http://www.lycato.com

Layout & i18n

Nguyễn Nghiệm

AGENDA

- FRAGMENT
- LAYOUT
- INTERNATIONALIZATION

https://www.thymeleaf.org/doc/tutorials/3.0/usingthymeleaf.html

Fragment

Fragment Directives & Expressions

- th:**fragment**
  - Định nghĩa fragment
- th:**replace**
  - Thay thế thẻ bằng fragment
- th:**insert**
  - Chèn fragment vào nội dung thẻ
- th:**remove**
  - Xóa thẻ

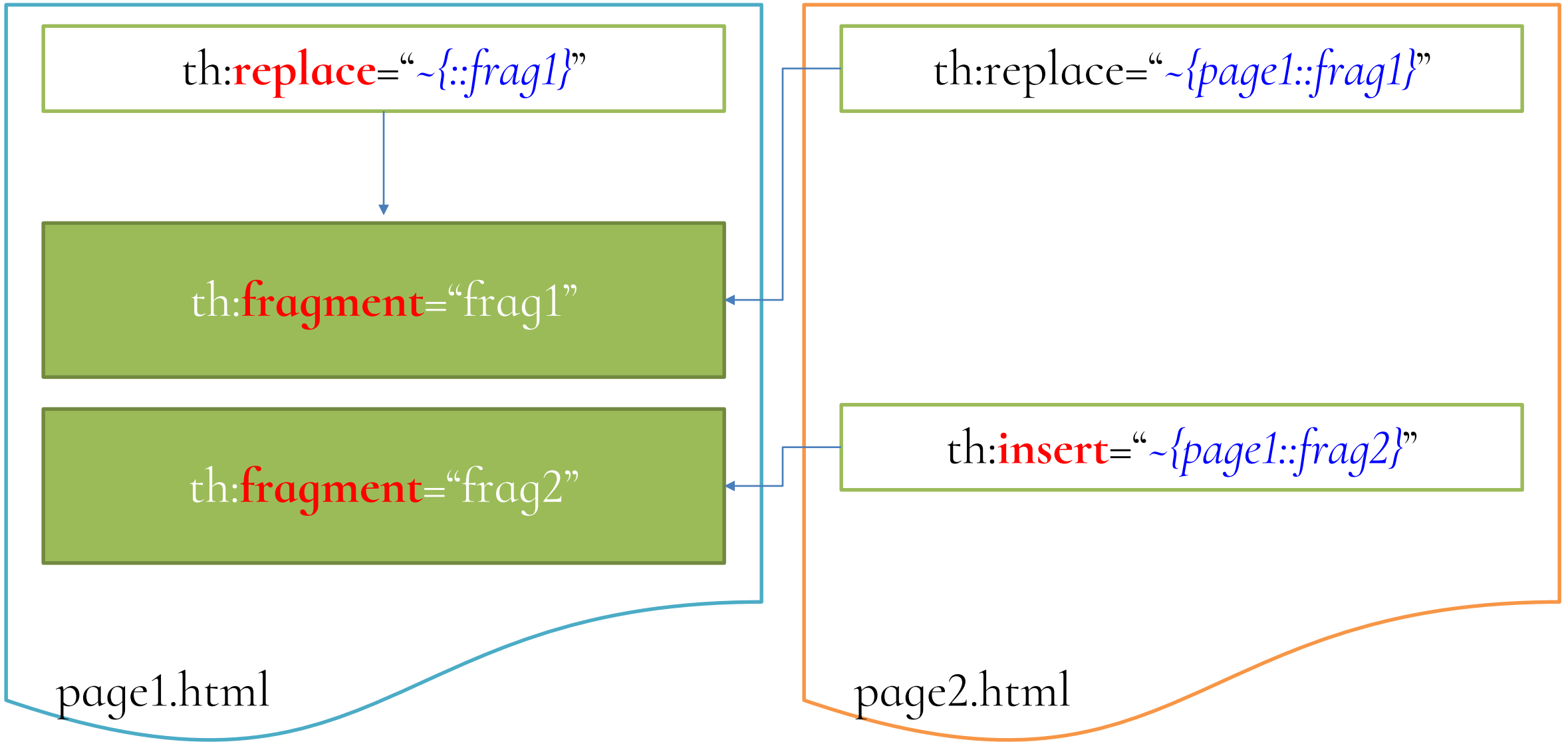
page1.html

```
<tag th:insert="~{::frag}">...</tag>

<tag th:replace="~{::frag}">...</tag>

<tag th:remove="all">
    <tag th:fragment="frag">...</tag>
</tag>
```

