hibernate validator

介绍

早期的网站，用户输入一个邮箱地址，需要将邮箱地址发送到服务端，服务端进行校验，校验成功后，给前端一个响应。

有了JavaScript后，校验工作可以放在前端去执行。那么为什么还需要服务端校验呢？ 因为前端传来的数据不可信。前端很容易获取到后端的接口，如果有人直接调用接口，就可能会出现非法数据，所以服务端也要数据校验。

总的来说：

- 前端校验：主要是提高用户体验
- 后端校验：主要是保证数据安全可靠

校验参数基本上是一个体力活，而且冗余代码繁多，也影响代码的可读性，我们需要一个比较优雅的方式来解决这个问题。Hibernate Validator 框架刚好解决了这个问题，可以以很优雅的方式实现参数的校验，让业务代码和校验逻辑分开,不再编写重复的校验逻辑。

hibernate-validator优势：

- 验证逻辑与业务逻辑之间进行了分离，降低了程序耦合度
- 统一且规范的验证方式，无需你再次编写重复的验证代码
- 你将更专注于你的业务，将这些繁琐的事情统统丢在一边

hibernate-validator的maven坐标：

```
1  <dependency>
2        <groupId>org.hibernate</groupId>
3        <artifactId>hibernate-validator</artifactId>
4        <version>6.0.18.Final</version>
5  </dependency>
```
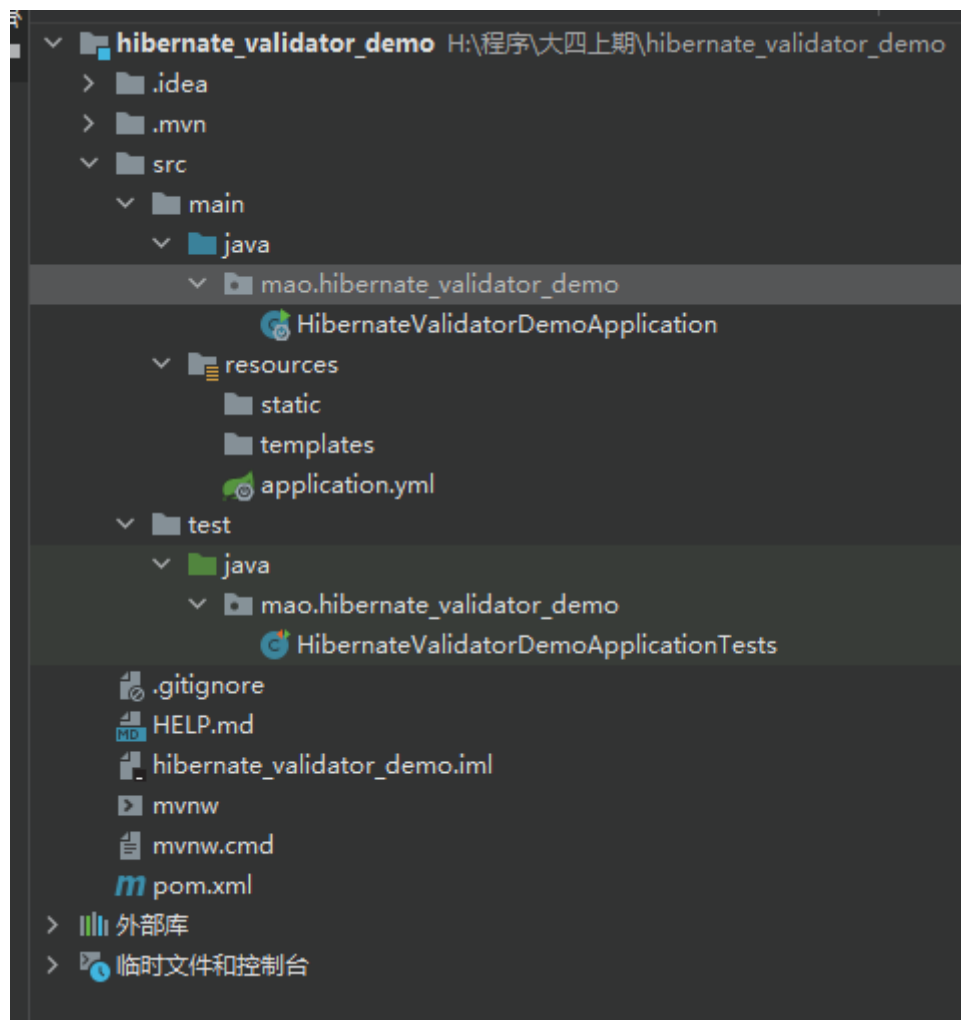
常用注解

hibernate-validator提供的校验方式为在类的属性上加入相应的注解来达到校验的目的。hibernate-validator提供的用于校验的注解如下：

注解	说明
@AssertTrue	用于boolean字段，该字段只能为true
@AssertFalse	用于boolean字段，该字段只能为false
@CreditCardNumber	对信用卡号进行一个大致的验证
@DecimalMax	只能小于或等于该值
@DecimalMin	只能大于或等于该值
@Email	检查是否是一个有效的email地址
@Future	检查该字段的日期是否是属于将来的日期
@Length(min=,max=)	检查所属的字段的长度是否在min和max之间,只能用于字符串
@Max	该字段的值只能小于或等于该值
@Min	该字段的值只能大于或等于该值
@NotNull	不能为null
@NotBlank	不能为空，检查时会将空格忽略
@NotEmpty	不能为空，这里的空是指空字符串
@Pattern(regex=)	被注释的元素必须符合指定的正则表达式
@URL(protocol=,host,port)	检查是否是一个有效的URL，如果提供了protocol，host等，则该URL还需满足提供的条件

入门案例

第一步：创建工程hibernate_validator_demo

第二步：修改pom文件

```xml
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
         xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
https://maven.apache.org/xsd/maven-4.0.0.xsd">
    <modelVersion>4.0.0</modelVersion>
    <parent>
        <groupId>org.springframework.boot</groupId>
        <artifactId>spring-boot-starter-parent</artifactId>
        <version>2.7.1</version>
        <relativePath/> <!-- lookup parent from repository -->
    </parent>
    <groupId>mao</groupId>
    <artifactId>hibernate_validator_demo</artifactId>
    <version>0.0.1-SNAPSHOT</version>
    <name>hibernate_validator_demo</name>
    <description>hibernate_validator_demo</description>
    <properties>
        <java.version>11</java.version>
    </properties>
    <dependencies>
```

```
20
21          <dependency>
22              <groupId>org.springframework.boot</groupId>
23              <artifactId>spring-boot-starter-web</artifactId>
24          </dependency>
25
26          <dependency>
27              <groupId>org.springframework.boot</groupId>
28              <artifactId>spring-boot-starter-test</artifactId>
29              <scope>test</scope>
30          </dependency>
31
32          <dependency>
33              <groupId>org.hibernate</groupId>
34              <artifactId>hibernate-validator</artifactId>
35              <version>6.2.5.Final</version>
36          </dependency>
37
38      </dependencies>
39
40      <build>
41          <plugins>
42              <plugin>
43                  <groupId>org.springframework.boot</groupId>
44                  <artifactId>spring-boot-maven-plugin</artifactId>
45              </plugin>
46          </plugins>
47      </build>
48
49  </project>
50
```

