

Themes in Spring MVC

- Static resources - CSS, images
- Why is a theme required?
- Define theme using
`org.springframework.ui.context.ThemeSource`
- Default implementation is `ResourceBundleThemeSource`
- `ThemeResolver` facilitates resolution

▶ ⏮ ⏪ ⏩ ⏭ 1:48 / 1:48

1.25x ⏮ ⏪ ⏩ ⏭

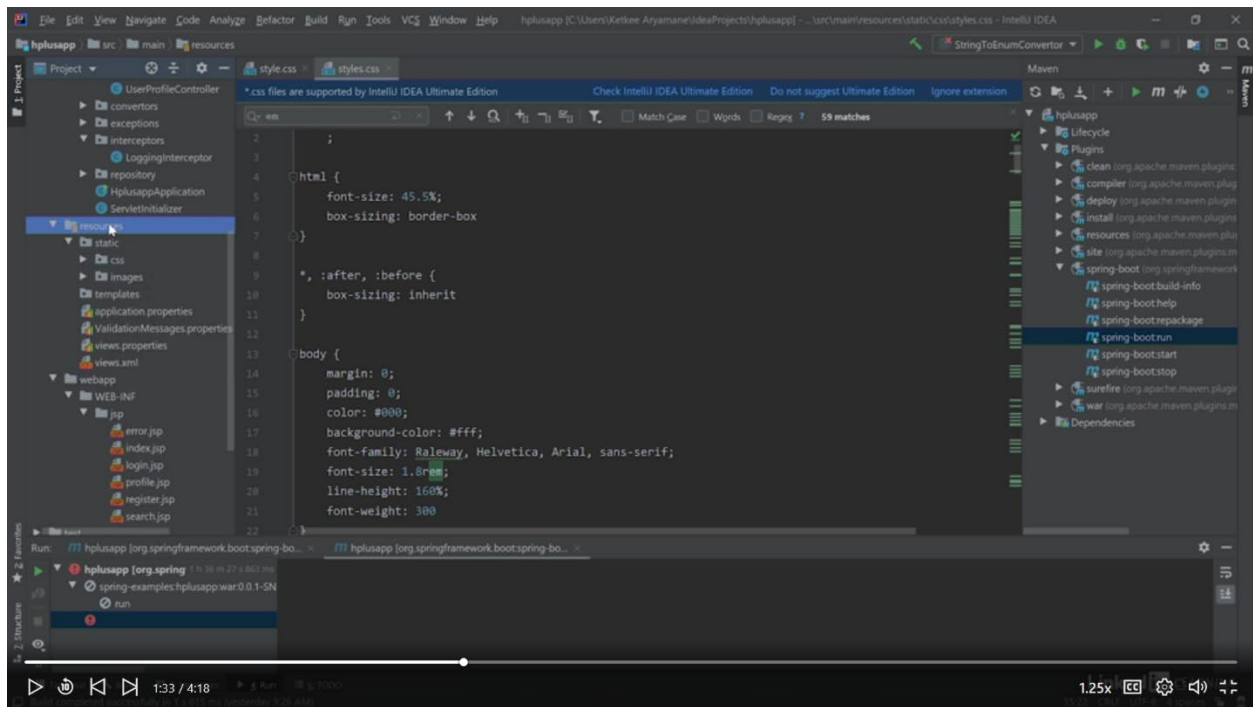
Spring MVC Resolving Themes Demo

- Define two separate themes (CSS resources)
- Define respective properties files for those themes

