

IDEA 运行 SpringBoot 项目的两个有用技巧

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- 来源网站: 链滴
- 许可协议: 署名-相同方式共享 4.0 国际 (CC BY-SA 4.0)



前言

本篇文章主要记录一下在IDEA中运行SpringBoot项目的一些技巧,主要包括两个,第一个小技巧: 不同端口号同时行同一个SpringBoot项目;第二个小技巧,将多个SpringBoot项目运行在services 面,这样更加方便管理。

创建一个SpringBoot项目

我们需要要创建一个SpringBoot项目,用这个项目来演示。创建过程很简单,在IDEA中,依次点击Fie -> New -> Project 然后进入下面的界面即可创建SpringBoot项目了

| 0 | New Project |
|--|--|
| Java Java Enterprise Java Enterprise JBoss Spring Java FX Android IntelliJ Platform Plugin | Project \$DK: 11.0.3 java version "11.0.5" Choose starter service URL: • • Default: https://start.spring.io • Custom: • Make sure your network connection is active before continuing. • |
| MicroProfile MicroProfile Maven Gradle | |
| Groovy Grails Application Forge | |
| Kotlin Kotlin | |
| GoGo ModulesDep | |
| | Previous Next Cancel Help |

创建完成后,在配置文件application.yml中增加如下配置

server: port: 8080

并且在pom.xml中引入web依赖

```
<dependency>
<groupId>org.springframework.boot</groupId>
<artifactId>spring-boot-starter-web</artifactId>
</dependency>
```

在启动类中增加一些代码:

@SpringBootApplication@RestControllerpublic class SpringbootDemoApplication {

```
@Value("${server.port}")
String port;
```

@RequestMapping("/hello")
public String hello() {
 return "hello, i am from port: " + port;
}

```
}
```

```
public static void main(String[] args) {
    SpringApplication.run(SpringbootDemoApplication.class, args);
}
```

```
}
```

山技巧一:以不同的端口号同时运行同一个SpringBoot

我们已经创建好springboot-demo这个项目了,下面开始演示如何以多个端口号同时运行它

第一步

点击右上方的Edit Configurations按钮

| 000 | springboot-demo – pom.xml (springboot-demo) | |
|--|--|-------------------------|
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| springboot-demo) 777 pom.xml | 🔨 🤞 SpringbootDemoApplication 🔸 🕷 🖏 😘 🚱 🖓 👘 | i Git 🖌 🗸 🗇 🦻 🛤 💁 🖾 Q |
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| | 40 <plugins></plugins> | |
| | 4f <plugin></plugin> | |
| 8 | 40 <groupid>org.springframework.boot</groupid> | |
| 20 | project | |

第二步

我们会进入下面这个界面,点击右上角的Allow parallel run前面的框框,然后再点击左侧的复制按钮

| Spring Boot | Name: SpringbootDemo Configuration Code Cov | Application verage Logs | Allow parallel r <u>u</u> n | Store as project file |
|--------------------------------|---|-----------------------------|-------------------------------------|-----------------------|
| Frem lates | Main class: • Environ <u>m</u> ent | com.my.springbootder | mo.SpringbootDemoApplication |)[|
| | VM options: | | | + ** |
| | Program arguments: | | | + "* |
| | Working directory: | | | + 🏣 |
| | Environment variables: | | | |
| | Use classpath of module: | 📭 springboot-demo | | ÷ |
| | | 🗹 Include dependencie | es with "Provided" scope | |
| | JRE: | Default (11.0.3 - SDK | of 'springboot-demo' module) | <u>ب</u> |
| | Shorten command line: | user-local default: non | e - java [options] className [args] | * |
| | Spring Boot Enable <u>debug</u> output Running Application Upda | Hide banner ate Policies | Enable launch optimization | Enable JMX agent |
| | On ' <u>U</u> pdate' action: | Do nothing | • 0 | |
| | On frame deactivation | : Do nothing | • (?) | |