第三步：创建User类

```
1   package mao.hibernate_validator_demo.entity;
2
3   import org.hibernate.validator.constraints.Length;
4
5   import javax.validation.constraints.*;
6
7   /**
8    * Project name(项目名称)：hibernate_validator_demo
9    * Package(包名): mao.hibernate_validator_demo.entity
10   * Class(类名): User
11   * Author(作者）: mao
12   * Author QQ: 1296193245
13   * GitHub: https://github.com/maomao124/
14   * Date(创建日期)： 2022/10/29
15   * Time(创建时间)： 12:47
16   * Version(版本): 1.0
```

```
17    * Description(描述)： 无
18   */
19
20   public class User
21   {
22       /**
23        * id
24        */
25       private Integer id;
26       /**
27        * 用户名
28        */
29       private String userName;
30       /**
31        * 年龄
32        */
33       private Integer age;
34       /**
35        * 电子邮件
36        */
37       private String email;
38
39
40   }
```

第四步：添加对应的注解

```
1    package mao.use.entity;
2
3    import org.hibernate.validator.constraints.Length;
4
5    import javax.validation.constraints.*;
6
7    /**
8     * Project name(项目名称)：hibernate_validator_demo
9     * Package(包名): mao.hibernate_validator_demo.entity
10    * Class(类名): User
11    * Author(作者）: mao
12    * Author QQ: 1296193245
13    * GitHub: https://github.com/maomao124/
14    * Date(创建日期)： 2022/10/29
15    * Time(创建时间)： 12:47
16    * Version(版本): 1.0
17    * Description(描述)： 无
18    */
19
20   public class User
21   {
22       /**
23        * id
24        */
```

```java
    @NotNull(message = "用户id不能为空")
    private Integer id;
    /**
     * 用户名
     */
    @NotEmpty(message = "用户名不能为空")
    @Length(max = 40, message = "用户名长度不能超过40位")
    private String userName;
    /**
     * 年龄
     */
    @Min(value = 18, message = "年龄至少为18岁")
    @Max(value = 60, message = "年龄最大为60岁")
    private Integer age;
    /**
     * 电子邮件
     */
    //@Email(message = "邮箱格式不正确")
    @Pattern(regexp = "[a-zA-Z0-9_-]+@[a-zA-Z0-9_-]+(\\\\.[a-zA-Z0-9_-]+)+$", message = "邮箱格式不正确")
    private String email;

    public Integer getId()
    {
        return id;
    }

    public void setId(Integer id)
    {
        this.id = id;
    }

    public String getUserName()
    {
        return userName;
    }

    public void setUserName(String userName)
    {
        this.userName = userName;
    }

    public Integer getAge()
    {
        return age;
    }

    public void setAge(Integer age)
    {
        this.age = age;
    }

    public String getEmail()
    {
        return email;
    }

    public void setEmail(String email)
```

```
82      {
83          this.email = email;
84      }
85  }
86
```

第五步：创建UserController

```java
1   package mao.hibernate_validator_demo.controller;
2
3   import mao.hibernate_validator_demo.entity.User;
4   import org.slf4j.Logger;
5   import org.slf4j.LoggerFactory;
6   import org.springframework.validation.annotation.Validated;
7   import org.springframework.web.bind.annotation.RequestBody;
8   import org.springframework.web.bind.annotation.RequestMapping;
9   import org.springframework.web.bind.annotation.RestController;
10
11  import javax.validation.constraints.NotBlank;
12
13  /**
14   * Project name(项目名称)：hibernate_validator_demo
15   * Package(包名): mao.hibernate_validator_demo.controller
16   * Class(类名): UserController
17   * Author(作者）: mao
18   * Author QQ: 1296193245
19   * GitHub: https://github.com/maomao124/
20   * Date(创建日期)： 2022/10/29
21   * Time(创建时间)： 13:01
22   * Version(版本): 1.0
23   * Description(描述)： 无
24   */
25
26  @RestController
27  //开启校验
28  @Validated
29  public class UserController
30  {
31      private static final Logger log =
    LoggerFactory.getLogger(UserController.class);
32
33      @RequestMapping("/delete")
34      public String delete(@NotBlank(message = "id不能为空") String id)
35      {
36          log.info("delete..." + id);
37          return "OK";
38      }
39
40      @RequestMapping("/save")
41      public String save(@Validated @RequestBody User user)
```

```
42      {
43          log.info("save..." + user);
44          return "OK";
45      }
46 }
```

