1)Design and develop a Spring MVC web application as follows:

a.Create index.jsp page having one hyperlink.When user clicks on that hyperlink, it should call HelloWorldController.

b.Design HelloWorldController class that returns a view helloWorld.jspc.

Design a helloWorld.jsp page that displays “Hello World” message.

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>FirstMVC</display-name>

<servlet>

<servlet-name>spring-dispatcher</servlet-name>

<servlet-class>org.springframework.web.servlet.DispatcherServlet

</servlet-class>

<load-on-startup>1</load-on-startup>

</servlet>

<servlet-mapping>

<servlet-name>spring-dispatcher</servlet-name>

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

</servlet-mapping>

</web-app>

**Servlet**

<?xml version=*"1.0"* encoding=*"UTF-8"*?> <beans xmlns = *"http://www.springframework.org/schema/beans"*

xmlns:context = *"http://www.springframework.org/schema/context"*

xmlns:xsi = *"http://www.w3.org/2001/XMLSchema-instance"*

xsi:schemaLocation = *"http://www.springframework.org/schema/beans*

*http://www.springframework.org/schema/beans/spring-beans-2.5.xsd"*>

<!-- http://www.springframework.org/schema/context

http://www.springframework.org/schema/context/spring-context-5.3.8.xsd -->

<bean id=*"HandlerMapping"* class=*"org.springframework.web.servlet.handler.BeanNameUrlHandlerMapping"* />

<bean name=*"/welcome.html"* class=*"com.hellocontroller.HelloController"* />

<bean id=*"viewResolver"* class=*"org.springframework.web.servlet.view.InternalResourceViewResolver"*>

<property name = *"prefix"*>

<value>/WEB-INF/</value>

</property>

<property name = *"suffix"*>

<value>.jsp</value>

</property>

</bean>

</beans>

**HelloPage.jsp**

<html>

<body>

<h1>First Spring MVC Application Demo</h1>

<h2>${welcomeMessage}</h2>

</body>

</html>

**Main.class**

package com.hellocontroller;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import org.springframework.web.servlet.ModelAndView;

import org.springframework.web.servlet.mvc.AbstractController;

public class HelloController extends AbstractController{

@Override

protected ModelAndView handleRequestInternal(HttpServletRequest arg0, HttpServletResponse arg1)

throws Exception {

ModelAndView modelandview = new ModelAndView("HelloPage");

modelandview.addObject("welcomeMessage","Hi User, welocme to the first Spring MVC application");

return modelandview;

}

}

Output

**First Spring MVC Application Demo**

**Hi User, welocme to the first Spring MVC application**

2)Design and develop a Spring MVC web application as follows:

a.Design simpleInterest.jsp to capture principal amount, no. of years and rate of interestb.

SimpleInterestController will receive these inputs and calculates simple interest.

SimpleInterestController should return a view that contains simple interest.

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>Assignments1</display-name>

<servlet>

<servlet-name>spring-dispatcher</servlet-name>

<servlet-class>org.springframework.web.servlet.DispatcherServlet

</servlet-class>

<load-on-startup>1</load-on-startup>

</servlet>

<servlet-mapping>

<servlet-name>spring-dispatcher</servlet-name>

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

</servlet-mapping>

</web-app>

Servlet

<?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:p=*"http://www.springframework.org/schema/p"*

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"*>

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

<mvc:annotation-driven/>

<bean id=*"viewResolver"* class=*"org.springframework.web.servlet.view.InternalResourceViewResolver"*>

<property name = *"prefix"*>

<value>/WEB-INF/</value>

</property>

<property name = *"suffix"*>

<value>.jsp</value>

</property>

</bean>

</beans>

Interest.jsp

<html>

<body>

<h1>${headerMessage}</h1>

<h3> STUDENT APPLICATION FORM </h3>

<P>

<form action=*"/Assignment1/FinalValueOutput.html"* method=*"Post"*>

<p>

Principle amount:<input type=*"text"* name=*"Principle"*/>

</p>

<p>

Time of interest:<input type=*"text"* name=*"Time"*/>

</p>

<p>

Rate of interest:<input type=*"text"* name=*"Rate"*/>

</p>

<input type=*"submit"* value=*"submit by clicking here"*/>

</form>

</body>

</html>

Success.jsp

<html>

<body>

<h1>SIMPLE INTEREST</h1>

<h2> ${msg}</h2>

</body>

</html>

Main.class

**package** com.simpleinterest;

**import** org.springframework.stereotype.Controller;

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

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

**import** org.springframework.web.bind.annotation.RequestParam;

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

@Controller

**public** **class** simpleinterset {

@RequestMapping(value="/Details.html", method=RequestMethod.***GET***)

**public** ModelAndView getValue() {

ModelAndView model=**new** ModelAndView("interset");

**return** model;

}

@RequestMapping(value="/FinalValueOutput.html", method=RequestMethod.***POST***)

