Latihan Project Viral

1. Ganti baris @RequestMapping("/viral") menjadi @RequestMapping("/viral2jari"). Kemudian run kembali.
   a. Apakah terjadi compile error?
      - Tidak terjadi compile error.

```
6 import org.springframework.ui.Model;
7 import org.springframework.web.bind.annotation.PathVariable;
8 import org.springframework.web.bind.annotation.RequestMapping;
9 import org.springframework.web.bind.annotation.RequestParam;
0
1 @Controller
2 public class PageController {
3     @RequestMapping("/viral2jari")
4     public String index(){
5         return "viral";
6     }
7
```
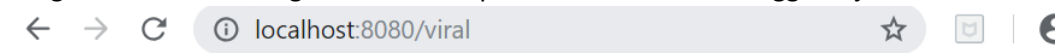
```
Console    Progress  Problems
orial-2 - Tutorial2Application [Spring Boot App] C:\Program Files\Java\jre1.8.0_121\bin\javaw.exe (Sep 22, 2018, 6:38:21 PM)
18-09-22 18:38:25.847  INFO 3236 --- [ost-startStop-1] o.a.c.c.C.[Tomcat].[localhost].[/]
18-09-22 18:38:25.847  INFO 3236 --- [ost-startStop-1] o.s.web.context.ContextLoader
18-09-22 18:38:25.924  INFO 3236 --- [ost-startStop-1] o.s.b.w.servlet.ServletRegistrationBe
18-09-22 18:38:25.928  INFO 3236 --- [ost-startStop-1] o.s.b.w.servlet.FilterRegistrationBea
18-09-22 18:38:25.929  INFO 3236 --- [ost-startStop-1] o.s.b.w.servlet.FilterRegistrationBea
18-09-22 18:38:25.929  INFO 3236 --- [ost-startStop-1] o.s.b.w.servlet.FilterRegistrationBea
18-09-22 18:38:25.929  INFO 3236 --- [ost-startStop-1] o.s.b.w.servlet.FilterRegistrationBea
18-09-22 18:38:26.043  INFO 3236 --- [  restartedMain] o.s.w.s.handler.SimpleUrlHandlerMappi
18-09-22 18:38:26.249  INFO 3236 --- [  restartedMain] s.w.s.m.m.a.RequestMappingHandlerAdap
18-09-22 18:38:26.306  INFO 3236 --- [  restartedMain] s.w.s.m.m.a.RequestMappingHandlerMapp
18-09-22 18:38:26.308  INFO 3236 --- [  restartedMain] s.w.s.m.m.a.RequestMappingHandlerMapp
18-09-22 18:38:26.308  INFO 3236 --- [  restartedMain] s.w.s.m.m.a.RequestMappingHandlerMapp
18-09-22 18:38:26.311  INFO 3236 --- [  restartedMain] s.w.s.m.m.a.RequestMappingHandlerMapp
18-09-22 18:38:26.311  INFO 3236 --- [  restartedMain] s.w.s.m.m.a.RequestMappingHandlerMapp
18-09-22 18:38:26.333  INFO 3236 --- [  restartedMain] o.s.w.s.handler.SimpleUrlHandlerMappi
18-09-22 18:38:26.333  INFO 3236 --- [  restartedMain] o.s.w.s.handler.SimpleUrlHandlerMappi
18-09-22 18:38:26.573  INFO 3236 --- [  restartedMain] o.s.b.d.a.OptionalLiveReloadServer
18-09-22 18:38:26.604  INFO 3236 --- [  restartedMain] o.s.j.e.a.AnnotationMBeanExporter
18-09-22 18:38:26.649  INFO 3236 --- [  restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServ
18-09-22 18:38:26.654  INFO 3236 --- [  restartedMain] com.example.demo.Tutorial2Application
```

   b. Coba akses localhost:8080/viral, berikan alasan dan jelaskan apa yang terjadi.
      - Program mencoba mengakses "viral" tapi tidak ditemukan sehingga terjadi error.

← → C   ⓘ localhost:8080/viral   ☆   ▣

Whitelabel Error Page

This application has no explicit mapping for /error, so you are seeing this as a fallback.

