

# JSTL I18N/Formatting Tags

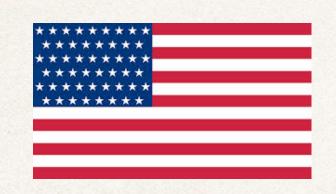


## Apply Internationalization

## Build a Multi-Lingual Application



## Multi-Lingual Application





Howdy

First Name *John* Last Name *Doe* 

Welcome to the training class.

Selected locale: en\_US



English (US) | Spanish (ES) | German (DE)

Hola

Nombre de pila *John* Apellido *Doe* 

Bienvenidos a la clase de formación.

Selected locale: es\_ES



English (US) | Spanish (ES) | German (DE)

Hallo

Vorname *John* Nachname *Doe* 

Willkommen in der Ausbildung Klasse.

Selected locale: de\_DE



## Formatting Messages



#### labels / placeholders

[greet]

[first\_name]: John

[last\_name]: Doe

[welcome\_message]

English (US) | Spanish (ES) | German (DE)

Hola

Nombre de pila *John* Apellido *Doe* 

Bienvenidos a la clase de formación.

Selected locale: es\_ES



#### To Do List

- Step 1: Create Resource Files
  - Translated versions of your labels

• Step 2: Create JSP Page with labels

• Step 3: Update JSP page to change locale based on user selection



- Translated versions of your labels
  - You will need to use Google Translate or similar translator service

• Must name the file using the locale



#### What is a Locale?

### Locale = Language Code + Country Code

- There are differences for a language depending on the country
- For example
  - English (US)
  - English (GB)



- File name must follow specific format
  - <your project file name>\_LANGUAGECODE\_COUNTRYCODE.properties
- Examples:
  - mylabels\_es\_ES.properties
  - mylabels\_de\_DE.properties
  - mylabels\_en\_GB.properties



- Language Codes based on ISO Standard 639-1 (2 letter code)
  - https://en.wikipedia.org/wiki/ISO\_639-1

- Country Codes based on ISO Standard 3166-2 (2 letter code)
  - https://en.wikipedia.org/wiki/ISO\_3166-2



• Here's an example for the locale: Spanish - Spain

File: mylabels\_es\_ES.properties

```
label.greeting=Hola
label.firstname=Nombre de pila
label.lastname=Apellido
label.welcome=Bienvenidos a la clase de formación.
```



# Step 2: Create JSP page with labels

File: i18n-messages-test.jsp

<fmt:message key="label.greeting" /> <br/><br/>

<fmt:message key="label.firstname" /> <i>John</i> <br/><br/>

<fmt:message key="label.lastname" /> <i>Doe</i> <br/><br/>

<fmt:message key="label.welcome" /> <br/>

Howdy

First Name *John* Last Name *Doe* 

Welcome to the training class.

Hola

Nombre de pila *John* Apellido *Doe* 

Bienvenidos a la clase de formación.



#### Step 3: Update JSP page to change locale based on user selection

• Our JSP page will send links to itself

• Will pass the locale as a parameter

English (US) | Spanish (ES) | German (DE)

Howdy

First Name John



#### Step 3: Update JSP page to change locale based on user selection

```
<a href="i18n-messages-test.jsp?theLocale=en_US">English (US)</a> |
<a href="i18n-messages-test.jsp?theLocale=es_ES">Spanish (ES)</a> |
<a href="i18n-messages-test.jsp?theLocale=de_DE">German (DE)</a>
```

English (US) | Spanish (ES) | German (DE)

Howdy

First Name John



#### Step 3: Update JSP page to change locale based on user selection

```
<c:set var="theLocale"
    value="${not empty param.theLocale ? param.theLocale : pageContext.request.locale}"
    scope="session" />
<fmt:setLocale value="${theLocale}" />
<fmt:setBundle basename="com.luv2code.jsp.tagdemo.i18n.resources.mylabels" />
```





# JSTL I18N/Formatting Tags