**public** ModelAndView SubmitValue(@RequestParam("Principle") Double P,

@RequestParam("Time") **float** T,@RequestParam("Rate") Double R) {

ModelAndView model=**new** ModelAndView("Success");

model.addObject("msg","SimpleInterest is:"+(P\*T\*R)/100);

**return** model;

}

}

Output:

### STUDENT APPLICATION FORM

Top of Form

Principle amount:

Time of interest:

Rate of interest:



Bottom of Form

# SIMPLE INTEREST

## SimpleInterest is:58.8

3)Design and develop a Spring MVC web application as follows:

a.Design a User model classhaving attributes username, password& email.

b.Design login.jsp to capture username and password (Use ModelAttribute)

c.UserController should receive the credentials and return “success” view if user is authenticated successfully, else return “error” view.

d.Design success.jsp and error.jsp

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>Assignment1</display-name>

<servlet>

<servlet-name>spring-dispatcher</servlet-name>

<servlet-class>org.springframework.web.servlet.DispatcherServlet

</servlet-class>

<load-on-startup>1</load-on-startup>

</servlet>

<servlet-mapping>

<servlet-name>spring-dispatcher</servlet-name>

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

</servlet-mapping>

</web-app>

Servlet

<?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:p=*"http://www.springframework.org/schema/p"*

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"*>

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

<mvc:annotation-driven/>

<bean id=*"viewResolver"* class=*"org.springframework.web.servlet.view.InternalResourceViewResolver"*>

<property name = *"prefix"*>

<value>/WEB-INF/</value>

</property>

<property name = *"suffix"*>

<value>.jsp</value>

</property>

</bean>

</beans>

loginDetails\_Main

**package** com.loginDetails;

**import** org.springframework.stereotype.Controller;

**import** org.springframework.web.bind.annotation.ModelAttribute;

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

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

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

@Controller

**public** **class** loginDetails {

@RequestMapping(value="/login.html", method=RequestMethod.***GET***)

**public** ModelAndView getValue() {

ModelAndView model=**new** ModelAndView("login");

**return** model;

}

@RequestMapping(value="/SuccessLogin.html", method=RequestMethod.***POST***)

**public** ModelAndView SubmitValue(@ModelAttribute("log") loginClass log, BindingResult result) {

**if**(result.hasFieldErrors()) {

ModelAndView model=**new** ModelAndView("error");

**return** model;

}

ModelAndView model=**new** ModelAndView("SuccessLogin");

**return** model;

}

}

Login.jsp

<html>

<body>

<h3> Enter Details To Login </h3>

<form:errors path=*"loginClass.\*"*/>

<P>

<form action=*"/Assignment1/SuccessLogin.html"* method=*"Post"*>

<p>

Enter the UserName:<input type=*"text"* name=*"username"*/>

</p>

<p>

Enter the Password:<input type=*"text"* name=*"password"*/>

</p>

<p>

Enter the Email:<input type=*"text"* name=*"email"*/>

</p>

<input type=*"submit"* value=*"submit by clicking here"*/>

</form>

</body>

</html>

Success.jsp

<html>

<body>

<h1>SUCCESSFULLy COMPLETED THE LOGIN CERDENTIALS</h1>

<table>

<tr>

<td>UserName:</td>

<td>${log.username}</td>

</tr>

<tr>

<td>Password:</td>

<td>${log.password}</td>

</tr>

<tr>

<td>EMail:</td>

<td>${log.email}</td>

</tr>

</table>

</body>

</html>

Error.jsp

<html>

<body>

<h1>RETRY!</h1>

</body>

</html>

4)Design and develop a Spring MVC web application as follows:

a.Design a User model class having attributes username, password & email.

b.Design registration.jsp to capture username, password and email. (Use ModelAttribute)

c.UserController should receive the details and store into a database. (Use JdbcTemplate). After successful registration, it should return login view.

d.Design login.jsp to capture username and password (Use ModelAttribute)

e.UserController should receive the credentials and return “success” view if user is authenticated successfully, else return “error” view.f.Design success.jsp and error.jsp

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>Assignment1</display-name>

<servlet>

<servlet-name>spring-dispatcher</servlet-name>

<servlet-class>org.springframework.web.servlet.DispatcherServlet

</servlet-class>

<load-on-startup>1</load-on-startup>

</servlet>

<servlet-mapping>

<servlet-name>spring-dispatcher</servlet-name>

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

</servlet-mapping>

</web-app>

Servlet

<?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:p=*"http://www.springframework.org/schema/p"*

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"*>

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

<mvc:annotation-driven/>

<bean id=*"viewResolver"* class=*"org.springframework.web.servlet.view.InternalResourceViewResolver"*>

<property name = *"prefix"*>

<value>/WEB-INF/</value>

</property>

<property name = *"suffix"*>

<value>.jsp</value>

</property>

</bean>

</beans>

Main-class