第六步：启动程序

```
1    .   ____          _            __ _ _
2   /\\ / ___'_ __ _ _(_)_ __  __ _ \ \ \ \
3  ( ( )\___ | '_ | '_| | '_ \/ _` | \ \ \ \
4   \\/  ___)| |_)| | | | | || (_| |  ) ) ) )
5    '  |____| .__|_| |_|_| |_\__, | / / / /
6   =========|_|==============|___/=/_/_/_/
7   :: Spring Boot ::                (v2.7.1)
8
9  2022-10-29 13:05:35.506  INFO 19760 --- [           main]
   m.h.HibernateValidatorDemoApplication    : Starting
   HibernateValidatorDemoApplication using Java 16.0.2 on mao with PID 19760
   (H:\程序\大四上期\hibernate_validator_demo\target\classes started by mao in
   H:\程序\大四上期\hibernate_validator_demo)
10 2022-10-29 13:05:35.509  INFO 19760 --- [           main]
   m.h.HibernateValidatorDemoApplication    : No active profile set, falling
   back to 1 default profile: "default"
11 2022-10-29 13:05:36.212  INFO 19760 --- [           main]
   o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat initialized with port(s):
   8080 (http)
12 2022-10-29 13:05:36.220  INFO 19760 --- [           main]
   o.apache.catalina.core.StandardService   : Starting service [Tomcat]
13 2022-10-29 13:05:36.220  INFO 19760 --- [           main]
   org.apache.catalina.core.StandardEngine  : Starting Servlet engine: [Apache
   Tomcat/9.0.64]
14 2022-10-29 13:05:36.296  INFO 19760 --- [           main] o.a.c.c.C.
   [Tomcat].[localhost].[/]        : Initializing Spring embedded
   WebApplicationContext
15 2022-10-29 13:05:36.296  INFO 19760 --- [           main]
   w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext:
   initialization completed in 744 ms
16 2022-10-29 13:05:36.546  INFO 19760 --- [           main]
   o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat started on port(s): 8080
   (http) with context path ''
17 2022-10-29 13:05:36.556  INFO 19760 --- [           main]
   m.h.HibernateValidatorDemoApplication    : Started
   HibernateValidatorDemoApplication in 1.324 seconds (JVM running for 1.88)
```
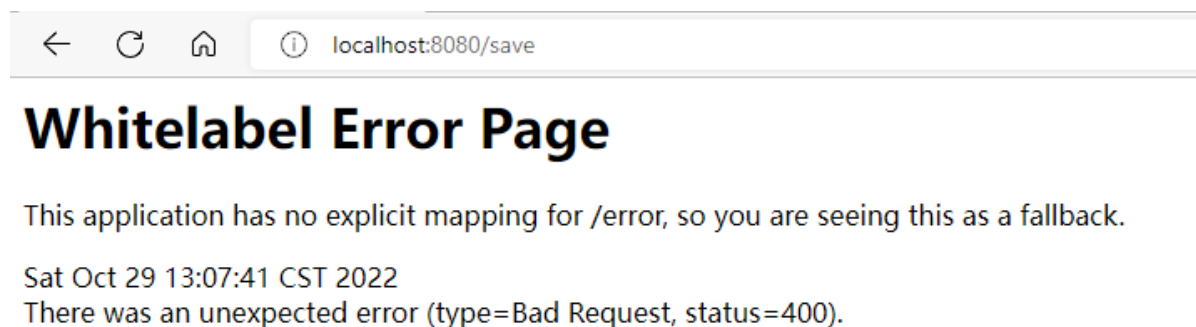
第七步：访问
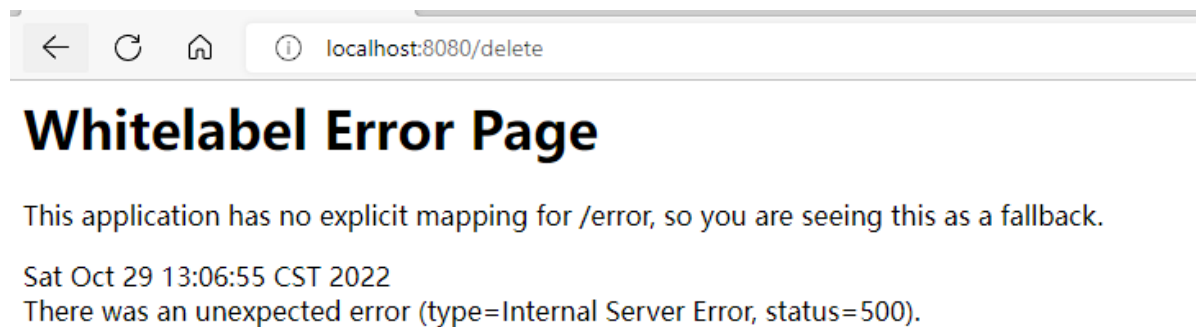
```
1  2022-10-29 13:10:06.254 ERROR 2412 --- [nio-8080-exec-5] o.a.c.c.C.[.[.[/].
   [dispatcherServlet]    : Servlet.service() for servlet [dispatcherServlet]
   in context with path [] threw exception [Request processing failed; nested
   exception is javax.validation.ConstraintViolationException: delete.id: id不
   能为空] with root cause
2
3  javax.validation.ConstraintViolationException: delete.id: id不能为空
4      at
   org.springframework.validation.beanvalidation.MethodValidationInterceptor.i
   nvoke(MethodValidationInterceptor.java:120) ~[spring-context-
   5.3.21.jar:5.3.21]
5      at
   org.springframework.aop.framework.ReflectiveMethodInvocation.proceed(Reflec
   tiveMethodInvocation.java:186) ~[spring-aop-5.3.21.jar:5.3.21]
6      at
   org.springframework.aop.framework.CglibAopProxy$CglibMethodInvocation.proce
   ed(CglibAopProxy.java:763) ~[spring-aop-5.3.21.jar:5.3.21]
```

```
 7      at
    org.springframework.aop.framework.CglibAopProxy$DynamicAdvisedInterceptor.i
    ntercept(CglibAopProxy.java:708) ~[spring-aop-5.3.21.jar:5.3.21]
 8      at
    mao.hibernate_validator_demo.controller.UserController$$EnhancerBySpringCGL
    IB$$648dd9df.delete(<generated>) ~[classes/:na]
 9      at
    java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native
    Method) ~[na:na]
10      at
    java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethod
    AccessorImpl.java:78) ~[na:na]
11      at
    java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(Delegati
    ngMethodAccessorImpl.java:43) ~[na:na]
12      at java.base/java.lang.reflect.Method.invoke(Method.java:567) ~[na:na]
13      at
    org.springframework.web.method.support.InvocableHandlerMethod.doInvoke(Invo
    cableHandlerMethod.java:205) ~[spring-web-5.3.21.jar:5.3.21]
14      at
    org.springframework.web.method.support.InvocableHandlerMethod.invokeForRequ
    est(InvocableHandlerMethod.java:150) ~[spring-web-5.3.21.jar:5.3.21]
15      at
    org.springframework.web.servlet.mvc.method.annotation.ServletInvocableHandl
    erMethod.invokeAndHandle(ServletInvocableHandlerMethod.java:117) ~[spring-
    webmvc-5.3.21.jar:5.3.21]
16      at
    org.springframework.web.servlet.mvc.method.annotation.RequestMappingHandler
    Adapter.invokeHandlerMethod(RequestMappingHandlerAdapter.java:895) ~
    [spring-webmvc-5.3.21.jar:5.3.21]
17      at
    org.springframework.web.servlet.mvc.method.annotation.RequestMappingHandler
    Adapter.handleInternal(RequestMappingHandlerAdapter.java:808) ~[spring-
    webmvc-5.3.21.jar:5.3.21]
18      at
    org.springframework.web.servlet.mvc.method.AbstractHandlerMethodAdapter.han
    dle(AbstractHandlerMethodAdapter.java:87) ~[spring-webmvc-
    5.3.21.jar:5.3.21]
19      at
    org.springframework.web.servlet.DispatcherServlet.doDispatch(DispatcherServ
    let.java:1067) ~[spring-webmvc-5.3.21.jar:5.3.21]
20      at
    org.springframework.web.servlet.DispatcherServlet.doService(DispatcherServl
    et.java:963) ~[spring-webmvc-5.3.21.jar:5.3.21]
21      at
    org.springframework.web.servlet.FrameworkServlet.processRequest(FrameworkSe
    rvlet.java:1006) ~[spring-webmvc-5.3.21.jar:5.3.21]
22      at
    org.springframework.web.servlet.FrameworkServlet.doGet(FrameworkServlet.jav
    a:898) ~[spring-webmvc-5.3.21.jar:5.3.21]
23      at javax.servlet.http.HttpServlet.service(HttpServlet.java:655) ~
    [tomcat-embed-core-9.0.64.jar:4.0.FR]
24      at
    org.springframework.web.servlet.FrameworkServlet.service(FrameworkServlet.j
    ava:883) ~[spring-webmvc-5.3.21.jar:5.3.21]
25      at javax.servlet.http.HttpServlet.service(HttpServlet.java:764) ~
    [tomcat-embed-core-9.0.64.jar:4.0.FR]
```

```
26      at
org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(Applicatio
nFilterChain.java:227) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
27      at
org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterC
hain.java:162) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
28      at
org.apache.tomcat.websocket.server.WsFilter.doFilter(WsFilter.java:53) ~
[tomcat-embed-websocket-9.0.64.jar:9.0.64]
29      at
org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(Applicatio
nFilterChain.java:189) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
30      at
org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterC
hain.java:162) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
31      at
org.springframework.web.filter.RequestContextFilter.doFilterInternal(Reques
tContextFilter.java:100) ~[spring-web-5.3.21.jar:5.3.21]
32      at
org.springframework.web.filter.OncePerRequestFilter.doFilter(OncePerRequest
Filter.java:117) ~[spring-web-5.3.21.jar:5.3.21]
33      at
org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(Applicatio
nFilterChain.java:189) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
34      at
org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterC
hain.java:162) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
35      at
org.springframework.web.filter.FormContentFilter.doFilterInternal(FormConte
ntFilter.java:93) ~[spring-web-5.3.21.jar:5.3.21]
36      at
org.springframework.web.filter.OncePerRequestFilter.doFilter(OncePerRequest
Filter.java:117) ~[spring-web-5.3.21.jar:5.3.21]
37      at
org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(Applicatio
nFilterChain.java:189) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
38      at
org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterC
hain.java:162) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
39      at
org.springframework.web.filter.CharacterEncodingFilter.doFilterInternal(Cha
racterEncodingFilter.java:201) ~[spring-web-5.3.21.jar:5.3.21]
40      at
org.springframework.web.filter.OncePerRequestFilter.doFilter(OncePerRequest
Filter.java:117) ~[spring-web-5.3.21.jar:5.3.21]
41      at
org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(Applicatio
nFilterChain.java:189) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
42      at
org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterC
hain.java:162) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
43      at
org.apache.catalina.core.StandardWrapperValve.invoke(StandardWrapperValve.j
ava:197) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
44      at
org.apache.catalina.core.StandardContextValve.invoke(StandardContextValve.j
ava:97) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
```

```
45    at
      org.apache.catalina.authenticator.AuthenticatorBase.invoke(AuthenticatorBas
      e.java:541) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
46    at
      org.apache.catalina.core.StandardHostValve.invoke(StandardHostValve.java:13
      5) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
47    at
      org.apache.catalina.valves.ErrorReportValve.invoke(ErrorReportValve.java:92
      ) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
48    at
      org.apache.catalina.core.StandardEngineValve.invoke(StandardEngineValve.jav
      a:78) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
49    at
      org.apache.catalina.connector.CoyoteAdapter.service(CoyoteAdapter.java:360)
      ~[tomcat-embed-core-9.0.64.jar:9.0.64]
50    at
      org.apache.coyote.http11.Http11Processor.service(Http11Processor.java:399)
      ~[tomcat-embed-core-9.0.64.jar:9.0.64]
51    at
      org.apache.coyote.AbstractProcessorLight.process(AbstractProcessorLight.jav
      a:65) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
52    at
      org.apache.coyote.AbstractProtocol$ConnectionHandler.process(AbstractProtoc