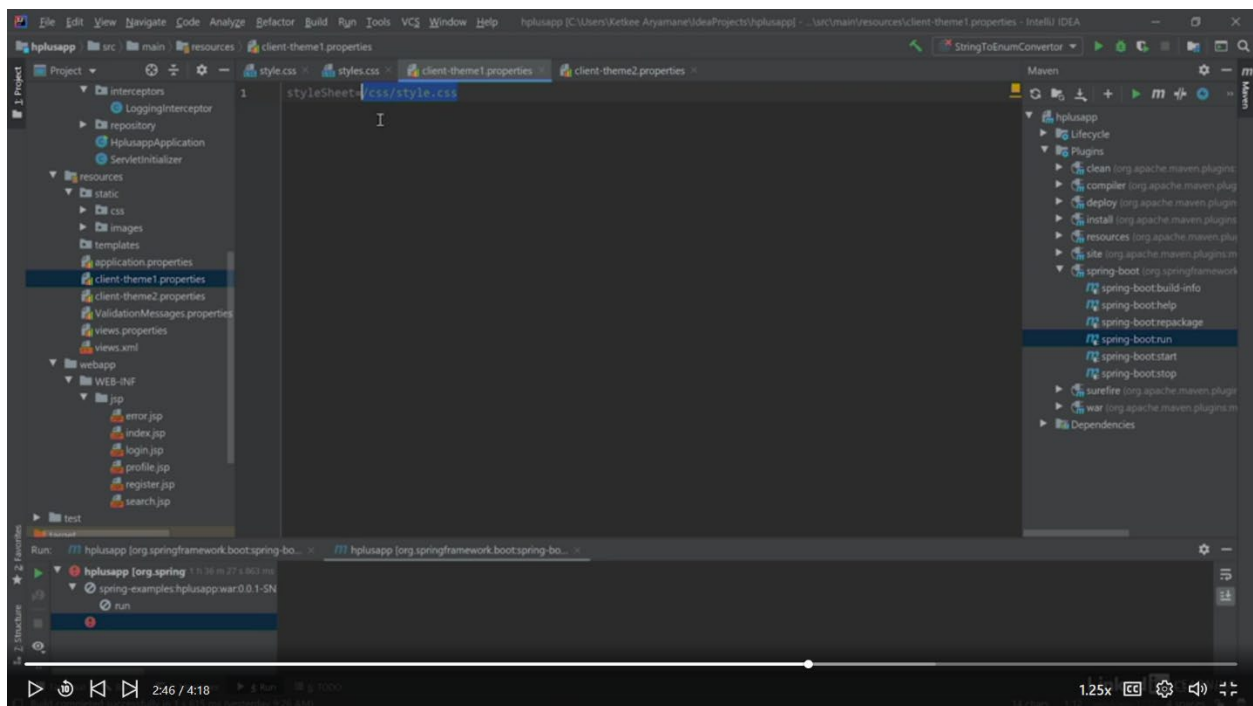
▶ ⏮ ⏪ ⏩ ⏭ 1:27 / 4:18

1.25x ⏮ ⏪ ⏩ ⏭

Different style.css namely style.css and styles.css



Create two different properties file client-theme1 and client-theme2 with stylesheet pointing to the two different css style sheet.



Spring MVC Resolving Themes Demo

- Define two separate themes (CSS resources)
- Define respective properties files for those themes
- Use one of ThemeResolver to decide which theme to use:
 - CookieThemeResolver
 - SessionThemeResolver
 - FixedThemeResolver

We are going to use CookieThemeResolver. Goto ApplicationConfig class and create a Bean that will give a ThemeResolver

```
@Bean
public ThemeResolver themeResolver(){
    CookieThemeResolver cookieThemeResolver = new CookieThemeResolver();
    cookieThemeResolver.setCookieName("theme");
    cookieThemeResolver.setDefaultThemeName("client-theme1");
    return cookieThemeResolver;
}
```

Spring MVC Resolving Themes Demo

- Configure ThemeChangeInterceptor to tap a change in theme value for every request

Register a ThemeChangeInterceptor inside ApplicationConfig class an implementation provided by Spring itself

```
@Override
protected void addInterceptors(InterceptorRegistry registry) {
    registry.addInterceptor(new LoggingInterceptor()).addPathPatterns("/*");
    registry.addInterceptor(new ThemeChangeInterceptor());
}
```

Spring MVC Resolving Themes Demo

- Configure ThemeChangeInterceptor to tap a change in theme value for every request
- Use <spring:theme/> to refer themed keys from .properties file on the JSP