Sat Sep 22 18:39:58 ICT 2018
There was an unexpected error (type=Not Found, status=404).
No message available

   c. Apakah Kegunaan @RequestMapping("/viral")?
      - Kegunaannya adalah untuk memberikan akses ke "viral" jika kita mengakses localhost:8080/viral.

2. Ganti nama method index() menjadi nama method viral().
   a. Apakah terjadi compile error?
      - Tidak terjadi compile error.

```
@Controller
public class PageController {
    @RequestMapping("/viral")
    public String viral(){
        return "viral";
    }
}
```

```
nsole ⌗  Progress  Problems                                    Sep 22, 2018, 6:38:21 PM)
ial-2 - Tutorial2Application [Spring Boot App] C:\Program Files\Java\jre1.8.0_121\bin\javaw.exe (Sep 22, 2018, 6:38:21 PM)
B-09-22 18:41:22.008   INFO 3236 --- [ost-startStop-1] o.s.web.context.ContextLoader
B-09-22 18:41:22.017   INFO 3236 --- [ost-startStop-1] o.s.b.w.servlet.ServletRegistrationB
B-09-22 18:41:22.018   INFO 3236 --- [ost-startStop-1] o.s.b.w.servlet.FilterRegistrationBe
B-09-22 18:41:22.018   INFO 3236 --- [ost-startStop-1] o.s.b.w.servlet.FilterRegistrationBe
B-09-22 18:41:22.018   INFO 3236 --- [ost-startStop-1] o.s.b.w.servlet.FilterRegistrationBe
B-09-22 18:41:22.018   INFO 3236 --- [ost-startStop-1] o.s.b.w.servlet.FilterRegistrationBe
B-09-22 18:41:22.041   INFO 3236 --- [   restartedMain] o.s.w.s.handler.SimpleUrlHandlerMapp
B-09-22 18:41:22.072   INFO 3236 --- [   restartedMain] s.w.s.m.m.a.RequestMappingHandlerAda
B-09-22 18:41:22.078   INFO 3236 --- [   restartedMain] s.w.s.m.m.a.RequestMappingHandlerMap
B-09-22 18:41:22.079   INFO 3236 --- [   restartedMain] s.w.s.m.m.a.RequestMappingHandlerMap
B-09-22 18:41:22.079   INFO 3236 --- [   restartedMain] s.w.s.m.m.a.RequestMappingHandlerMap
B-09-22 18:41:22.081   INFO 3236 --- [   restartedMain] s.w.s.m.m.a.RequestMappingHandlerMap
B-09-22 18:41:22.081   INFO 3236 --- [   restartedMain] s.w.s.m.m.a.RequestMappingHandlerMap
B-09-22 18:41:22.087   INFO 3236 --- [   restartedMain] o.s.w.s.handler.SimpleUrlHandlerMapp
B-09-22 18:41:22.088   INFO 3236 --- [   restartedMain] o.s.w.s.handler.SimpleUrlHandlerMapp
B-09-22 18:41:22.139   INFO 3236 --- [   restartedMain] o.s.b.d.a.OptionalLiveReloadServer
B-09-22 18:41:22.156   INFO 3236 --- [   restartedMain] o.s.j.e.a.AnnotationMBeanExporter
B-09-22 18:41:22.168   INFO 3236 --- [   restartedMain] o.s.b.w.embedded.tomcat.TomcatWebSer
B-09-22 18:41:22.169   INFO 3236 --- [   restartedMain] com.example.demo.Tutorial2Applicatio
B-09-22 18:41:22.172   INFO 3236 --- [   restartedMain] .ConditionEvaluationDeltaLoggingList
```

b. Coba akses localhost:8080/viral, berikan alasan dan jelaskan apa yang terjadi.
   - Program mengakses viral ke requestMapping "viral" dan muncul halaman sesuai
      dengan viral.html.

```
←  →  C  ⓘ localhost:8080/viral            ☆  ▣  |  ⊖  ⋮
```

Mashook Pak Ekoo!!