      ol.java:890) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
53    at
      org.apache.tomcat.util.net.NioEndpoint$SocketProcessor.doRun(NioEndpoint.ja
      va:1787) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
54    at
      org.apache.tomcat.util.net.SocketProcessorBase.run(SocketProcessorBase.java
      :49) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
55    at
      org.apache.tomcat.util.threads.ThreadPoolExecutor.runWorker(ThreadPoolExecu
      tor.java:1191) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
56    at
      org.apache.tomcat.util.threads.ThreadPoolExecutor$Worker.run(ThreadPoolExec
      utor.java:659) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
57    at
      org.apache.tomcat.util.threads.TaskThread$WrappingRunnable.run(TaskThread.j
      ava:61) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
58    at java.base/java.lang.Thread.run(Thread.java:831) ~[na:na]
59
60    2022-10-29 13:10:08.522 ERROR 2412 --- [nio-8080-exec-4] o.a.c.c.C.[.[.[/].
      [dispatcherServlet]    : Servlet.service() for servlet [dispatcherServlet]
      in context with path [] threw exception [Request processing failed; nested
      exception is javax.validation.ConstraintViolationException: delete.id: id不
      能为空] with root cause
61
62    javax.validation.ConstraintViolationException: delete.id: id不能为空
63    at
      org.springframework.validation.beanvalidation.MethodValidationInterceptor.i
      nvoke(MethodValidationInterceptor.java:120) ~[spring-context-
      5.3.21.jar:5.3.21]
64    at
      org.springframework.aop.framework.ReflectiveMethodInvocation.proceed(Reflec
      tiveMethodInvocation.java:186) ~[spring-aop-5.3.21.jar:5.3.21]
65    at
      org.springframework.aop.framework.CglibAopProxy$CglibMethodInvocation.proce
      ed(CglibAopProxy.java:763) ~[spring-aop-5.3.21.jar:5.3.21]
```

```
66      at
org.springframework.aop.framework.CglibAopProxy$DynamicAdvisedInterceptor.i
ntercept(CglibAopProxy.java:708) ~[spring-aop-5.3.21.jar:5.3.21]
67      at
mao.hibernate_validator_demo.controller.UserController$$EnhancerBySpringCGL
IB$$648dd9df.delete(<generated>) ~[classes/:na]
68      at
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native
Method) ~[na:na]
69      at
java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethod
AccessorImpl.java:78) ~[na:na]
70      at
java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(Delegati
ngMethodAccessorImpl.java:43) ~[na:na]
71      at java.base/java.lang.reflect.Method.invoke(Method.java:567) ~[na:na]
72      at
org.springframework.web.method.support.InvocableHandlerMethod.doInvoke(Invo
cableHandlerMethod.java:205) ~[spring-web-5.3.21.jar:5.3.21]
73      at
org.springframework.web.method.support.InvocableHandlerMethod.invokeForRequ
est(InvocableHandlerMethod.java:150) ~[spring-web-5.3.21.jar:5.3.21]
74      at
org.springframework.web.servlet.mvc.method.annotation.ServletInvocableHandl
erMethod.invokeAndHandle(ServletInvocableHandlerMethod.java:117) ~[spring-
webmvc-5.3.21.jar:5.3.21]
75      at
org.springframework.web.servlet.mvc.method.annotation.RequestMappingHandler
Adapter.invokeHandlerMethod(RequestMappingHandlerAdapter.java:895) ~
[spring-webmvc-5.3.21.jar:5.3.21]
76      at
org.springframework.web.servlet.mvc.method.annotation.RequestMappingHandler
Adapter.handleInternal(RequestMappingHandlerAdapter.java:808) ~[spring-
webmvc-5.3.21.jar:5.3.21]
77      at
org.springframework.web.servlet.mvc.method.AbstractHandlerMethodAdapter.han
dle(AbstractHandlerMethodAdapter.java:87) ~[spring-webmvc-
5.3.21.jar:5.3.21]
78      at
org.springframework.web.servlet.DispatcherServlet.doDispatch(DispatcherServ
let.java:1067) ~[spring-webmvc-5.3.21.jar:5.3.21]
79      at
org.springframework.web.servlet.DispatcherServlet.doService(DispatcherServl
et.java:963) ~[spring-webmvc-5.3.21.jar:5.3.21]
80      at
org.springframework.web.servlet.FrameworkServlet.processRequest(FrameworkSe
rvlet.java:1006) ~[spring-webmvc-5.3.21.jar:5.3.21]
81      at
org.springframework.web.servlet.FrameworkServlet.doGet(FrameworkServlet.jav
a:898) ~[spring-webmvc-5.3.21.jar:5.3.21]
82      at javax.servlet.http.HttpServlet.service(HttpServlet.java:655) ~
[tomcat-embed-core-9.0.64.jar:4.0.FR]
83      at
org.springframework.web.servlet.FrameworkServlet.service(FrameworkServlet.j
ava:883) ~[spring-webmvc-5.3.21.jar:5.3.21]
84      at javax.servlet.http.HttpServlet.service(HttpServlet.java:764) ~
[tomcat-embed-core-9.0.64.jar:4.0.FR]
```

```
85        at
org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(Applicatio
nFilterChain.java:227) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
86        at
org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterC
hain.java:162) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
87        at
org.apache.tomcat.websocket.server.WsFilter.doFilter(WsFilter.java:53) ~
[tomcat-embed-websocket-9.0.64.jar:9.0.64]
88        at
org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(Applicatio
nFilterChain.java:189) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
89        at
org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterC
hain.java:162) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
90        at
org.springframework.web.filter.RequestContextFilter.doFilterInternal(Reques
tContextFilter.java:100) ~[spring-web-5.3.21.jar:5.3.21]
91        at
org.springframework.web.filter.OncePerRequestFilter.doFilter(OncePerRequest
Filter.java:117) ~[spring-web-5.3.21.jar:5.3.21]
92        at
org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(Applicatio
nFilterChain.java:189) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
93        at
org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterC
hain.java:162) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
94        at
org.springframework.web.filter.FormContentFilter.doFilterInternal(FormConte
ntFilter.java:93) ~[spring-web-5.3.21.jar:5.3.21]
95        at
org.springframework.web.filter.OncePerRequestFilter.doFilter(OncePerRequest
Filter.java:117) ~[spring-web-5.3.21.jar:5.3.21]
96        at
org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(Applicatio
nFilterChain.java:189) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
97        at
org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterC
hain.java:162) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
98        at
org.springframework.web.filter.CharacterEncodingFilter.doFilterInternal(Cha
racterEncodingFilter.java:201) ~[spring-web-5.3.21.jar:5.3.21]
99        at
org.springframework.web.filter.OncePerRequestFilter.doFilter(OncePerRequest
Filter.java:117) ~[spring-web-5.3.21.jar:5.3.21]
100       at
org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(Applicatio
nFilterChain.java:189) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
101       at
org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterC
hain.java:162) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
102       at
org.apache.catalina.core.StandardWrapperValve.invoke(StandardWrapperValve.j
ava:197) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
103       at
org.apache.catalina.core.StandardContextValve.invoke(StandardContextValve.j
ava:97) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
```

```
104        at
org.apache.catalina.authenticator.AuthenticatorBase.invoke(AuthenticatorBas
e.java:541) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
105        at
org.apache.catalina.core.StandardHostValve.invoke(StandardHostValve.java:13
5) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
106        at
org.apache.catalina.valves.ErrorReportValve.invoke(ErrorReportValve.java:92
) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
107        at
org.apache.catalina.core.StandardEngineValve.invoke(StandardEngineValve.jav
a:78) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
108        at
org.apache.catalina.connector.CoyoteAdapter.service(CoyoteAdapter.java:360)
~[tomcat-embed-core-9.0.64.jar:9.0.64]
109        at
org.apache.coyote.http11.Http11Processor.service(Http11Processor.java:399)
~[tomcat-embed-core-9.0.64.jar:9.0.64]
110        at
org.apache.coyote.AbstractProcessorLight.process(AbstractProcessorLight.jav
a:65) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
111        at
org.apache.coyote.AbstractProtocol$ConnectionHandler.process(AbstractProtoc
ol.java:890) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
112        at
org.apache.tomcat.util.net.NioEndpoint$SocketProcessor.doRun(NioEndpoint.ja
va:1787) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
113        at
org.apache.tomcat.util.net.SocketProcessorBase.run(SocketProcessorBase.java
:49) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
114        at
org.apache.tomcat.util.threads.ThreadPoolExecutor.runWorker(ThreadPoolExecu
tor.java:1191) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
115        at
org.apache.tomcat.util.threads.ThreadPoolExecutor$Worker.run(ThreadPoolExec
utor.java:659) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
116        at
org.apache.tomcat.util.threads.TaskThread$WrappingRunnable.run(TaskThread.j
ava:61) ~[tomcat-embed-core-9.0.64.jar:9.0.64]
117      at java.base/java.lang.Thread.run(Thread.java:831) ~[na:na]
118
119   2022-10-29 13:10:12.624  WARN 2412 --- [nio-8080-exec-6]
.w.s.m.s.DefaultHandlerExceptionResolver : Resolved
[org.springframework.http.converter.HttpMessageNotReadableException:
Required request body is missing: public java.lang.String
mao.hibernate_validator_demo.controller.UserController.save(mao.hibernate_v
alidator_demo.entity.User)]
120
```