Add the spring tag library in index.jsp

```
<!DOCTYPE html>
<%@ page contentType="text/html; charset=UTF-8" %>
<%@ taglib prefix="spring" uri="http://www.springframework.org/tags" %>
<head>
```

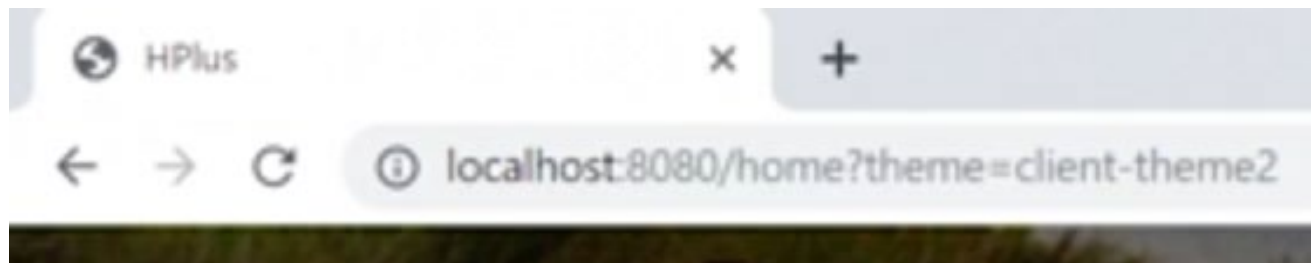
Change the link rel tag to respond the change theme

```
<link rel="stylesheet" href="<spring:theme code='styleSheet' />" type="text/css"/>
```

Spring MVC Resolving Themes Demo

- Configure ThemeChangeInterceptor to tap a change in theme value for every request
- Use `<spring:theme/>` to refer themed keys from .properties file on the JSP
- Build and run the application

Change the url query pattern as

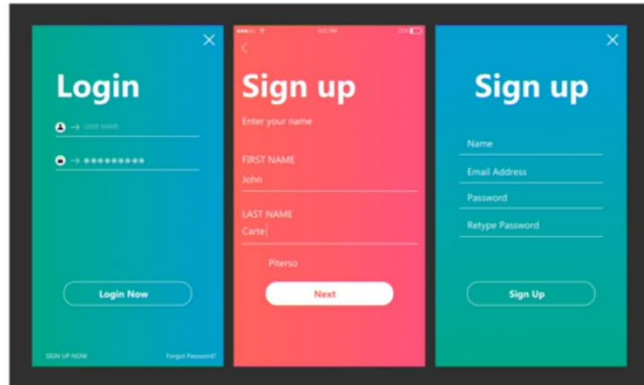
A screenshot of the H+ Sport website. The website has a dark header with the 'h+ sport' logo on the left and navigation links 'home', 'login', 'search', 'linkedin' on the right. The main content area features a large image of a road and a car wheel, with text: 'We support and encourage **active and healthy** lifestyles, by offering **ethically sourced** and **eco-friendly** nutritional products for the **performance-driven** athlete.' Below this is a yellow section titled 'COMPANY HISTORY' with the text: 'In 2006, H+ Sport founder **Henry Twill** set out to create supplements and nutritional products made from the'. A photo of a smiling man is visible on the right side of the yellow section. At the bottom, there is a table showing application data.

Name	Value	Domain	Path	Expires / M...	Size	HttpOnly	Secure	SameSite
JSESSIONID	DDFE801F9F9EEFF5A53DD47B4E0DEB27	localhost	/	Session	42	✓		
theme	client-theme2	localhost	/	Session	18			

L10n and i18n with Spring MVC

I10n and i18n with Spring MVC

- Localize/externalize messages and labels for an application
- Why?