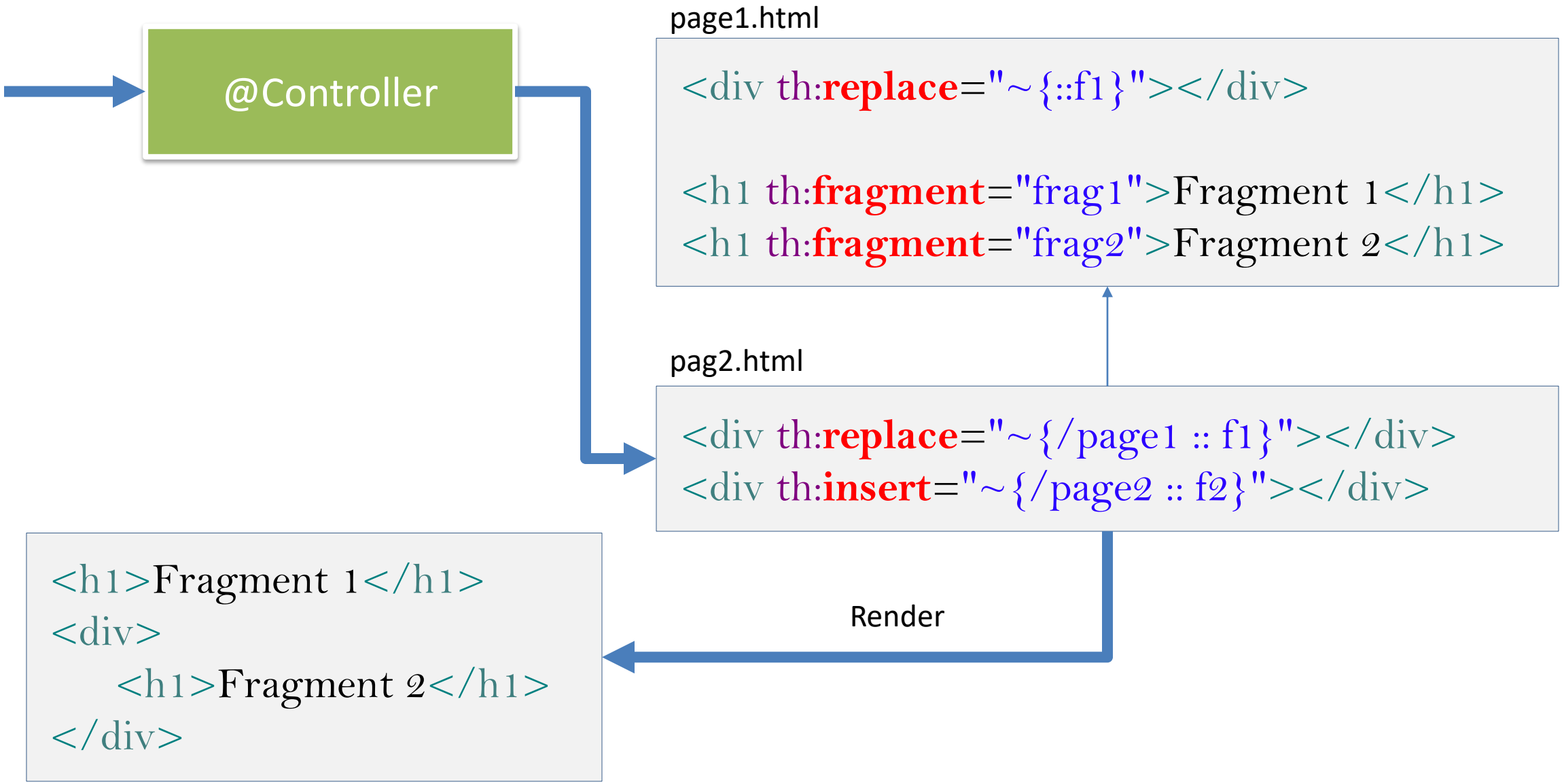
page2.html

```
<tag th:insert="~{page1::frag}">...</tag>

<tag th:replace="~{page1::frag}">...</tag>
```

