thymeleaf-ee (0.0.1)

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Travis CI status: [Build Status]

# **Chapter 1. Introduction**

This repo contains example of Thymeleaf and Java EE integration

Read GitHub pages project reference documentation

generated by generator-jvm yeoman generator (java-ee-thymeleaf)

## Chapter 2. Implementation

### 2.1. create Java EE project

I'm using my yo generator-jvm generator package (type: java-ee, name thymeleaf-ee):

```
npm i -g yo generator generator-jvm
yo jvm -t java-ee -n thymeleaf-ee
```

#### beans.xml

### 2.2. add thymeleaf and mvc 1.0 spec dependencies

```
<dependencies>
  <dependency>
    <groupId>javax.mvc</groupId>
    <artifactId>javax.mvc-api</artifactId>
    <version>1.0-pr</version>
  </dependency>
  <dependency>
    <groupId>org.mvc-spec.ozark</groupId>
    <artifactId>ozark-resteasy</artifactId>
    <version>1.0.0-m03
  </dependency>
  <dependency>
    <groupId>org.mvc-spec.ozark.ext</groupId>
    <artifactId>ozark-thymeleaf</artifactId>
    <version>1.0.0-m03
    <exclusions>
      <exclusion>
       <groupId>org.thymeleaf</groupId>
       <artifactId>thymeleaf</artifactId>
      </exclusion>
    </exclusions>
  </dependency>
  <dependency>
    <groupId>org.thymeleaf</groupId>
    <artifactId>thymeleaf</artifactId>
    <version>3.0.9.RELEASE
  </dependency>
</dependencies>
```

#### gardle

```
allprojects {
  dependencies {
   implementation 'org.webjars:jquery:3.3.1-1'
   implementation 'org.webjars:material-design-icons:3.0.1'
   implementation 'org.webjars:materializecss:0.100.2'

  implementation 'javax.mvc:javax.mvc-api:1.0-pr'
  implementation 'org.mvc-spec.ozark:ozark-resteasy:1.0.0-m03'
  implementation 'org.mvc-spec.ozark.ext:ozark-thymeleaf:1.0.0-m03', {
    exclude group: 'org.thymeleaf', module: 'thymeleaf'
   }
  implementation 'org.thymeleaf:thymeleaf:3.0.9.RELEASE'
}
```

### 2.3. configure thymeleaf

configure Thymeleaf view resolver

```
@Slf4j
@ApplicationScoped
public class ThymeleafViewEngine extends ViewEngineBase {
 @Inject ServletContext servletContext;
 TemplateEngine engine;
 @Override
 public boolean supports(final String view) {
    return !view.contains(".");
 }
 @PostConstruct
 public void postConstruct() {
    final ServletContextTemplateResolver resolver = new
ServletContextTemplateResolver(servletContext);
    resolver.setPrefix("/WEB-INF/layouts/");
    resolver.setSuffix(".html");
    resolver.setTemplateMode(TemplateMode.HTML);
    resolver.setCacheable(false);
    engine = new TemplateEngine();
    engine.setTemplateResolver(resolver);
 }
 @Override
 public void processView(ViewEngineContext context) throws ViewEngineException {
    Try.run(() -> {
      final HttpServletRequest request = context.getRequest();
      final HttpServletResponse response = context.getResponse();
      final WebContext webContext = new WebContext(request, response, servletContext,
request.getLocale());
      webContext.setVariables(context.getModels());
      request.setAttribute("view", context.getView());
      engine.process(/*default layout*/ "default", webContext, response.getWriter());
    }).getOrElseThrow(ViewEngineException::new);
 }
}
```

#### 2.4. create MVC controller

#### resteasy controller

```
@Path("")
@Controller
@Produces(TEXT_HTML)
public class IndexPage {

    @Inject Models models;

    @GET
    @Path("")
    public String indexView() {
        models.put("message", "Hello, World!");
        models.put("data", asList("ololo", "trololo"));
        return "index";
    }
}
```

## 2.5. add default (basic) pages layout

```
<!doctype html>
<html lang="en"
     xmlns="http://www.w3.org/1999/xhtml"
     xmlns:th="http://www.thymeleaf.org">
<head>
 <meta charset="UTF-8">
 <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <meta http-equiv="X-UA-Compatible" content="IE=Edge" />
 <title>Template | Thymeleaf EE</title>
 <link rel="icon" type="image/x-icon" th:href="@{/assets/favicon.ico}" />
  <link rel="stylesheet" type="text/css" th:href="@{/webjars/material-design-</pre>
icons/3.0.1/material-icons.css}"
       href="/webjars/material-design-icons/3.0.1/material-icons.css"/>
 <link rel="stylesheet" type="text/css" th:href=</pre>
"@{/webjars/materializecss/0.100.2/css/materialize.min.css}"
       href="/webjars/materializecss/0.100.2/css/materialize.css"/>
 <link rel="stylesheet" type="text/css" th:href="@{/assets/styles.css}" />
 <!-- custom styles will be added here...->
 <th:block th:include="${view} :: header" />
</head>
<body>
<div th:text="${message}">Here should be some basic message...</div>
th:text="${item}">
<!-- custom view specific stuff: -->
<div th:replace="${view} :: content"></div>
<script th:src="@{/webjars/jquery/3.3.1-1/jquery.min.js}"</pre>
        src="/webjars/jquery/3.3.1-1/jquery.js"></script>
<script th:src="@{/webjars/materializecss/0.100.2/js/materialize.min.js}"</pre>
        src="/webjars/materializecss/0.100.2/js/materialize.js"></script>
<script th:src="@{/assets/scripts.js}"></script>
<!-- custom scripts will be added here...->
<th:block th:include="${view} :: footer" />
</body>
</html>
```

#### 2.6. and finally create view for index page

Thymeleaf index view template (file src/main/resources/webapp/WEB-INF/layouts/index.html):

```
<!DOCTYPE html>
<html lang="en" xmlns="http://www.w3.org/1999/xhtml" xmlns:th=
"http://www.thymeleaf.org">
<head>
 <title>Hello | Thymeleaf EE</title>
 <div th:fragment="header" th:remove="tag">
   <!-- additional styles -->
  </div>
</head>
<body th:fragment="content">
<h1>Hello!</h1>
<div th:fragment="footer" th:remove="tag">
 <!-- additional scripts -->
</div>
</body>
</html>
```

# Chapter 3. Links

- GitHub repo
- GitHub pages

# **Chapter 4. Other links**

- DZone: Thymeleaf With JavaEE 8 article
- JSR 371: Model-View-Controller Specification
- Resteasy docs
- Ozark: MVC for JavaEE