第三步

经过第二步我们会进入下面这个界面,将name改为SpringbootDemoApplication2,然后在VM opt ons这里填入-Dserver.port=8081

| | | Run/Debug Configuration | ons | |
|--|---------------------------------------|-------------------------|-------------------------------------|-----------------------|
| + - B / * * B 12 | Name: SpringbootDemo | Application2 | 🗹 Allow parallel r <u>u</u> n | Store as project file |
| Spring Boot | Configuration Code Cov | verage Logs | | |
| SpringbootDemoApplication Templates | Main class: • Environ <u>m</u> ent | com.my.springbootden | no.SpringbootDemoApplication | |
| | VM options: | -Dserver.port=80 | 81 | + «* |
| | Program arguments: | | | + ** |
| | Working directory: | | | + 📾 |
| | Environment variables: | | | |
| | Use classpath of module: | 📭 springboot-demo | | • |
| | | 🗹 Include dependencie | s with "Provided" scope | |
| | JRE: | Default (11.0.3 - SDK o | f 'springboot-demo' module) | 1 × |
| | Shorten command line: | user-local default: non | e - java [options] className [args] | • |
| | ✓ Spring Boot | | | |
| | Enable <u>d</u> ebug output | 🗌 <u>H</u> ide banner | Enable launch optimization | Enable JMX agent |
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| | On frame deactivation | : Do nothina | • 🤇 | |
| Ð | | | ОК | Cancel <u>Apply</u> |

第四步

重复第二第三步的操作,在创建一个以8082端口运行的模板SpringbootDemoApplication3,我们可以看到如下所示的效果,然后依次运行它们

| 000 | springboot-demo – SpringbootDemoApplication.java | |
|--|--|-----|
| Eile Edit View Navigate Code Analyze Befactor Build Run | Iools VC\$ Window Help | |
| springboot-demo src main java com my springbootdemo | SpringbootDemoApplications → b & G G → b G G → G G → G G → G G → G G → G G → G G → G G → G G → G G → G | |
| Project - 20 - 0 * % springboot-demo -/code/java-code/my-spring-cloud-exam | <pre>mpom.xml(spingbootdemo)</pre> | |
| Debug: SpringbootDemoApplication | and is static unid main(ftrinaf] area t Application 2 | 0 - |
| C Debugger IB Console M Endpoints = □ ± ± ± 1 | NY 18 M | = |
| | | |
| * rational 2 * OW C | • Services Multiple Spring Boot run configurations were detected | e _ |

第五步

运行成功后,打开浏览器

访问 http://localhost:8080/hello,返回hello,i am from port: 8080 访问 http://localhost:8081/hello,返回hello,i am from port: 8081 访问 http://localhost:8082/hello,返回hello,i am from port: 8082

至此大功告成!

小技巧二:将多个SpringBoot项目运行在services管理

我们接着上面的步骤来,刚才我们创建了一个名为springboot-demo的项目,并且分别以8080,8081,083这三个端口号运行起来了,Debug界面如下所示:

| Debug: | SpringbootDemoApplication | SpringbootDemoApplication2 | SpringbootDemoApplication3 | ¢ - |
|------------------|---|--|---|--|
| G De | bugger Establishe 👫 Endpoints | 目(2) 1 1 1 日日 | 4 | <u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u> |
| ▶ II ■ ● S 白 Q ≠ | 2020.00-12 22:17:32.152 2020-10-12 22:17:32.153 2020-10-12 22:17:32.986 2020-10-12 22:17:32.982 2020-10-12 22:17:33.992 2020-10-12 22:17:33.026 2020-10-12 22:17:33.026 2020-10-12 22:17:33.130 2020-10-12 22:17:33.253 2020-10-12 22:18:03.411 Note: further occurrenc | INF 11677 E INF0 13677 E INF0 13 | <pre>main]s.SpringbootDemoApplication main]s.SpringbootDemoApplication main] o.s.b.w.embedded tomcat.ToncatWebServer main] o.s.b.w.embedded tomcat.ToncatWebServer main] o.s.b.w.embedded.tomcat.ToncatWebServer main] o.s.c.C.TomcatJ.[lecalhost].//] main] w.s.c.ServletWebServerApplicationContext main] o.s.b.w.embedded.tomcat.ToncatWebServer main] o.s.b.w.embedded.tomcat.ToncatWebServer main] o.s.SpringbootDemoApplication exec-1] o.apache.tomcat.util.http.parser.Cookie ogged at DEBUG level.</pre> | <pre>: Starting SpringbootDemoApplication on lenovo with PID 13677 (/home/marshal/code : No active profile set, falling back to default profiles: default : Tomcat initialized with port(s): 8080 (http) : Starting service [Tomcat] : Starting Service [Tomcat] : Initializing Spring embedded WebApplicationContext : Root WebApplicationContext: initialization completed in 736 ms : Initializing ExecutorService 'applicationTaskExecutor' : Tomcat started on port(s): 8080 (http) with context path '' : Started SpringbootDemoApplication in 1.348 seconds (JVM running for 2.115) : A cookie header was received [1599471386,1599788432,1599993400] that contained : Tomcat Context Received [1599471386,159788432,1599993400] that contained</pre> |
| | 2020-10-12 22:18:03.415 | INFO 13677 [nio-8080- | exec-1] o.s.web.servlet.DispatcherServlet | : Initializing Servlet 'dispatcherServlet' |
| | 2020-10-12 22:18:03.420 | INFO 13677 [nio-8080- | exec-1] o.s.web.servlet.DispatcherServlet | : Completed initialization in 5 ms |
| 1.5:De | bug 17 9: Cit III Terminal O 8: Se | rvices & Build # Spring III, Java | Enterprise III 6: TODO | Q Event Log |