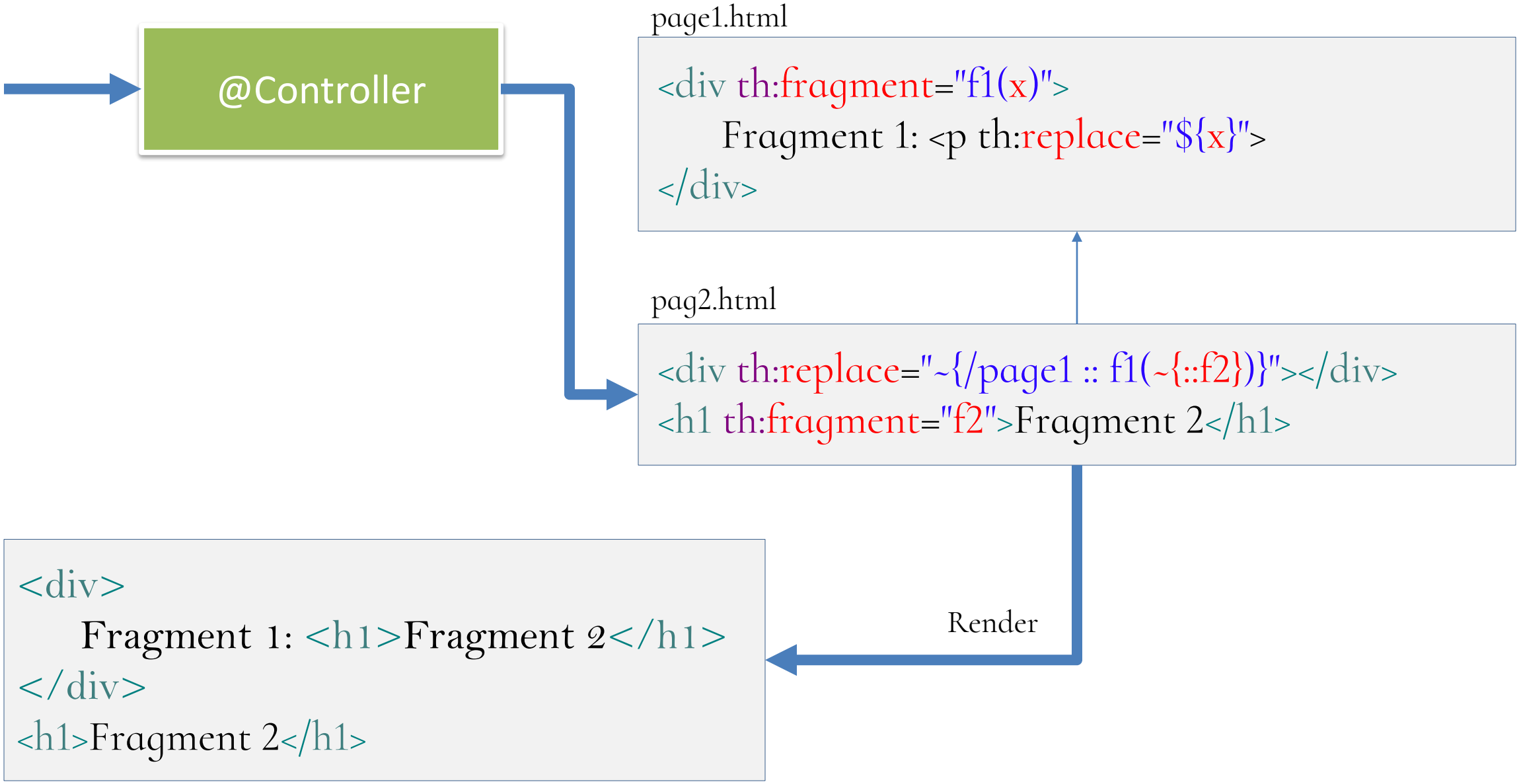
WHAT IS FRAGMENT?