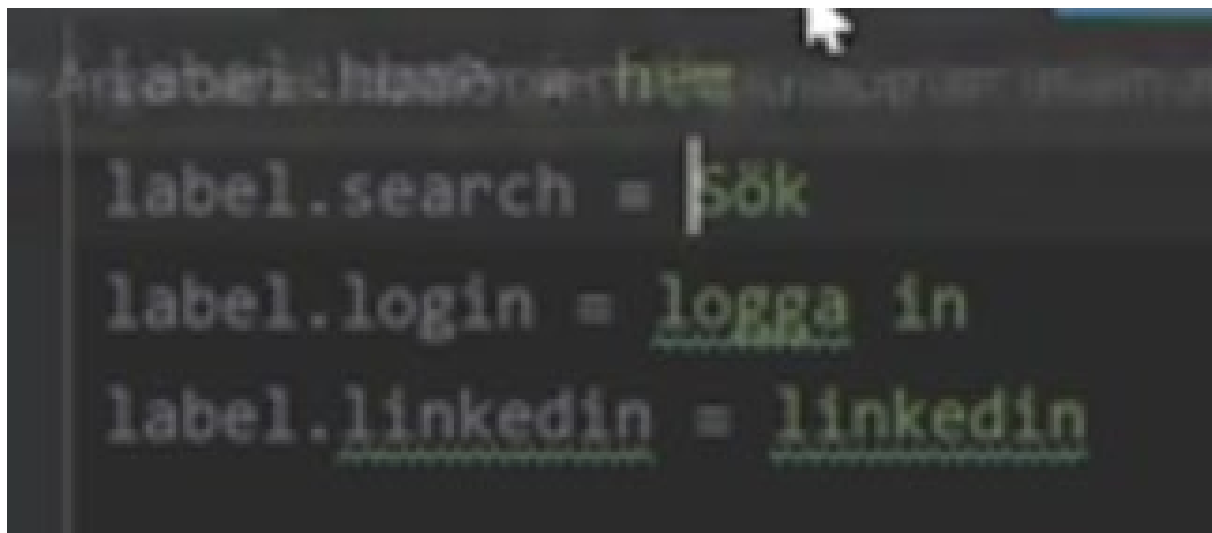
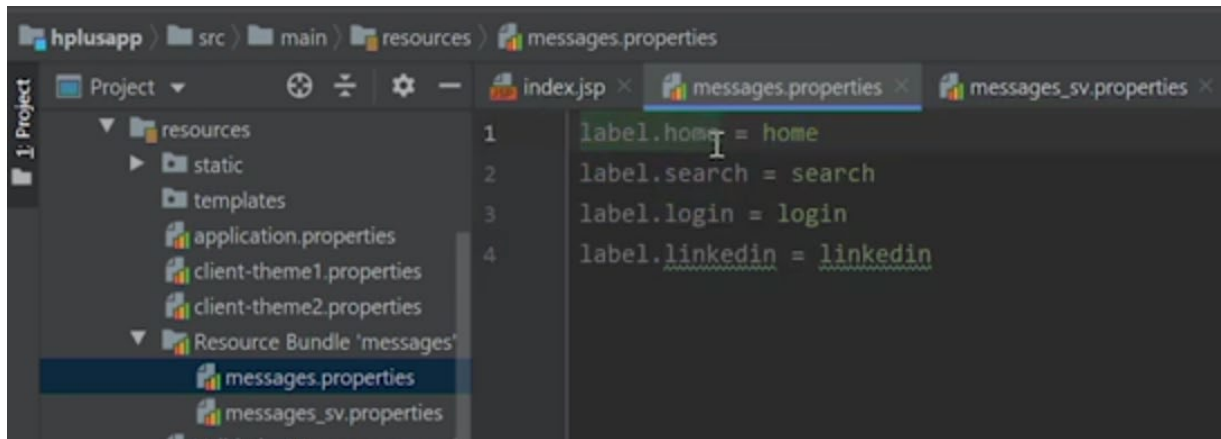
Automatic Locale Resolution

