

Problem Statement : Create a Spring MVC web application that will retrieve users based on their user ID. The retrieved user data will then be edited in a form and updated in the database. The entire database processing has to be done using Hibernate. Front pages will be made in JSP.

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1.pom.xml  
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```
<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/maven-v4_0_0.xsd">
  <modelVersion>4.0.0</modelVersion>
  <groupId>com.simplilearn</groupId>
  <artifactId>UpdateDetails</artifactId>
  <packaging>war</packaging>
  <version>0.0.1-SNAPSHOT</version>
  <name>UpdateDetails Maven Webapp</name>
  <url>http://maven.apache.org</url>
  <dependencies>
    <dependency>
      <groupId>junit</groupId>
      <artifactId>junit</artifactId>
      <version>3.8.1</version>
      <scope>test</scope>
    </dependency>
    <!-- https://mvnrepository.com/artifact/javax.servlet.jsp.jstl/jstl
-->

    <!-- https://mvnrepository.com/artifact/org.springframework/spring-
context -->
    <!-- https://mvnrepository.com/artifact/javax.servlet.jsp.jstl/jstl
-->

    <!-- https://mvnrepository.com/artifact/javax.servlet/javax.servlet-
api -->
    <dependency>
      <groupId>javax.servlet</groupId>
      <artifactId>javax.servlet-api</artifactId>
      <version>4.0.1</version>
      <scope>provided</scope>
    </dependency>
    <!-- https://mvnrepository.com/artifact/mysql/mysql-connector-java
-->

    <dependency>
      <groupId>mysql</groupId>
      <artifactId>mysql-connector-java</artifactId>
      <version>8.0.30</version>
    </dependency>
    <!-- https://mvnrepository.com/artifact/org.springframework/spring-
jdbc -->
    <dependency>
      <groupId>org.springframework</groupId>
      <artifactId>spring-jdbc</artifactId>
      <version>5.3.22</version>
    </dependency>

    <!-- https://mvnrepository.com/artifact/org.springframework/spring-
context -->
    <dependency>
      <groupId>org.springframework</groupId>
      <artifactId>spring-context</artifactId>
```

```

        <version>5.3.22</version>
    </dependency>

    <!-- https://mvnrepository.com/artifact/org.springframework/spring-
webmvc -->
    <dependency>
        <groupId>org.springframework</groupId>
        <artifactId>spring-webmvc</artifactId>
        <version>5.3.22</version>
    </dependency>

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

</dependencies>
<build>
    <finalName>UpdateDetails</finalName>
</build>
</project>

```

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## 2. web.xml

```

-----
<!DOCTYPE web-app PUBLIC
"-//Sun Microsystems, Inc.//DTD Web Application 2.3//EN"
"http://java.sun.com/dtd/web-app_2_3.dtd" >

<web-app>
    <display-name>Archetype Created Web Application</display-name>

    <servlet>
        <servlet-name>spring</servlet-name>
        <servlet-class>org.springframework.web.servlet.DispatcherServlet</servlet-
class>

    </servlet>

    <servlet-mapping>
        <servlet-name>spring</servlet-name>
        <url-pattern>/</url-pattern>
    </servlet-mapping>
</web-app>

```

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## 3. spring-servlet.xml

```

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

```

```

<context:annotation-config></context:annotation-config>

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

    <bean id="jspViewResolver"
class="org.springframework.web.servlet.view.InternalResourceViewResolver">
    <property name="suffix" value=".jsp"></property>
    <property name="prefix" value="/WEB-INF/view/"></property>
</bean>

    <bean id="dataSource"
class="org.springframework.jdbc.datasource.DriverManagerDataSource">
    <property name="driverClassName"
value="com.mysql.cj.jdbc.Driver"></property>
    <property name="url"
value="jdbc:mysql://localhost:3306/addproducts"></property>
    <property name="username" value="root"></property>
    <property name="password" value="Ankit@1998"></property>

</bean>

    <bean id="jdbcTemplate"
class="org.springframework.jdbc.core.JdbcTemplate">
    <property name="dataSource" ref="dataSource"></property>
</bean>