为了能够在页面友好的显示数据校验结果，可以通过全局异常处理来解决

第八步：创建全局异常处理类

```java
package mao.hibernate_validator_demo.controller;

import org.slf4j.Logger;
import org.slf4j.LoggerFactory;
import org.springframework.validation.BindException;
import org.springframework.web.bind.annotation.ControllerAdvice;
import org.springframework.web.bind.annotation.ExceptionHandler;
import org.springframework.web.bind.annotation.RestControllerAdvice;

import javax.servlet.http.HttpServletRequest;
import javax.validation.ConstraintViolation;
import javax.validation.ConstraintViolationException;
import java.util.Objects;
import java.util.Set;

/**
 * Project name(项目名称)：hibernate_validator_demo
 * Package(包名): mao.hibernate_validator_demo.controller
 * Class(类名): ExceptionConfiguration
 * Author(作者）: mao
 * Author QQ: 1296193245
 * GitHub: https://github.com/maomao124/
 * Date(创建日期)： 2022/10/29
 * Time(创建时间)： 13:12
 * Version(版本): 1.0
 * Description(描述)： 无
 */


@RestControllerAdvice
public class ExceptionConfiguration
{

    private static final Logger log =
LoggerFactory.getLogger(ExceptionConfiguration.class);

    @ExceptionHandler({ConstraintViolationException.class,
BindException.class})
    public String validateException(Exception ex, HttpServletRequest
request)
    {
        log.error("异常: ", ex);
        String msg = null;
        if (ex instanceof ConstraintViolationException)
        {
            ConstraintViolationException constraintViolationException =
                    (ConstraintViolationException) ex;
            Set<ConstraintViolation<?>> violations =
                    constraintViolationException.getConstraintViolations();
            ConstraintViolation<?> next = violations.iterator().next();
            msg = next.getMessage();
```

```
49              }
50          else if (ex instanceof BindException)
51          {
52              BindException bindException = (BindException) ex;
53              msg =
        Objects.requireNonNull(bindException.getBindingResult().getFieldError()).get
        DefaultMessage();
54          }
55          return msg;
56      }
57  }
58
```

第九步：重启程序

第十步：访问
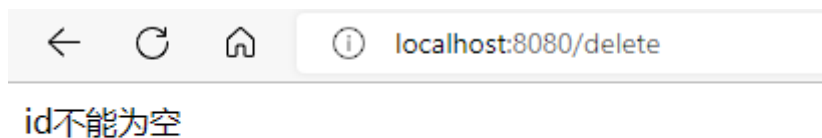
```
1   2022-10-29 13:18:54.922 ERROR 2416 --- [nio-8080-exec-1]
    m.h.controller.ExceptionConfiguration    : 异常：
2
3   javax.validation.ConstraintViolationException: delete.id: id不能为空
4       at
    org.springframework.validation.beanvalidation.MethodValidationInterceptor.inv
    oke(MethodValidationInterceptor.java:120) ~[spring-context-5.3.21.jar:5.3.21]
5       at
    org.springframework.aop.framework.ReflectiveMethodInvocation.proceed(Reflecti
    veMethodInvocation.java:186) ~[spring-aop-5.3.21.jar:5.3.21]
6
7       ...
```

通过控制台的输出可以看到，校验框架将我们的多个属性都进行了数据校验（默认行为），如果我们希望只要有一个属性校验失败就直接返回提示信息，后面的属性不再进行校验了该如何实现呢?

