

```

package com.controller;

import java.util.Locale;

import org.springframework.context.annotation.Bean;
import org.springframework.context.annotation.Configuration;
import org.springframework.web.servlet.LocaleResolver;
import org.springframework.web.servlet.config.annotation.InterceptorRegistry;
import org.springframework.web.servlet.config.annotation.WebMvcConfigurerAdapter;
import org.springframework.web.servlet.i18n.LocaleChangeInterceptor;
import org.springframework.web.servlet.i18n.SessionLocaleResolver;

@Configuration
public class InternationalizationConfig extends WebMvcConfigurerAdapter {

    //Create a SessionLocaleResolver object and set the
    //default locale to English return the
    //SessionLocaleResolver object
    @Bean
    public LocaleResolver localeResolver() {
        SessionLocaleResolver slr = new
        SessionLocaleResolver();
        slr.setDefaultLocale(Locale.US);
        return slr;
    }

    //Create LocaleChangeInterceptor object and set the
    //parameter name as language and return the
    //LocaleChangeInterceptor
    @Bean
    public LocaleChangeInterceptor
    localeChangeInterceptor() {
        LocaleChangeInterceptor
        localeChangeInterceptor = new
        LocaleChangeInterceptor();

        localeChangeInterceptor.setParamName("language");
        return localeChangeInterceptor;
    }

    //register the LocaleChangeInterceptor
    @Override

```

```

        public void addInterceptors(InterceptorRegistry
registry) {

registry.addInterceptor(localeChangeInterceptor());

    }
}

```

```

#Do not edit the key server.port.Port number can be
changed
#include other needed configurations
server.port=9095
spring.mvc.view.prefix: /WEB-INF/jsp/
spring.mvc.view.suffix: .jsp

```

```

package com.controller;

import java.util.ArrayList;
import java.util.List;

import javax.validation.Valid;

import
org.springframework.beans.factory.annotation.Autowired
;
import org.springframework.stereotype.Controller;
import org.springframework.ui.ModelMap;
import org.springframework.validation.BindingResult;
import
org.springframework.web.bind.annotation.ModelAttribute
;
import
org.springframework.web.bind.annotation.RequestMapping
;
import
org.springframework.web.bind.annotation.RequestMethod;

import com.model.UserClaim;
import com.service.TaxServiceImpl;
@Controller
public class TaxController {
    @Autowired
    private TaxServiceImpl taxService;

    @RequestMapping(value="/getTaxClaimFormPage" ,
method=RequestMethod.GET)

```

```

        public String
claimPage(@ModelAttribute("userClaim") UserClaim
userClaim, BindingResult result) {
    return "taxclaim";
}
@RequestMapping(value="/calculateTax" ,
method=RequestMethod.GET)
    public String calculateTax(
@ModelAttribute("userClaim") @Valid UserClaim
userClaim, BindingResult result,ModelMap map) {

        if(result.hasErrors()) {

            return "taxclaim";
        }

        map.put("taxClaimAmount",
taxService.calculateTax(userClaim));

        return "result";
    }

    @ModelAttribute("expenseList")
    public List<String> populateExpense() {

        List<String> list=new ArrayList<>();
        list.add("MedicalExpense");
        list.add("TravelExpense");
        list.add("FoodExpense");
        return list;
    }
}

```

```

package com.service;
import org.springframework.stereotype.Service;
import com.model.UserClaim;

@Service
public class TaxServiceImpl implements TaxService{

    @Override
    public double calculateTax(UserClaim userClaim)
    {

        double taxamount=0.0;

```

```

        if
        (userClaim.getExpenseType().equalsIgnoreCase("MedicalExpense")) {

            if (userClaim.getExpenseAmt() < 1000)
            {

                taxamount=
userClaim.getExpenseAmt()*(0.15);

            }
            else if (userClaim.getExpenseAmt() >
1000 && userClaim.getExpenseAmt() < 10000) {
                taxamount=
userClaim.getExpenseAmt()*(0.20);
            }
            else {
                taxamount=
userClaim.getExpenseAmt()*(0.25);
            }

        } else if
        (userClaim.getExpenseType().equalsIgnoreCase("TravelExpense")) {

            if (userClaim.getExpenseAmt() < 1000)
            {

                taxamount=
userClaim.getExpenseAmt()*(0.10);
            }
            else if (userClaim.getExpenseAmt() >
1000 && userClaim.getExpenseAmt() < 10000) {
                taxamount=
userClaim.getExpenseAmt()*(0.15);
            }
            else {
                taxamount=
userClaim.getExpenseAmt()*(0.20);
            }

        } else {

            if (userClaim.getExpenseAmt() < 1000)
            {

                taxamount=
userClaim.getExpenseAmt()*(0.05);
            }
            else if (userClaim.getExpenseAmt() >
1000 && userClaim.getExpenseAmt() < 10000) {
                taxamount=
userClaim.getExpenseAmt()*(0.10);
            }
            else {
                taxamount=
userClaim.getExpenseAmt()*(0.15);
            }
        }
    }
}