    <bean id="dao" class="com.simplilearn.dao.EProductDao"></bean>

</beans>
*****
4. index.jsp
-----
<html>
<body bgcolor="cadetblue">

<div style="text-align:center">
<form action="details">
<h1>Fetch the data using Id </h1>
Id :<input type="text" name="Id" placeholder="Enter the Id"><br><br>

<button type="submit" style="text-align:center ;background-
color:green;color:white;height:1.5rem;width:120px;">Submit</button><br><br>

<h1><a href="listproduct">List All Product</a></h1>
<br><br>

<h1><a href="Update.jsp">Update Product</a></h1>

</form>
</div>
</body>
</html>
*****
5. Update.jsp
-----
<%@ 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 bgcolor="silver">
<div style="text-align:center">
<h1>Update Product</h1>

<form action="Update">
<h3>Id :<input type="text" name="id" placeholder="please enter integer
values"><br><br></h3>
<h3>Name :<input type="text" name="name" placeholder="Enter the name of
product"><br><br></h3>
<h3>price :<input type="text" name="price" placeholder="Enter the
price"><br><br></h3>
<h3>AddedDate :<input type="date" name="date" placeholder="Enter the
date"><br><br></h3>
<button type="submit">Submit</button>
</form><br><br>
</div>
</body>
</html>

```

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6. view/details.jsp  
-----

```

<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8" isELIgnored="false" %>
    <%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body bgcolor="lightgreen">
<div style="margin-top:10%;margin-left:35%;color:gray">
<h1 >Products Details Page</h1><br>
<c:set var="product" value="{obj }"></c:set>
<h2>Name: ${product.name } </h2><br>
<h2>Price: ${product.price }</h2> <br>
<h2>Date: ${product.dateAdded }</h2> <br>
</div>
</body>
</html>

```

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7. view/products.jsp  
-----

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1" isELIgnored="false"%>
    <%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body bgcolor="aqua" >
<div style="margin-left:35%;margin-top:10%;">
<h1>ECommerce Products </h1><br>

<table style="border:solid black;text-align:center;width:500px">

```

```

        <tr style="border:solid
black"><th>ID</th><th>NAME</th><th>PRICE</th><th>DATE</th></tr>
        <c:forEach var="p" items="${list }">

            <tr style="border:solid black">
                <td>${p.id }</td>
                <td>${p.name }</td>
                <td>${p.price }</td>
                <td>${p.dateAdded }</td>

            </tr>

        </c:forEach>

</table>
</div>
</body>
</html>

```

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8.src/main/java/com.simplilearn.controller.MainController.java

```

-----
package com.simplilearn.controller;

import java.math.BigDecimal;
import java.sql.Date;
import java.text.ParseException;
import java.text.SimpleDateFormat;
import java.time.Instant;
import java.util.List;

import javax.servlet.http.HttpServletRequest;

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

import org.springframework.stereotype.Controller;
import org.springframework.ui.ModelMap;
import org.springframework.web.bind.annotation.GetMapping;
import com.simplilearn.dao.EProductDao;
import com.simplilearn.entity.EProductEntity;

@Controller
public class MainController {

    @Autowired
    EProductDao dao;

    @GetMapping("/listproduct")
    public String getAllProducts(ModelMap map) {

        List<EProductEntity> list= dao.getAllProducts();
        map.addAttribute("list", list);
        System.out.println(list);
        return "products";

    }
}