- LocaleResolver into play
- Default implementation: AcceptHeaderLocaleResolver

Automatic Locale Resolution Demo

- Add message properties files for different locales on classpath

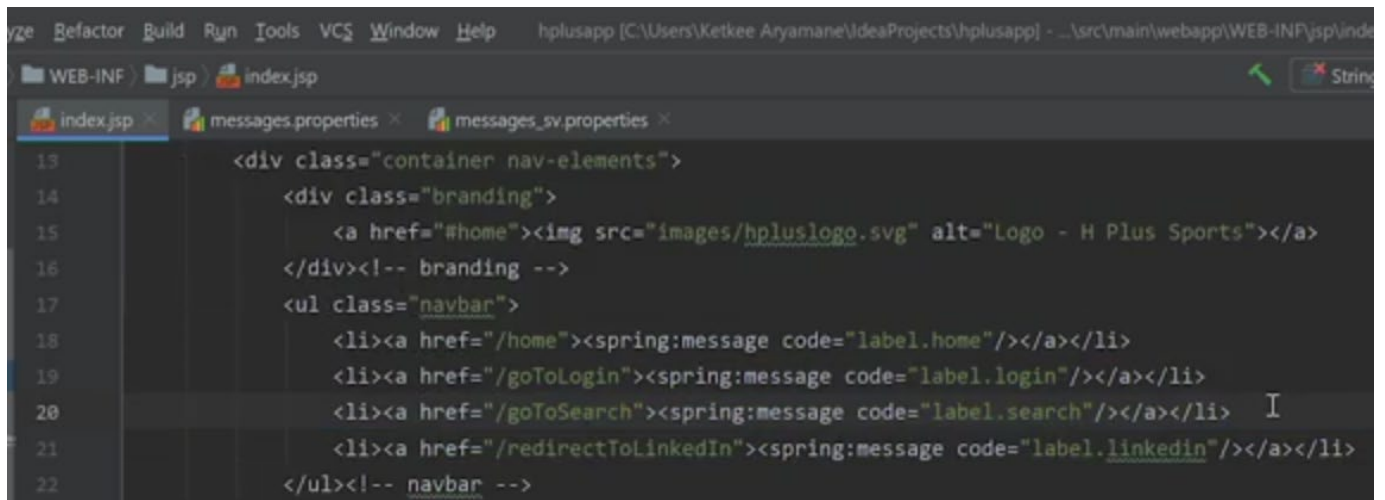
Adding two properties file for messaging one messages.properties for English language and one messages_sv.properties for Swidish



Automatic Locale Resolution Demo

- Add message properties files for different locales on classpath
- Define key-value properties for labels and error messages
- Use Spring tags to resolve keys

Adding Spring:message tag for internationalization in index.jsp



```
13      <div class="container nav-elements">
14          <div class="branding">
15              <a href="#home"></a>
16          </div><!-- branding -->
17          <ul class="navbar">
18              <li><a href="/home"><spring:message code="label.home"/></a></li>
19              <li><a href="/goToLogin"><spring:message code="label.login"/></a></li>
20              <li><a href="/goToSearch"><spring:message code="label.search"/></a></li>
21              <li><a href="/redirectToLinkedIn"><spring:message code="label.linkedin"/></a></li>
22          </ul><!-- navbar -->
```

Automatic Locale Resolution Demo

- Add message properties files for different locales on classpath
- Define key-value properties for labels and error messages
- Use Spring tags to resolve keys
- Build and run the application

Now in browser add Swedish language by going to the setting of the browser and access the link