```

```

        }

        return taxamount;
    }
}

```

```

package com.model;

import javax.validation.constraints.Min;
import javax.validation.constraints.NotEmpty;
import javax.validation.constraints.PositiveOrZero;
import javax.validation.constraints.Size;

import org.hibernate.validator.constraints.Range;

public class UserClaim {

    private String expenseType;
    @PositiveOrZero(message =
"{error.expenseAmount.negative}" )
    @Min(value = 0,message =
"{error.expenseAmount.numeric}")
    @Range(min = 1,message = "{error.expenseAmount}")
    )
    private double expenseAmt;
    @NotEmpty(message = "{error.employeeId}")
    @Size(min = 5,message =
"{error.employeeId.size}")
    private String employeeId;

    public String getExpenseType() {
        return expenseType;
    }
    public void setExpenseType(String expenseType) {
        this.expenseType = expenseType;
    }
    public double getExpenseAmt() {
        return expenseAmt;
    }
    public void setExpenseAmt(double expenseAmt) {
        this.expenseAmt = expenseAmt;
    }
    public String getEmployeeId() {
        return employeeId;
    }
    public void setEmployeeId(String employeeId) {
        this.employeeId = employeeId;
    }
}

```

```
}
```

```
label.employeeId=Employee ID in German  
label.expenseType=Expense Type in German  
label.expenseAmount=Expense Amount in German  
error.employeeId=Employee ID cannot be empty in German  
error.expenseAmount=Expense Amount cannot be empty in  
German  
error.expenseAmount.numeric=Expense amount should be  
numeric only in German  
error.expenseAmount.negative=Expense amount should not  
be a negative number in German  
error.employeeId.size=Employee ID should be at least 5  
characters in German
```

```
label.employeeId=Employee ID in French  
label.expenseType=Expense Type in French  
label.expenseAmount=Expense Amount in French  
error.employeeId=Employee ID cannot be empty in French  
error.expenseAmount=Expense Amount cannot be empty in  
French  
error.expenseAmount.numeric=Expense amount should be  
numeric only in French  
error.expenseAmount.negative=Expense amount should not  
be a negative number in French  
error.employeeId.size=Employee ID should be at least 5  
characters in French
```

```
package com.service;  
import org.springframework.stereotype.Service;  
import com.model.UserClaim;  
  
@Service  
public interface TaxService {  
  
    public double calculateTax(UserClaim userClaim);  
  
}
```

```

<%@ page language="java" contentType="text/html;
charset=ISO-8859-1"
    pageEncoding="ISO-8859-1" isELIgnored="false"%>
<%@ taglib prefix="spring"
uri="http://www.springframework.org/tags"%>
<%@ taglib prefix="form"
uri="http://www.springframework.org/tags/form"%>
<%@ taglib
uri="http://www.springframework.org/tags/form"
prefix="form"%>
<%@ taglib prefix="c"
uri="http://java.sun.com/jsp/jstl/core"%>

<!DOCTYPE html>
<html>

<body style="background-color: lavender">
    <h1 style="text-align: centre">Tax: Tax
Claim</h1>

    <a
href="/getTaxClaimFormPage?language=en">English</a>|<a
href="/getTaxClaimFormPage?language=de">German</a>|<a
href="/getTaxClaimFormPage?language=fr">French</a>

    <form:form method="GET" action="/calculateTax"
        modelAttribute="userClaim">

        <table>

            <tr>
                <td id="id1"><spring:message
code="label.employeeId" /></td>
                <td id="id2"><form:input
path="employeeId" id="employeeId" /></td>
                <td id="id3"><form:errors
path="employeeId" /></td>
            </tr>

            <tr>
                <td id="id4"><spring:message
code="label.expenseType" /></td>
                <td id="id5"><form:select
path="expenseType"
                    items="{expenseList}" id="expenseType" /></td>
            </tr>
        </table>
    </form>