```

```

    @GetMapping("/details")
    public String getProduct(HttpServletRequest request, ModelMap map) {
        String id=(request.getParameter("Id"));
        System.out.println(id);
        int Id=Integer.parseInt(id);
        EProductEntity entity=dao.getProductById(Id);
        map.addAttribute("obj", entity);
        return "details";
    }

    @GetMapping("/Update")
    public String UpdateProduct(HttpServletRequest request, ModelMap map)
throws ParseException {
        System.out.println(request.getParameter("id"));
        int id=Integer.parseInt(request.getParameter("id"));
        String Name=(request.getParameter("name"));
        int Price=Integer.parseInt(request.getParameter("price"));
        String Date=request.getParameter("date");

        EProductEntity entity=dao.updateProduct(id,Name,Price,Date);

        map.addAttribute("obj", entity);
        return "index";
    }
}
*****g.
src/main/java/com.simplilearn.dao.EProductDao.java
-----
package com.simplilearn.dao;

import java.sql.Date;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.List;

import org.springframework.jdbc.core.RowMapper;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.dao.DataAccessException;
import org.springframework.jdbc.core.JdbcTemplate;
import org.springframework.jdbc.core.ResultSetExtractor;
import org.springframework.*;
import org.springframework.stereotype.Repository;
import com.simplilearn.entity.EProductEntity;

@Repository
public class EProductDao {

    @Autowired
    JdbcTemplate jdbcTemplate;

    public List<EProductEntity> getAllProducts(){

        return jdbcTemplate.query("select * from eproduct",new
RowMapper<EProductEntity>() {

            public EProductEntity mapRow(ResultSet rs, int rowNum) throws
SQLException{

```

```

        EProductEntity obj= new EProductEntity();
        obj.setId(rs.getInt(1));
        obj.setName(rs.getString(2));
        obj.setPrice(rs.getInt(3));
        obj.setDateAdded(rs.getString(4));

        System.out.println(rs.getString(2));
        return obj;
    }

});

}

    public EProductEntity getProductById(int id) {
        return jdbcTemplate.query("select * from eproduct where id="+id,
new ResultSetExtractor<EProductEntity>() {

            public EProductEntity extractData(ResultSet rs) throws SQLException,
DataAccessException {
                // TODO Auto-generated method stub
                if(rs.next())
                {
                    EProductEntity obj= new EProductEntity();
                    obj.setId(rs.getInt(1));
                    obj.setName(rs.getString(2));
                    obj.setPrice(rs.getInt(3));
                    obj.setDateAdded(rs.getString(4));
                    return obj;
                }
                return null;
            }
        });
    }

    public void updateProduct(EProductEntity obj) {
        if(obj.getId()>0) {
            String sql= "update eproduct set name=?, price=?, dateAdded=?
where id=?";

            jdbcTemplate.update(sql,obj.getName(),obj.getPrice(),obj.getDateAdded(),obj.getId());
        }
        else {
            String sql= "insert into eproduct (name,price,dateAdded)
values (?, ?, ?)";

            jdbcTemplate.update(sql,obj.getName(),obj.getPrice(),obj.getDateAdded());
        }
    }

    public EProductEntity updateProduct(int id, String name, int price, String
date) {
        if(id>0) {
            String sql= "update eproduct set name=?, price=?,dateAdded=?
where id=?";

            jdbcTemplate.update(sql,name,price,date,id);
        }
        else {
            String sql= "insert into eproduct (name,price,dateAdded)
values (?, ?, ?)";

```

```

        jdbcTemplate.update(sql,name,price,date);
    }
    // TODO Auto-generated method stub
    return null;
}

```

```

}
*****

```

10. src/main/java/com.simplilearn.entity.EProductEntity.java

```

-----

package com.simplilearn.entity;

import java.math.BigDecimal;
import java.util.Date;

public class EProductEntity {

    private int id;
    private String name;
    private int price;
    private String dateAdded;

    public EProductEntity() {
        // TODO Auto-generated constructor stub
    }

    public EProductEntity(String name, int price, String dateAdded) {
        super();
        this.name = name;
        this.price = price;
        this.dateAdded = dateAdded;
    }

    public int getId() {
        return id;
    }

    public void setId(int id) {
        this.id = id;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public int getPrice() {
        return price;
    }

    public void setPrice(int price) {
        this.price = price;
    }

    public String getDateAdded() {
        return dateAdded;
    }
}

```



```
public void setDateAdded(String dateAdded) {
    this.dateAdded = dateAdded;
}

@Override
public String toString() {
    return "EProductEntity [id=" + id + ", name=" + name + ", price=" +
price + ", dateAdded=" + dateAdded + "];"
}

}
*****
```