第十一步：创建ValidatorConfig类，指定校验时使用快速失败返回模式

```java
package mao.hibernate_validator_demo.config;

import org.hibernate.validator.HibernateValidator;
import org.springframework.context.annotation.Bean;
import org.springframework.validation.beanvalidation.MethodValidationPostProcessor;

import javax.validation.Validation;
import javax.validation.Validator;
import javax.validation.ValidatorFactory;

/**
 * Project name(项目名称)：hibernate_validator_demo
 * Package(包名): mao.hibernate_validator_demo.config
 * Class(类名): ValidatorConfig
 * Author(作者）: mao
 * Author QQ: 1296193245
 * GitHub: https://github.com/maomao124/
 * Date(创建日期)： 2022/10/29
 * Time(创建时间)： 13:21
 * Version(版本): 1.0
 * Description(描述)： 无
 */

public class ValidatorConfig
{
    @Bean
    public Validator validator()
    {
        ValidatorFactory validatorFactory =
                Validation.byProvider(HibernateValidator.class)
                        .configure()
                        //快速失败返回模式
                        .addProperty("hibernate.validator.fail_fast", "true")
                        .buildValidatorFactory();
        return validatorFactory.getValidator();
    }

    /**
     * 开启快速返回
```

```
41         *  如果参数校验有异常，直接抛异常，不会进入到 controller，使用全局异常拦截进行拦截
42         */
43      @Bean
44      public MethodValidationPostProcessor methodValidationPostProcessor()
45      {
46          MethodValidationPostProcessor postProcessor =
47                  new MethodValidationPostProcessor();
48          /*设置validator模式为快速失败返回*/
49          postProcessor.setValidator(validator());
50          return postProcessor;
51      }
52  }
```

上面创建的类并不是配置类，所以到目前为止快速失败返回模式并不会生效，为了使其生效需要创建一个注解用于控制此模式的开启

第十二步：创建注解EnableFormValidator用于控制快速失败返回模式的开启

```
 1  package mao.hibernate_validator_demo.config;
 2
 3  import org.springframework.context.annotation.Import;
 4
 5  import java.lang.annotation.ElementType;
 6  import java.lang.annotation.Retention;
 7  import java.lang.annotation.RetentionPolicy;
 8  import java.lang.annotation.Target;
 9
10  @Target(ElementType.TYPE)
11  @Retention(RetentionPolicy.RUNTIME)
12  @Import(ValidatorConfig.class)
13  public @interface EnableFormValidator
14  {
15
16  }
```

第十三步：在启动类上加入EnableFormValidator注解，开启快速失败返回模式

```java
package mao.hibernate_validator_demo;

import mao.hibernate_validator_demo.config.EnableFormValidator;
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication
@EnableFormValidator
public class HibernateValidatorDemoApplication
{

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

}
```

