

```
// USER CLASS

package com.bean;

import javax.persistence.Entity;
import javax.persistence.Id;

@Entity
public class User {

    @Id
    private int uid;

    private String fname;
    private String lname;
    private String email;

    public int getUid() {
        return uid;
    }

    public void setUid(int uid) {
        this.uid = uid;
    }

    public String getFname() {
        return fname;
    }

    public void setFname(String fname) {
```

```

        this.fname = fname;
    }

    public String getLname() {
        return lname;
    }

    public void setLname(String lname) {
        this.lname = lname;
    }

    public String getEmail() {
        return email;
    }

    public void setEmail(String email) {
        this.email = email;
    }

    @Override
    public String toString() {
        return "User [user ID=" + uid + ", First Name=" + fname + ", Last Name=" + lname + ",
Email=" + email + "]";
    }

}

// USER CONTROLLER CLASS

```

```
package com.controller;
```

```
import javax.servlet.http.HttpServletRequest;
```

```
import org.springframework.beans.factory.annotation.Autowired;
```

```
import org.springframework.stereotype.Controller;
```

```
import org.springframework.web.bind.annotation.RequestMapping;
```

```
import org.springframework.web.bind.annotation.RequestMethod;
```

```
import org.springframework.web.servlet.ModelAndView;
```

```
import com.bean.User;
```

```
import com.service.UserService;
```

```
@Controller
```

```
public class UserController {
```

```
    @Autowired
```

```
    UserService userService;
```

```
    @RequestMapping(value = "storeUser", method = RequestMethod.POST)
```

```
    public ModelAndView storeUser(HttpServletRequest req, User user) {
```

```
        int uid = Integer.parseInt(req.getParameter("uid"));
```

```
        String fname = req.getParameter("fname");
```

```
        String lname = req.getParameter("lname");
```

```
        String email = req.getParameter("email");
```

```
        user.setUid(uid);
```

```
        user.setFname(fname);

        user.setLname(lname);


        user.setEmail(email);


        String result = userService.storeUser(user);

        ModelAndView mav = new ModelAndView();

        mav.addObject("msg", result);

        mav.setViewName("storeUser.jsp");

        return mav;
    }


    @RequestMapping(value = "updateUser", method = RequestMethod.POST)
    public ModelAndView updateUser(HttpServletRequest req, User user) {

        int uid = Integer.parseInt(req.getParameter("uid"));

        String email = req.getParameter("email");


        user.setUid(uid);

        user.setEmail(email);


        String result = userService.updateUser(user);

        ModelAndView mav = new ModelAndView();

        mav.addObject("msg", result);

        mav.setViewName("updateUser.jsp");

        return mav;
    }
```

```

@RequestMapping(value = "searchUser", method = RequestMethod.POST)

public ModelAndView searchUser(HttpServletRequest req) {

    int uid = Integer.parseInt(req.getParameter("uid"));

    String result = userService.searchUserById(uid);

    ModelAndView mav = new ModelAndView();

    mav.addObject("msg", result);

    mav.setViewName("searchUserById.jsp");

    return mav;

}
}

```

// USER DAO CLASS

```
package com.dao;
```

```
import org.hibernate.Session;
```

```
import org.hibernate.SessionFactory;
```

```
import org.hibernate.Transaction;
```

```
import org.springframework.beans.factory.annotation.Autowired;
```

```
import org.springframework.stereotype.Repository;
```

```
import com.bean.User;
```

```
@Repository
```

```
public class UserDAO {
```

```
    @Autowired
```

```
    SessionFactory sf;
```

```
public int storeUserDetails(User user) {  
    try {  
  
        Session session = sf.openSession();  
        Transaction tran = session.getTransaction();  
        tran.begin();  
        session.save(user);  
        tran.commit();  
        return 1;  
    } catch (Exception e) {  
        System.out.println(e);  
        return 0;  
    }  
}
```

```
public int updateUser(User user) {  
    Session session = sf.openSession();  
    Transaction tran = session.getTransaction();  
    User u = session.get(User.class, user.getUid());  
    if (u == null) {  
        return -1;  
    } else {  
  
        tran.begin();  
        u.setEmail(user.getEmail());  
        session.update(u);  
    }  
}
```

```

        tran.commit();

        return 1;

    }

}

public User searchUserById(int uid) {

    Session session = sf.openSession();

    User u = session.get(User.class, uid);

    return u;

}

}

// USER SERVICE

package com.service;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;

import com.bean.User;
import com.dao.UserDAO;

@Service

public class UserService {

    @Autowired

    UserDAO userDao;

    public String storeUser(User user) { if(userDao.storeUserDetails(user)>0){

```

```
return "User details stored successfully";
```

```
}else {
```

```
    return "User details didn't store";
```

```
}
```

```
}
```

```
public String updateUser(User user) { if(userDao.updateUser(user)>0) {
```

```
    return "Record updated successfully";
```

```
}else {
```

```
    return "Record didn't update";
```

```
}
```

```
}
```

```
public String searchUserById(int uid) {
```

```
    User u = userDao.searchUserById(uid); if(u==null) {
```

```
        return "Record not present";
```

```
}else {
```

```
    return u.toString();
```

```
}
```

```
}
```

```
}
```