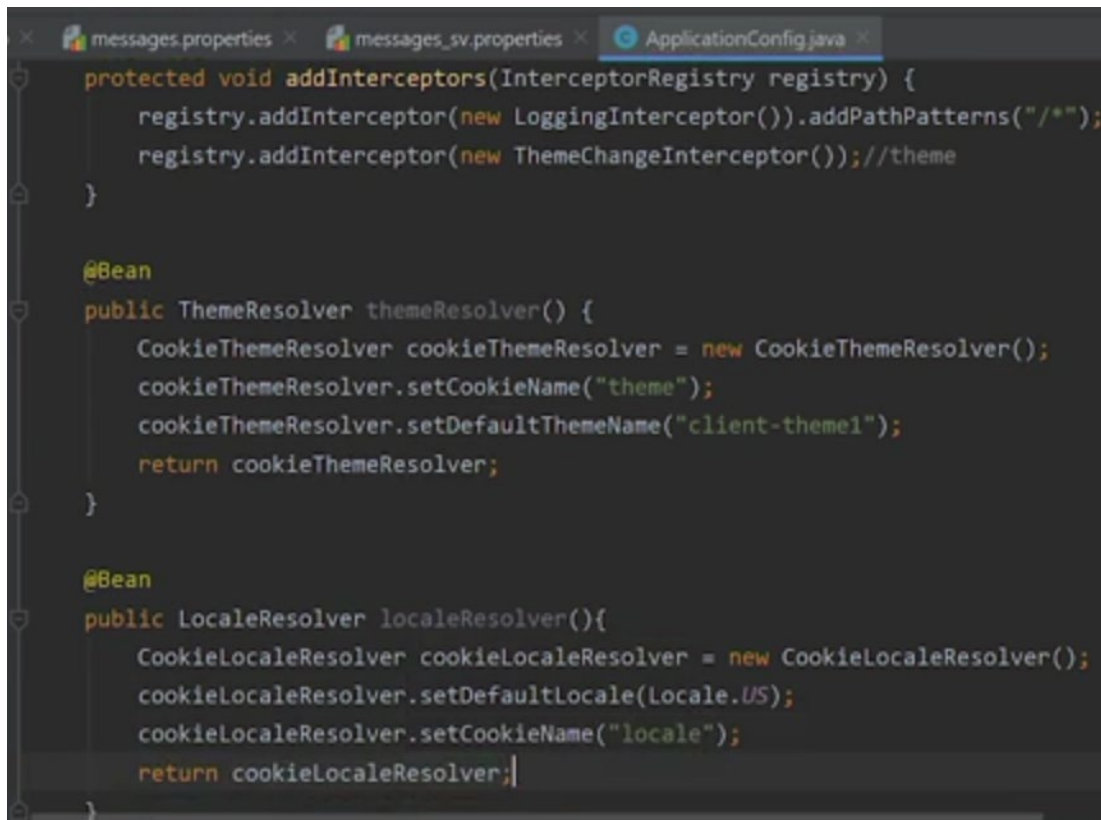
<http://localhost:8080/home?theme=client-theme2>

<http://localhost:8080/home>

Locale Resolution with Interceptors

- CookieLocaleResolver, SessionLocaleResolver
- Add CookieLocaleResolver to enable the resolution through a cookie