这三个Debug界面看起来不是很美观,现在我们使用service界面来管理



按住Alt + 8快捷键打开services界面

| Project * Ø ÷ Ø · | - m pom.xi | il (springboot-demo) 🐇 📲 SpringbootDemoApplication.java 🐘 | |
|--|---|---|-----|
| pringboot-demo -/code/java-code/my-spring-cloud-exar indea indea | ng 11 📽 🕨 12 13 14 15 16 17 🕲 18 19 20 21 22 23 24 25 | <pre>public class SpringbootDemoApplication { @Value("S(server.port)") String port; @RequestMapping("/hello") public String hello() { return "hello, i am from port; " + port; } public static void main(String[] args) { SpringApplication.run(SpringbootDemoApplication.class, args); } }</pre> | |
| Services | 70 | | 0 0 |
| 王 ÷ 政 问 *. No services collegerod. Add Service (Addinsert) | - | Select service to view details | |
| | | • Services | |

第二步

依次点击Add Service -> Add Configuration Type, 然后进入下面的界面后,选择SpringBoot

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| * Ill main | 54 | String port; | | | |
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| SpringbootDemoApplication | 17 62 | nublic String hello() (| | | |
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| ⊨ Im test | 19 |) | | | |
| ► Im target | 2.0 | | | | |
| il .gitignore | 21 🕨 - | nublic static void main(String[] | ares) (| | |
| HELP.md | | foriestellistic outering | an gay t | | |
| | | SpringApplication.run(Spring) | bootDemoApplication.class, args); | | |
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| 71 pom xml | 24 | | | | |
| # springhoot-demo.iml | 26 3 | | | | |
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| el Spring O & Services III Terminal 14 g Git III Java | Enterprise III &: TODO | Salart end or more tunes | | QE | |

第四步

然后就可以看到,我们之前添加的三个运行模板都在这里了

| Project - 🛛 🕀 ÷ | ¢ - m pom.xr | nl (springboot-demo) 👘 💰 SpringbootDemoApplication.java 🐘 | |
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| Scratches and Consoles 표 후 및 것, (파) +, * Spring Boot * P Not Started | | | © • - |
| SpringbootDemoApplication2 SpringbootDemoApplication3 | | Select service to view details Services Multiple Spring Boot run | n configurations were |
| | | detected | |

第五步

运行它们

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| | | <pre>@Value("\$(server.port)")</pre> | | | | 1 |
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| © SpringbootDemoApplication :8080/ | | 2020-10-13 08:45:53.928 INFO 1015 | j6 [m. | ain] c.m.s.SpringbootDemoApplication | : No active profile set, f | 6 |
| © SpringbootDemoApplication2:8081/ | | 2020-10-13 08:45:54.529 INFO 1015 | i6 [m/ | ain] o.s.b.w.embedded.tomcat.TomcatWebServer | : Tomcat initialized with | 1 |
| SpringbootDemoApplication3 <u>:8082/</u> | | 2020-10-13 08:45:54.535 INFO 1015 | 56 E m/ | ain] o.apache.catalina.core.StandardService | : Starting service [Tomcat_ | 1 |
| P | | 2020-10-13 08:45:54.535 INFO 1015 | 56 f m | ain] org.apache.catalina.core.StandardEngine | : Starting Servlet engine: | 2 |
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最后

这两个小技巧,在运行微服务项目时会很有用