId);
 }
 @Override
 public void updateUser(User user) {
 userDao.updateUser(user);
```

```
  }
}
```

UserController.java :

```java
@Controller
@RequestMapping("/user")
public class UserController {
 @Autowired
 private UserService userService;
 @GetMapping("/edit")
 public String showEditForm(@RequestParam("userId") int userId, Model
model) {
 User user = userService.getUserById(userId);
 if (user == null) {
 // Handle invalid user ID
 return "errorPage";
 }
 model.addAttribute("user", user);
 return "editUser";
 }
 @PostMapping("/update")
 public String updateUser(@ModelAttribute("user") User user) {
 userService.updateUser(user);
 return "confirmation";
 }
}
```

enterUserId.jsp :

```jsp
<%@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8" %>
<!DOCTYPE html>
<html>
<head>
<title>Enter User ID</title>
</head>
<body>
<h1>Enter User ID:</h1>
<form action="${pageContext.request.contextPath}/user/edit" method="get">
<input type="number" name="userId" required>
<button type="submit">Edit</button>
</form>
</body>
</html>
```

editUser.jsp :

```jsp
<%@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8" %>
<!DOCTYPE html>
```

```html
<html>
<head>
<title>Edit User</title>
</head>
<body>
<h1>Edit User</h1>
<form action="${pageContext.request.contextPath}/user/update"
method="post">
<input type="hidden" name="userId" value="${user.userId}">
<label>Username:</label>
<input type="text" name="username" value="${user.username}" required><br>
<label>Email:</label>
<input type="email" name="email" value="${user.email}" required><br>
<button type="submit">Update</button>
</form>
</body>
</html>
```

confirmation.jsp :

```jsp
<%@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8" %>
<!DOCTYPE html>
<html>
<head>
<title>Update Confirmation</title>
</head>
<body>
<h1>Update Successful</h1>
<p>User details have been updated successfully.</p>
</body>
</html>
```

pom.xml :

```xml
<project xmlns="http://maven.apache.org/POM/4.0.0"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
http://maven.apache.org/xsd/maven-4.0.0.xsd">
<modelVersion>4.0.0</modelVersion>
<groupId>com.example</groupId>
<artifactId>spring-mvc-hibernate-demo</artifactId>
<version>1.0.0</version>
<packaging>war</packaging>
<properties>
<spring.version>5.3.12.RELEASE</spring.version>
<hibernate.version>5.5.7.Final</hibernate.version>
<mysql-connector.version>8.0.27</mysql-connector.version>
<log4j.version>2.17.0</log4j.version>
<jstl.version>1.2</jstl.version>
```

```xml
</properties>
<dependencies>
<!-- Spring MVC -->
<dependency>
<groupId>org.springframework</groupId>
<artifactId>spring-webmvc</artifactId>
<version>${spring.version}</version>
</dependency>
<!-- Hibernate -->
<dependency>
<groupId>org.hibernate</groupId>
<artifactId>hibernate-core</artifactId>
<version>${hibernate.version}</version>
</dependency>
<!-- MySQL Connector -->
<dependency>
<groupId>mysql</groupId>
<artifactId>mysql-connector-java</artifactId>
<version>${mysql-connector.version}</version>
</dependency>
<!-- Log4j -->
<dependency>
<groupId>org.apache.logging.log4j</groupId>
<artifactId>log4j-core</artifactId>
<version>${log4j.version}</version>
</dependency>
<!-- JSTL -->
<dependency>
<groupId>javax.servlet</groupId>
<artifactId>jstl</artifactId>
<version>${jstl.version}</version>
</dependency>
</dependencies>
<build>
<plugins>
<!-- Maven Compiler Plugin -->
<plugin>
<groupId>org.apache.maven.plugins</groupId>
<artifactId>maven-compiler-plugin</artifactId>
<version>3.8.1</version>
<configuration>
<source>1.8</source>
<target>1.8</target>
</configuration>
</plugin>
<!-- Maven War Plugin -->
<plugin>
<groupId>org.apache.maven.plugins</groupId>
<artifactId>maven-war-plugin</artifactId>
<version>3.3.1</version>
<configuration>
<warSourceDirectory>src/main/webapp</warSourceDirectory>
<failOnMissingWebXml>false</failOnMissingWebXml>
</configuration>
</plugin>
</plugins>
</build>
</project>
```

hibernate.cfg.xml :

```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>
<property
name="hibernate.connection.driver_class">com.mysql.jdbc.Driver</property>
<property
name="hibernate.connection.url">jdbc:mysql://localhost:3306/users/property>
<property name="hibernate.connection.username">root</property>
<property name="hibernate.connection.password">Vikarabad@123</property>
<property
name="hibernate.dialect">org.hibernate.dialect.MySQL8Dialect</property>
<property name="hibernate.current_session_context_class">thread</property>
<property name="hibernate.show_sql">true</property>
<property name="hibernate.format_sql">true</property>
</session-factory>
</hibernate-configuration>
```

dispatcher-servlet.xml :

```xml
<beans xmlns="http://www.springframework.org/schema/beans"
 xmlns:context="http://www.springframework.org/schema/context"
 xmlns:mvc="http://www.springframework.org/schema/mvc"
 xsi:schemaLocation="http://www.springframework.org/schema/beans
 http://www.springframework.org/schema/beans/spring-beans.xsd
 http://www.springframework.org/schema/context
 http://www.springframework.org/schema/context/spring-context.xsd
 http://www.springframework.org/schema/mvc
 http://www.springframework.org/schema/mvc/spring-mvc.xsd"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<!-- Enable component scanning for Spring MVC -->
<context:component-scan base-package="com.example.controller" />
<!-- Configure Spring MVC -->
<mvc:annotation-driven />
<!-- View resolver for JSP files -->
<bean
class="org.springframework.web.servlet.view.InternalResourceViewResolver">
<property name="prefix" value="/WEB-INF/views/" />
<property name="suffix" value=".jsp" />
</bean>
</beans>
```

web.xml :

```xml
<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>Spring MVC Hibernate Demo</display-name>
<servlet>
```

```xml
<servlet-name>dispatcher</servlet-name>
<servlet-class>org.springframework.web.servlet.DispatcherServlet</servlet-class>
<init-param>
<param-name>contextConfigLocation</param-name>
<param-value>/WEB-INF/dispatcher-servlet.xml</param-value>
</init-param>
<load-on-startup>1</load-on-startup>
</servlet>
<servlet-mapping>
<servlet-name>dispatcher</servlet-name>
<url-pattern>/</url-pattern>
</servlet-mapping>
</web-app>
```

log4j2.xml :

```xml
<Configuration status="WARN">
<Appenders>
<Console name="ConsoleAppender" target="SYSTEM_OUT">
<PatternLayout pattern="%d{HH:mm:ss.SSS} [%t] %-5level %logger{36} -
%msg%n" />
</Console>
</Appenders>
<Loggers>
<Root level="debug">
<AppenderRef ref="ConsoleAppender" />
</Root>
</Loggers>
</Configuration>
```