```

```

                                <td id="id6"><form:errors
path="expenseType"/></td>
                                </tr>

                                <tr>
                                <td id="id7"><spring:message
code="label.expenseAmount" /></td>
                                <td id="id8"><form:input
path="expenseAmt" id="expenseAmt" /></td>
                                <td id="id9"><form:errors
path="expenseAmt"/></td>
                                </tr>
                                <tr><td><input type="Submit"
name="submit"
value="calculateTax"/></td><td></td></tr>
                                <tr><td><input type="reset" name="reset"
value="Clear"/></td><td></td></tr>
                                </table>
                                </form:form>
</body>
</html>

```

```

label.employeeId=Employee ID in English
label.expenseType=Expense Type in English
label.expenseAmount=Expense Amount in English
error.employeeId=Employee ID cannot be empty in
English
error.expenseAmount=Expense Amount cannot be empty in
English
error.expenseAmount.numeric=Expense amount should be
numeric only in English
error.expenseAmount.negative=Expense amount should not
be a negative number in English
error.employeeId.size=Employee ID should be at least 5
characters in English

```

```

<%@ page language="java" contentType="text/html;
charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html;
charset=ISO-8859-1">
<title>Tax Claim</title>

```



```

</head>
<body style="background-color: lavender">
    <h1 style="text-align: centre">Tax: Tax
Claim</h1>

    <h2>The tax claim for ${userClaim.expenseType}
with expense amount
    ${userClaim.expenseAmt} is
    ${taxClaimAmount}</h2>

</body>
</html>

```

```

package com;

import org.springframework.boot.SpringApplication;
import
org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.context.MessageSource;
import org.springframework.context.annotation.Bean;
import
org.springframework.context.annotation.ComponentScan;
import
org.springframework.context.support.ReloadableResource
BundleMessageSource;
import
org.springframework.validation.beanvalidation.LocalVal
idatorFactoryBean;

@SpringBootApplication
@ComponentScan({"com.controller","com.model","com.serv
ice"})
public class TmsApplication {

    public static void main(String[] args) {
        SpringApplication.run(TmsApplication.class,
args);
    }

    @Bean
    public MessageSource messageSource() {
        ReloadableResourceBundleMessageSource
messageSource = new
ReloadableResourceBundleMessageSource();

messageSource.setBasename("classpath:messages");
        messageSource.setDefaultEncoding("UTF-8");
    }
}

```

```

        return messageSource;
    }

    @Bean
    public LocalValidatorFactoryBean validator() {
        LocalValidatorFactoryBean bean = new
LocalValidatorFactoryBean();

        bean.setValidationMessageSource(messageSource());
        return bean;
    }
}

```

```

<%@ page language="java" contentType="text/html;
charset=ISO-8859-1"
    pageEncoding="ISO-8859-1" isELIgnored="false"%>
<%@ taglib prefix="spring"
uri="http://www.springframework.org/tags"%>
<%@ taglib prefix="form"
uri="http://www.springframework.org/tags/form"%>
<%@ taglib
uri="http://www.springframework.org/tags/form"
prefix="form"%>
<%@ taglib prefix="c"
uri="http://java.sun.com/jsp/jstl/core"%>

<!DOCTYPE html>
<html>

<body style="background-color: lavender">
    <h1 style="text-align: centre">Tax: Tax
Claim</h1>

    <a
href="/getTaxClaimFormPage?language=en">English</a>|<a
href="/getTaxClaimFormPage?language=de">German</a>|<a
href="/getTaxClaimFormPage?language=fr">French</a>

    <form:form method="GET" action="/calculateTax"
        modelAttribute="userClaim">

        <table>

```

```

        <tr>
            <td id="id1"><spring:message
code="label.employeeId" /></td>
            <td id="id2"><form:input
path="employeeId" id="employeeId" /></td>
            <td id="id3"><form:errors
path="employeeId" /></td>
        </tr>

        <tr>
            <td id="id4"><spring:message
code="label.expenseType" /></td>
            <td id="id5"><form:select
path="expenseType"

            items="${expenseList}" id="expenseType" /></td>
            <td id="id6"><form:errors
path="expenseType"/></td>
        </tr>

        <tr>
            <td id="id7"><spring:message
code="label.expenseAmount" /></td>
            <td id="id8"><form:input
path="expenseAmt" id="expenseAmount" /></td>
            <td id="id9"><form:errors
path="expenseAmt"/></td>
        </tr>
        <tr><td><input type="Submit"
name="submit" name="calculateClaim"
value="calculateTax"/></td><td></td></tr>
        <tr><td><input type="reset" name="reset"
value="Clear"/></td><td></td></tr>
    </table>
</form:form>
</body>
</html>

```