3. Ganti string return type menjadi menjadi return "viral2jari".
   a. Apakah terjadi compile error?
      - Tidak terjadi compile error, tetapi runtime error (TemplateInputError).

```
11 @Controller
12 public class PageController {
13    @RequestMapping("/viral")
14    public String viral(){
15        return "viral2jari";
16    }
17 }
```

```
 Console ⌗  Progress  Problems                                    Sep 22, 2018, 6:52:17 PM)
tutorial-2 - Tutorial2Application [Spring Boot App] C:\Program Files\Java\jre1.8.0_121\bin\javaw.exe (Sep 22, 2018, 6:52:17 PM)
            at org.apache.catalina.connector.CoyoteAdapter.service(CoyoteAdapter.java:342) [tomcat-
            at org.apache.coyote.http11.Http11Processor.service(Http11Processor.java:800) [tomcat-e
            at org.apache.coyote.AbstractProcessorLight.process(AbstractProcessorLight.java:66) [to
            at org.apache.coyote.AbstractProtocol$ConnectionHandler.process(AbstractProtocol.java:8
            at org.apache.tomcat.util.net.NioEndpoint$SocketProcessor.doRun(NioEndpoint.java:1498)
            at org.apache.tomcat.util.net.SocketProcessorBase.run(SocketProcessorBase.java:49) [tom
            at java.util.concurrent.ThreadPoolExecutor.runWorker(Unknown Source) [na:1.8.0_121]
            at java.util.concurrent.ThreadPoolExecutor$Worker.run(Unknown Source) [na:1.8.0_121]
            at org.apache.tomcat.util.threads.TaskThread$WrappingRunnable.run(TaskThread.java:61) [
            at java.lang.Thread.run(Unknown Source) [na:1.8.0_121]

2018-09-22 18:53:24.889  ERROR 16428 --- [nio-8080-exec-1] o.a.c.c.C.[.[.[/].[dispatcherServlet]

org.thymeleaf.exceptions.TemplateInputException: Error resolving template "viral2jari", templat
            at org.thymeleaf.engine.TemplateManager.resolveTemplate(TemplateManager.java:870) ~[thy
            at org.thymeleaf.engine.TemplateManager.parseAndProcess(TemplateManager.java:607) ~[thy
            at org.thymeleaf.TemplateEngine.process(TemplateEngine.java:1098) ~[thymeleaf-3.0.9.REL
```
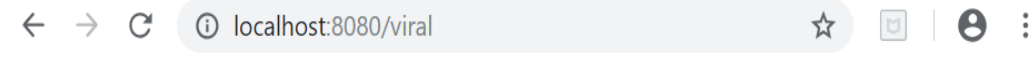
b. Coba akses localhost:8080/viral, berikan alasan dan jelaskan apa yang terjadi.
-   Terjadi error yang menyatakan bahwa template tidak ditemukan.

c. Apakah kegunaan return type pada method controller tersebut?
-   Kegunaan return pada method tersebut adalah untuk mengembalikan konten file html ke view (localhost). Return type String mengembalikan tipe dari nama file html ke view sebagai query String.
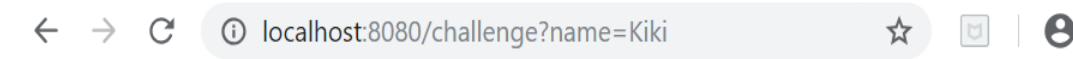

Latihan Request Parameter

1. Mengapa tulisan "In My feeling" pada thymeleaf challenge tidak pernah muncul di browser?
-   Tulisan "In My feeling" pada thymeleaf challenge tidak pernah muncul di browser karena atribut **th:text** membuat teks tersebut menjadi bagian *body/internal* sehingga akan ditampilkan. Sedangkan yang di luar atribut **th:text** (In My Feeling) akan menjadi eksternal dan pada umumnya akan diatur implementasinya dalam org.thymeleaf.messageresolver.IMessageResolver, yang dalam hal ini tidak dimunculkan.
2. Ubah nilai anotasi Request Mapping "/challenge" menjadi "/viral/challenge". Deskripsikan hasil pada browser dan kembalikan ke bentuk sebelumnya!

```
@RequestMapping("/viral/challenge")
public String challenge(@RequestParam(value="name") String name, Model model) {
    model.addAttribute("name", name);
    return "challenge";
}
```

-   Jika kita buka http://localhost:8080/challenge?name=Kiki di web, maka terjadi error (Whitelabel Error Page).