Create a LocaleResolver Bean in ApplicationConfig class



```
protected void addInterceptors(InterceptorRegistry registry) {
    registry.addInterceptor(new LoggingInterceptor()).addPathPatterns("/*");
    registry.addInterceptor(new ThemeChangeInterceptor()); // theme
}

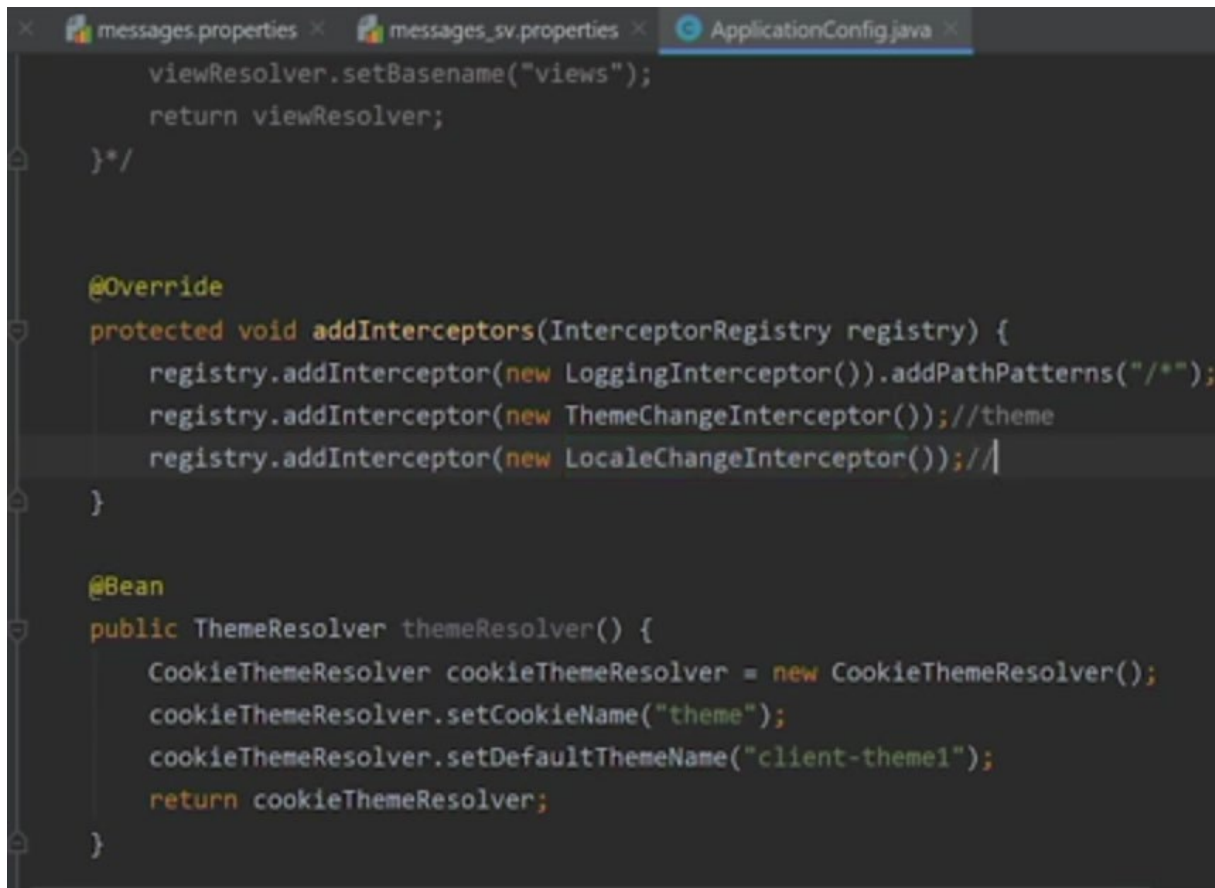
@Bean
public ThemeResolver themeResolver() {
    CookieThemeResolver cookieThemeResolver = new CookieThemeResolver();
    cookieThemeResolver.setCookieName("theme");
    cookieThemeResolver.setDefaultThemeName("client-theme1");
    return cookieThemeResolver;
}

@Bean
public LocaleResolver localeResolver(){
    CookieLocaleResolver cookieLocaleResolver = new CookieLocaleResolver();
    cookieLocaleResolver.setDefaultLocale(Locale.US);
    cookieLocaleResolver.setCookieName("locale");
    return cookieLocaleResolver;
}
```

Locale Resolution with Interceptors

- CookieLocaleResolver, SessionLocaleResolver
- Add CookieLocaleResolver to enable the resolution through a cookie
- Add LocaleChangeInterceptor to intercept language parameter passed as query parameter

Register the interceptor via addInterceptor method in ApplicationConfig class



```
viewResolver.setBasename("views");
return viewResolver;
}*/

@Override
protected void addInterceptors(InterceptorRegistry registry) {
    registry.addInterceptor(new LoggingInterceptor()).addPathPatterns("/*");
    registry.addInterceptor(new ThemeChangeInterceptor()); //theme
    registry.addInterceptor(new LocaleChangeInterceptor()); //l
}

@Bean
public ThemeResolver themeResolver() {
    CookieThemeResolver cookieThemeResolver = new CookieThemeResolver();
    cookieThemeResolver.setCookieName("theme");
    cookieThemeResolver.setDefaultThemeName("client-theme1");
    return cookieThemeResolver;
}
```

Locale Resolution with Interceptors

- CookieLocaleResolver, SessionLocaleResolver
- Add CookieLocaleResolver to enable the resolution through a cookie
- Add LocaleChangeInterceptor to intercept language parameter passed as query parameter
- Build and run the application using the query parameter

Now in browser add Swedish language by going to the setting of the browser and access the link

<http://localhost:8080/home?locale=sv>