THYMELEAF FRAGMENT

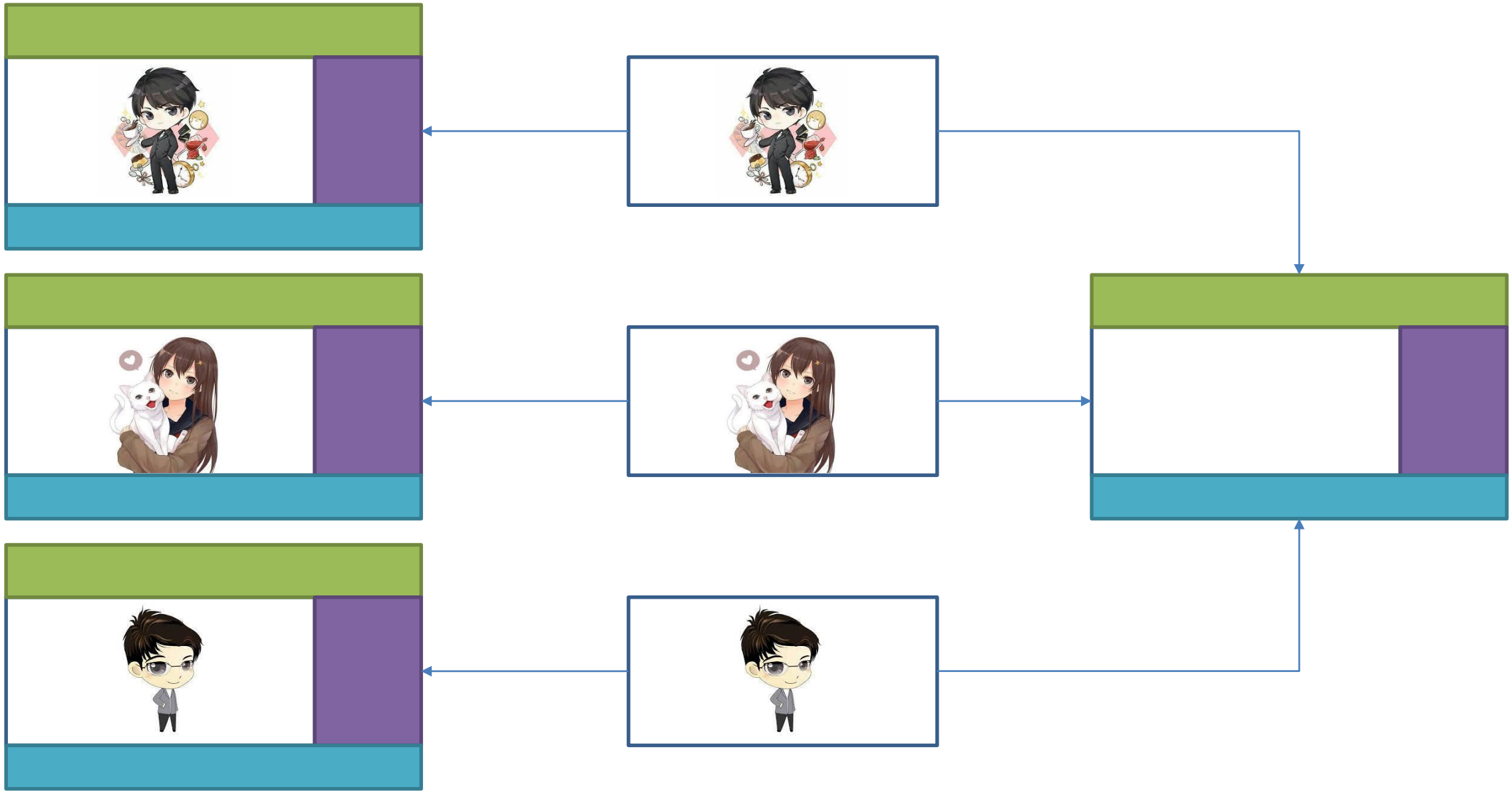


FRAGMENT PARAMETERS



Layout

Layout


Result
Dynamic Content
Template

LAYOUT

layout.html

th:fragment="dynamic(view)"