-   Jika kita buka http://localhost:8080/viral/challenge?name=Kiki, maka akan muncul "Kiki do you love me? ..."

localhost:8080/viral/challenge?name=Kiki

Kiki do you love me?

Are you riding?

3. Akses localhost:8080/challenge.
   a. Deskripsikan hasilnya.
      - Terjadi error (Whitelabel Error Page).

      localhost:8080/challenge/
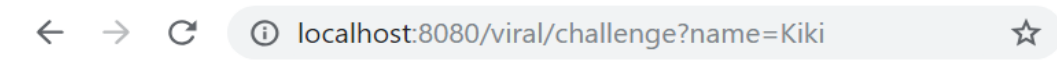
      # Whitelabel Error Page

      This application has no explicit mapping for /error, so you are seeing this as a fallback.

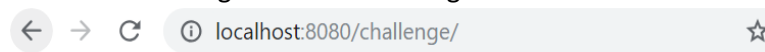   Sat Sep 22 18:59:23 ICT 2018
      There was an unexpected error (type=Not Found, status=404).
      No message available

      Default required variable adalah true, sehingga ketika tidak ada value yang kita masukkan akan terjadi error.
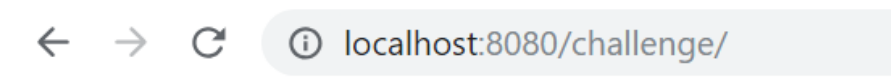   b. Ubah methodnya menjadi seperti di bawah ini, deskripsikan lalu kembalikan ke bentuk awal!
      - Setelah method diubah dan kita mengakses localhost:8080/challenge, maka yang muncul adalah bagian nama diisi dengan null.

      localhost:8080/challenge/

      null do you love me?

      Are you riding?

   c. Ubah methodnya menjadi seperti di bawah ini, deskripsikan lalu kembalikan ke bentuk awal!
      - Setelah method diubah dan kita mengakses localhost:8080/challenge, maka yang muncul adalah bagian nama diisi secara default dengan "kiki".
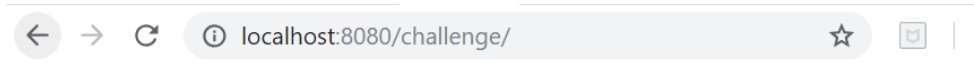
      localhost:8080/challenge/

      kiki do you love me?

      Are you riding?

Latihan Path Variable

1. Akses localhost:8080/challenge/ Apakah hasil dari halaman tersebut?
   - Yang muncul adalah error (Whitelabel Error Page).
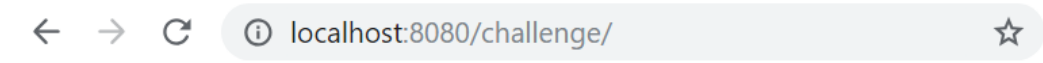
Whitelabel Error Page

This application has no explicit mapping for /error, so you are seeing this as a fallback.

Sat Sep 22 18:59:23 ICT 2018
There was an unexpected error (type=Not Found, status=404).
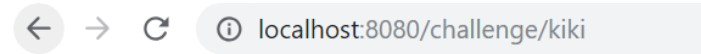No message available

2. Ubah method challengePath menjadi seperti di gambar. Akses localhost:8080/challenge/
   Apakah hasil dari halaman tersebut?
   - Setelah method diubah, bagian nama diisi dengan "KB" di mana kita telah mengatur agar
     "KB" menjadi default nilainya ketika tidak ada input path setelah path "challenge".

KB do you love me?

Are you riding?

3. Akses localhost:8080/challenge/kiki. Apakah hasil dari halaman tersebut?
   - Hasilnya adalah bagian nama terisi dengan "kiki" sesuai path yang kita ketik, yaitu "kiki".

kiki do you love me?

Are you riding?