虽然我们输入的数据有多个都不符合校验规则，但是只有一个校验失败异常信息，这说明已经开启了快速失败返回模式

封装成一个模块

封装

第一步：初始化项目

创建父工程hibernate_validator_demo2
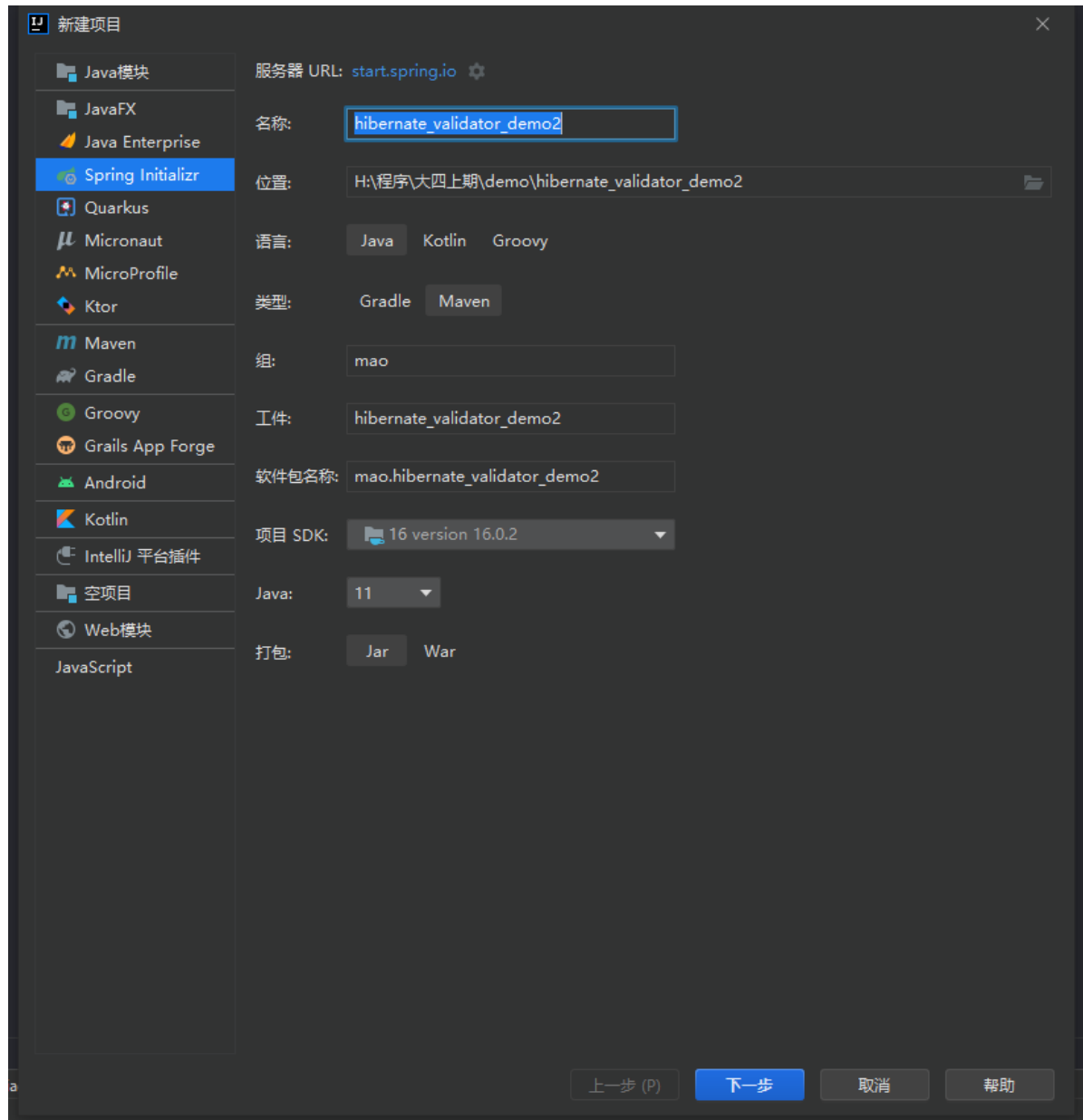
创建子工程tools-validator
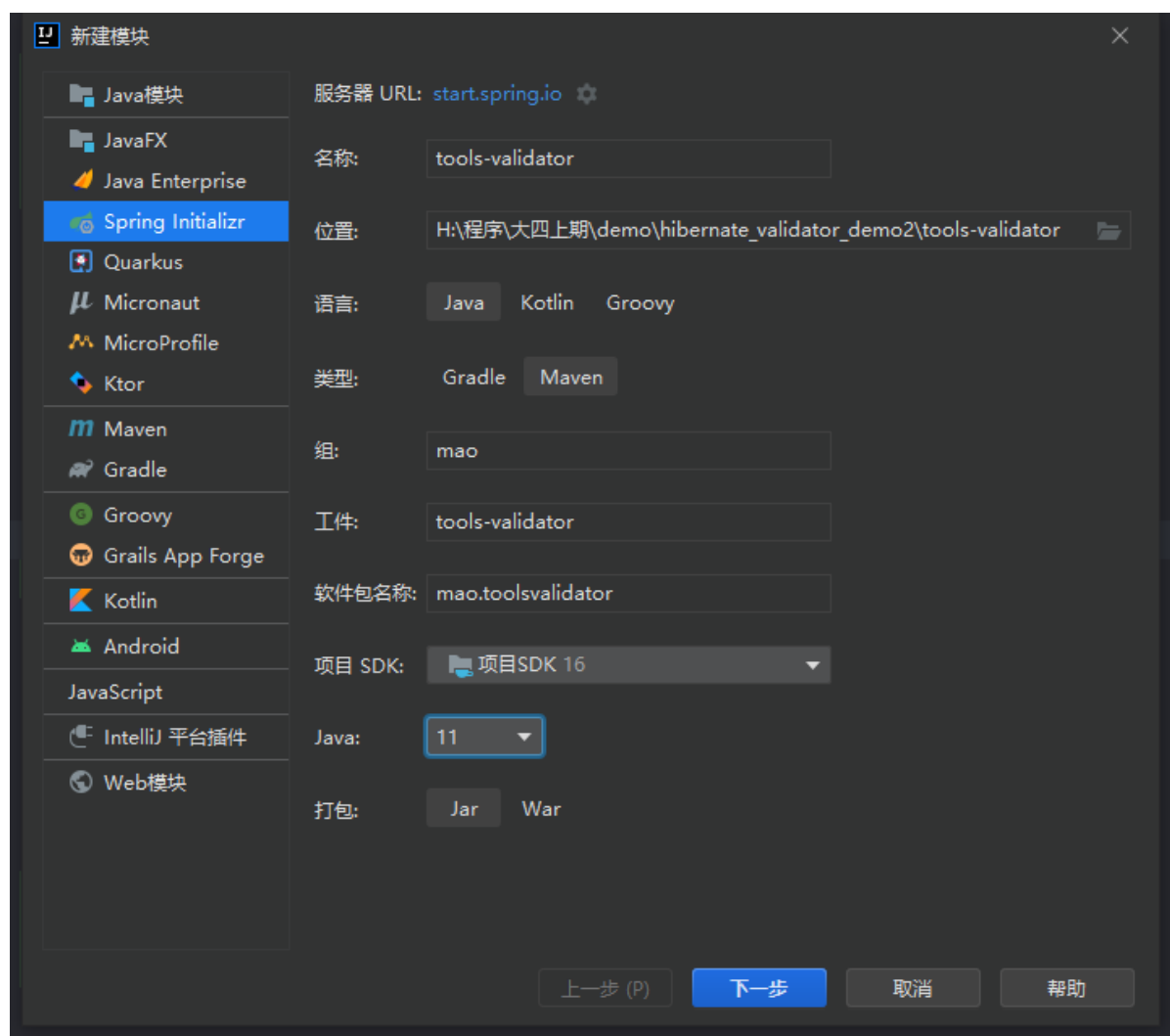
创建子工程use

第二步：修改项目的pom文件

父工程的pom文件：

```xml
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
         xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
https://maven.apache.org/xsd/maven-4.0.0.xsd">
    <modelVersion>4.0.0</modelVersion>

    <parent>
        <groupId>org.springframework.boot</groupId>
        <artifactId>spring-boot-starter-parent</artifactId>
        <version>2.7.1</version>
        <relativePath/> <!-- lookup parent from repository -->
    </parent>

    <groupId>mao</groupId>
```

```xml
        <artifactId>hibernate_validator_demo2</artifactId>
        <version>0.0.1-SNAPSHOT</version>
        <name>hibernate_validator_demo2</name>
        <description>hibernate_validator_demo2</description>
        <packaging>pom</packaging>

        <properties>
            <java.version>11</java.version>
        </properties>

        <modules>
            <module>tools-validator</module>
            <module>use</module>
        </modules>

        <dependencies>

        </dependencies>

        <dependencyManagement>
            <dependencies>

            </dependencies>
        </dependencyManagement>

        <build>
            <plugins>
                <plugin>
                    <groupId>org.springframework.boot</groupId>
                    <artifactId>spring-boot-maven-plugin</artifactId>
                </plugin>
            </plugins>
        </build>

</project>
```