<header>

th:replace="${view}"

<aside>

<footer>

th:replace="layout::dynamic(~{::view})"

th:fragment="view"

page1.html

th:replace="layout::dynamic(~{::view})"

th:fragment="view"

page2.html

th:replace="layout::dynamic(~{::view})"

th:fragment="view"

page3.html

TỔ CHỨC LAYOUT

```
<html xmlns:th="http://www.thymeleaf.org"
          th:fragment="dynamic(view)">
<head>...</head>
<body>
   <header>...</header>
     <div>
        <article th:replace="${view}"></article>
        <aside>...</aside>
   </div>
   <footer>...</footer>
</body>
</html>
```

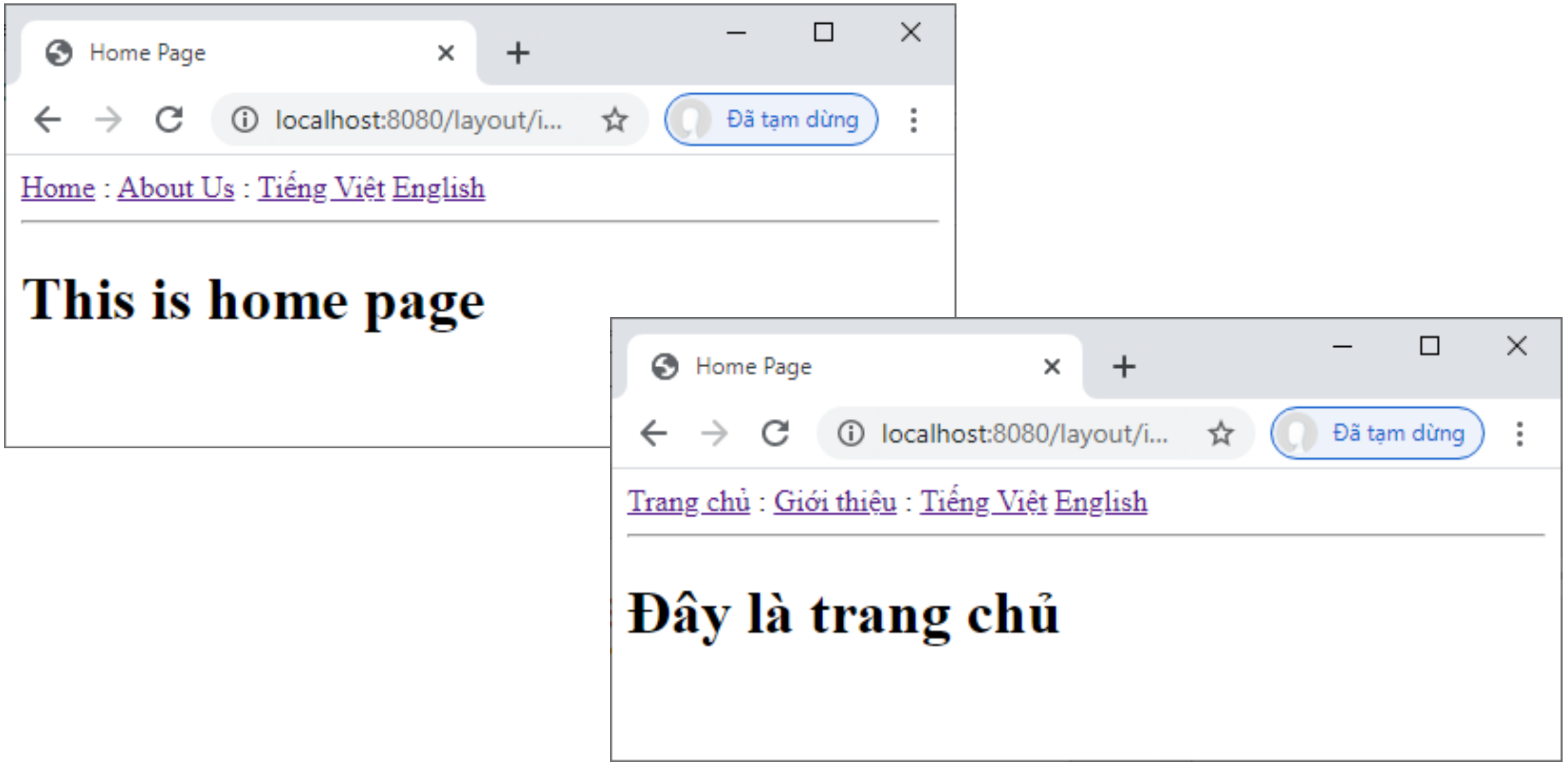
layout.html

```
<html xmlns:th="http://www.thymeleaf.org"
     th:replace="~{layout :: dynamic(~{::view})}">
<body>
     <div th:fragment="view">
          <h1>Hotgirl</h1>
          <img src="hotgirl.png">
     </div>
</body>
</html>
```