[illegible]

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<h2>Search User</h2>
<form action="searchUser" method="post">
<label>User ID</label>
<input type="number" name="uid"><br/></br>
<input type="submit" value="Search User"/><br/></br>
<input type="reset" value="reset"/><br/></br>
</form>
```

```
<br/>
${requestScope.msg}
<br/>
<a href="index.jsp">Back</a>
</body>
</html>
```

```
// STORE USER
```

```
<%@ page language="java" contentType="text/html;
charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
${requestScope.msg}
<h2>Add User</h2>
<form action="storeUser" method="post">
<label>User Id</label>
<input type="number" name="uid"><br/><br/>
<label>First Name</label>
<input type="text" name="fname"><br/><br/>
<label>Last Name</label>
<input type="text" name="lname"><br/><br/>
<label>Email</label>
<input type="text" name="email"><br/><br/>
<input type="submit" value="Add User"/><br/><br/>
<input type="reset" value="reset"/><br/>
</form>
<br/>
<a href="index.jsp">Back</a>
</body>
</html>
```

```
// UPDATE USER
```

```

<%@ page language="java" contentType="text/html;
charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>

<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
${requestScope.msg}
<h2>Update User</h2>
<form action="updateUser" method="post">
<label>User ID</label>
<input type="number" name="uid"><br/><br/>
<label>Email</label>
<input type="email" name="email"><br/><br/>
<input type="submit" value="Update User"/><br/></br>
<input type="reset" value="reset"/><br/></br>
</form>
<br/>
<a href="index.jsp">Back</a>
</body>
</html>

```

// POM XML

```

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

<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>UserManager</groupId>
  <artifactId>UserManager</artifactId>
  <version>0.0.1-SNAPSHOT</version>
  <packaging>war</packaging>
  <build>
    <plugins>

```

```

        <plugin>
            <artifactId>maven-compiler-
plugin</artifactId>
            <version>3.8.1</version>
            <configuration>
                <release>11</release>
            </configuration>
        </plugin>
        <plugin>
            <artifactId>maven-war-
plugin</artifactId>
            <version>3.2.3</version>
        </plugin>
    </plugins>
</build>

<dependencies>

    <dependency>
        <groupId>mysql</groupId>
        <artifactId>mysql-connector-
java</artifactId>
        <version>8.0.16</version>
    </dependency>
    <dependency>
        <groupId>org.hibernate</groupId>
        <artifactId>hibernate-core</artifactId>
        <version>5.5.6.Final</version>
    </dependency>

    <dependency>
        <groupId>javax.servlet</groupId>
        <artifactId>jstl</artifactId>
        <version>1.2</version>
    </dependency>

    <dependency>
        <groupId>org.springframework</groupId>
        <artifactId>spring-jdbc</artifactId>
        <version>5.2.12.RELEASE</version>
    </dependency>

```

```

        <dependency>
            <groupId>org.springframework</groupId>
            <artifactId>spring-webmvc</artifactId>
            <version>5.2.12.RELEASE</version>
        </dependency>
        <dependency>
            <groupId>org.springframework</groupId>
            <artifactId>spring-orm</artifactId>
            <version>5.2.12.RELEASE</version>
        </dependency>

    </dependencies>

</project>

// DISPATCHER SERVLET

<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
    xmlns="http://www.springframework.org/schema/beans"

    xmlns:context="http://www.springframework.org/schema/cont
ext"
    xmlns:mvc="http://www.springframework.org/schema/mvc"

    xsi:schemaLocation="http://www.springframework.org/schema/
beans
        http://www.springframework.org/schema/beans/spring-
beans-3.0.xsd
        http://www.springframework.org/schema/context
        http://www.springframework.org/schema/context/spring-
context-3.0.xsd">

    <context:component-scan base-
package="com"></context:component-scan>

    <bean
class="org.springframework.jdbc.datasource.DriverManagerDa
taSource" id="ds" scope="singleton">

```

```
<property name="driverClassName"
value="com.mysql.cj.jdbc.Driver"></property>
<property name="url"
value="jdbc:mysql://localhost:3306/mphasis_db"></property>
<property name="username" value="root"></property>
<property name="password"
value="18W91A0477"></property>
</bean>
```

```
<bean
class="org.springframework.orm.hibernate5.LocalSessionFactoryBean" id="sf" scope="singleton">
```

```
<property name="dataSource" ref="ds"></property>
```

```
<property name="annotatedClasses">
<list>
<value>com.bean.User</value>
</list>
</property>
```

```
<property name="hibernateProperties">
<props>
<prop
key="hibernate.dialect">org.hibernate.dialect.MySQLDialect
</prop>
</props>
</property>
```

```
</bean>
```

```
</beans>
```

```
// WEB XML
```

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app>
  <display-name>UserManager</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>dispatcher</servlet-name>
        <servlet-
class>org.springframework.web.servlet.DispatcherServlet
        </servlet-class>
    </servlet>
    <servlet-mapping>
        <servlet-name>dispatcher</servlet-name>
        <url-pattern>/</url-pattern>
    </servlet-mapping>

</web-app>

```

```
// DATABASE
```

```
create table user
```

```
(uid int primary key, fname varchar(50), lname varchar(50), email varchar(50));
```