page.html

Internationalization

INTERNATIONALIZATION CASE STUDY



INTERNATIONALIZATION

MessageSource

- Message.properties

Select & Display Message

- LocaleResolver

Change Language

- Locale Change Interceptor

menu_vi.properties

```
menu.home=Trang chủ
menu.about=Giới thiệu
page.home=Đây là trang chủ
page.about=Đây là trang giới thiệu
```

menu_en.properties

```
menu.home=Home
menu.about=About Us
page.home=This is home page
page.about=This is about us page
```

```
@Configuration
public class MessageConfig {
    @Bean("messageSource")
    public MessageSource getMessageSource() {
        ReloadableResourceBundleMessageSource msg
                            = new ReloadableResourceBundleMessageSource();
        msg.setDefaultEncoding("utf-8");
        msg.setBasenames("classpath:messages/menu");
        return msg;
    }
}
```

```
@Configuration
public class MessageConfig {
    @Bean("messageSource")
    public MessageSource getMessageSource() {...}
    @Bean("localeResolver")
    public LocaleResolver getLocaleResolver() {
        CookieLocaleResolver resolver = new CookieLocaleResolver();
        resolver.setDefaultLocale(new Locale("vi"));
        resolver.setCookiePath("/");
        resolver.setCookieMaxAge(5 * 24 * 60 * 60); //5 days
        return resolver;
    }
}
```

2.2 Display Message

```
...
<a href="/layout/index" th:text="#{menu.home}"></a> :
<a href="/layout/about" th:text="#{menu.about}"></a> :
<a href="">Tiếng Việt</a>
<a href="">English</a>
...
```

menu.html

```
...
<h1 th:text="#{menu.home}"></h1>
...
```

home.html

```
...
<h1 th:text="#{menu.about}"></h1>
...
```

about.html

3.1 LocaleChangeInterceptor

```
@Configuration
public class MessageConfig implements WebMvcConfigurer {
    @Bean("messageSource")
    public MessageSource getMessageSource() {...}
    @Bean("localeResolver")
    public LocaleResolver getLocaleResolver() {...}
    @Override
    public void addInterceptors(InterceptorRegistry registry) {
        LocaleChangeInterceptor localeChange = new LocaleChangeInterceptor();
        localeChange.setParamName("lang");
        registry.addInterceptor(localeChange).addPathPatterns("/**");
    }
}
```

```
<a href="?lang=vi">Tiếng Việt</a>
<a href="?lang=en">English</a>
```

3.2 CHANGE LANGUAGE REQUEST

```
...
<a href="/home/set-lang?lang=vi">Tiếng Việt</a>
<a href="/home/set-lang?lang=en">English</a>
...
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
<script>
$(document).ready(function(){
    $("a[href*=lang]").click(function(){
        var url = $(this).attr("href");
        $.get(url).then(resp => location.reload());
    });
})
</script>
```

TỔNG KẾT

- ☑ Xây dựng Layout
  - ☑ th:fragment
  - ☑ th:insert
  - ☑ th:replace
  - ☑ th:remove
- ☑ I18N
  - ☑ Resourses
    - ☑ .properties
    - ☑ @Configuration
  - ☑ Display
    - ☑ #{key}
    - ☑ LocaleResolver
  - ☑ Change language
    - ☑ LocaleChangeInterceptor
    - ☑ @href="?lang=vi"