子工程tools-validator的pom文件：

```xml
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
         xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
https://maven.apache.org/xsd/maven-4.0.0.xsd">
    <modelVersion>4.0.0</modelVersion>

    <parent>
        <artifactId>hibernate_validator_demo2</artifactId>
        <groupId>mao</groupId>
        <version>0.0.1-SNAPSHOT</version>
    </parent>

    <artifactId>tools-validator</artifactId>
```

```xml
        <version>0.0.1-SNAPSHOT</version>
        <name>tools-validator</name>
        <description>tools-validator</description>

        <properties>

        </properties>

        <dependencies>

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

            <dependency>
                <groupId>org.hibernate</groupId>
                <artifactId>hibernate-validator</artifactId>
                <version>6.2.5.Final</version>
            </dependency>

        </dependencies>

        <build>
            <plugins>
                <plugin>
                    <groupId>org.springframework.boot</groupId>
                    <artifactId>spring-boot-maven-plugin</artifactId>
                </plugin>
            </plugins>
        </build>

</project>
```
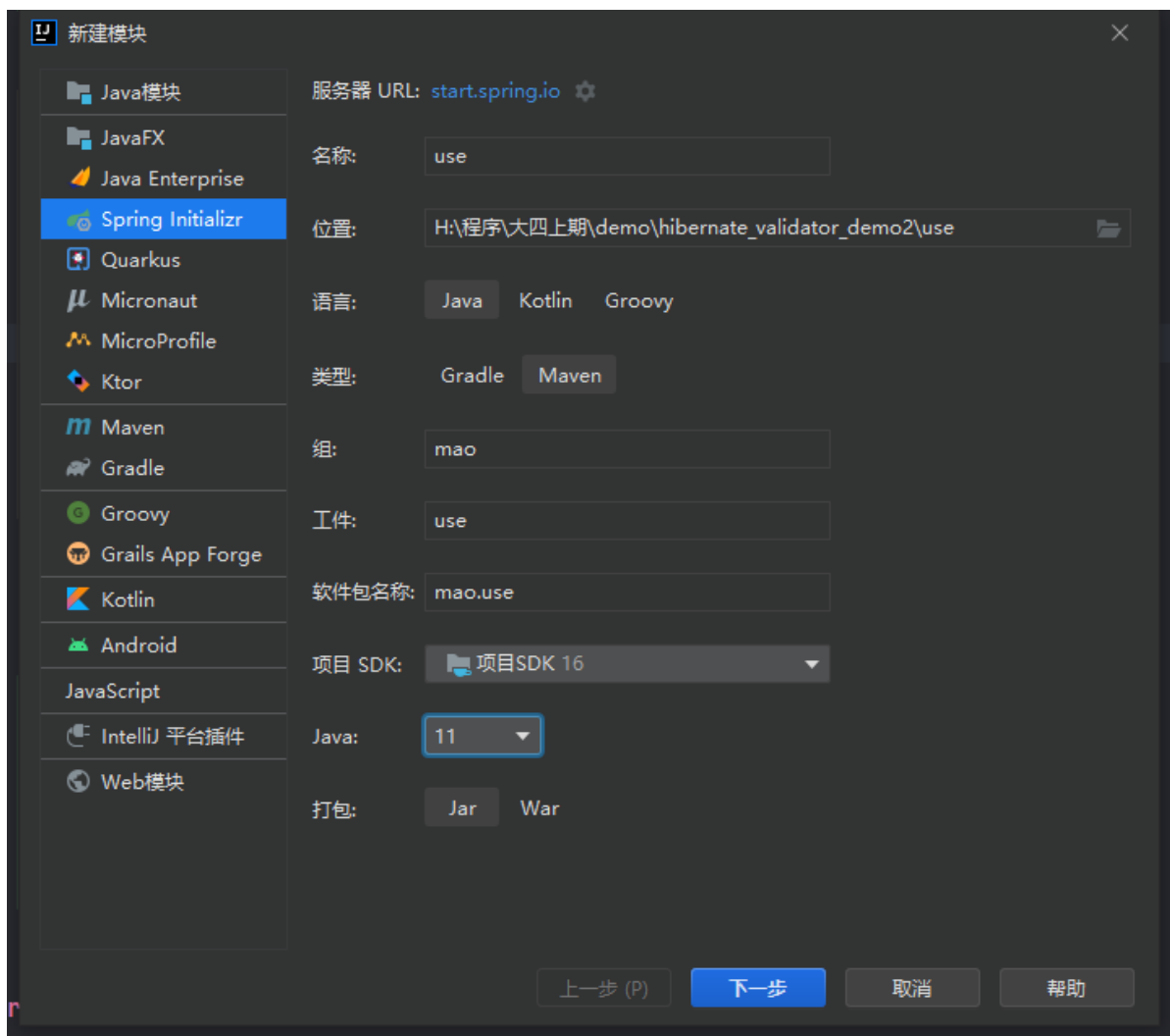
子工程use的pom文件:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
https://maven.apache.org/xsd/maven-4.0.0.xsd">
    <modelVersion>4.0.0</modelVersion>
    <parent>
        <artifactId>hibernate_validator_demo2</artifactId>
        <groupId>mao</groupId>
        <version>0.0.1-SNAPSHOT</version>
    </parent>
    <artifactId>use</artifactId>
    <version>0.0.1-SNAPSHOT</version>
    <name>use</name>
    <description>use</description>
```

```
15      <properties>
16
17      </properties>
18
19      <dependencies>
20
21          <dependency>
22              <groupId>org.springframework.boot</groupId>
23              <artifactId>spring-boot-starter-web</artifactId>
24          </dependency>
25
26          <dependency>
27              <groupId>org.springframework.boot</groupId>
28              <artifactId>spring-boot-starter-test</artifactId>
29              <scope>test</scope>
30          </dependency>
31
32      </dependencies>
33
34      <build>
35          <plugins>
36              <plugin>
37                  <groupId>org.springframework.boot</groupId>
38                  <artifactId>spring-boot-maven-plugin</artifactId>
39              </plugin>
40          </plugins>
41      </build>
42
43  </project>
```

第三步：拷贝之前config包下的所有类到此子工程中
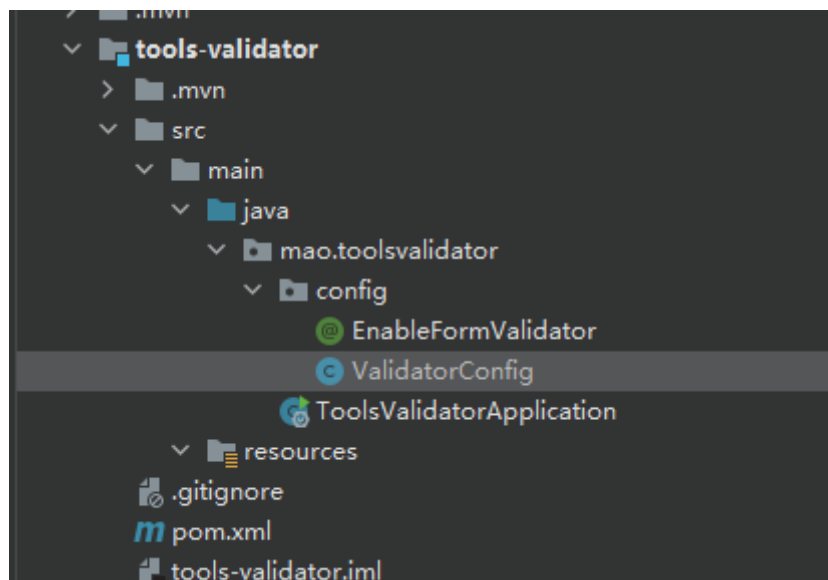
使用

第一步：导入tools-validator的依赖

```xml
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
https://maven.apache.org/xsd/maven-4.0.0.xsd">
    <modelVersion>4.0.0</modelVersion>
    <parent>
        <artifactId>hibernate_validator_demo2</artifactId>
        <groupId>mao</groupId>
        <version>0.0.1-SNAPSHOT</version>
    </parent>
    <artifactId>use</artifactId>
    <version>0.0.1-SNAPSHOT</version>
    <name>use</name>
    <description>use</description>

    <properties>

    </properties>

    <dependencies>

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

        <dependency>
            <groupId>org.springframework.boot</groupId>
            <artifactId>spring-boot-starter-test</artifactId>
            <scope>test</scope>
        </dependency>

        <dependency>
            <groupId>mao</groupId>
            <artifactId>tools-validator</artifactId>
            <version>0.0.1-SNAPSHOT</version>
        </dependency>

    </dependencies>

    <build>
        <plugins>
            <plugin>
```

```
43              <groupId>org.springframework.boot</groupId>
44              <artifactId>spring-boot-maven-plugin</artifactId>
45            </plugin>
46          </plugins>
47        </build>
48
49  </project>
```

第二步：拷贝之前的entity包和controller包到此项目中
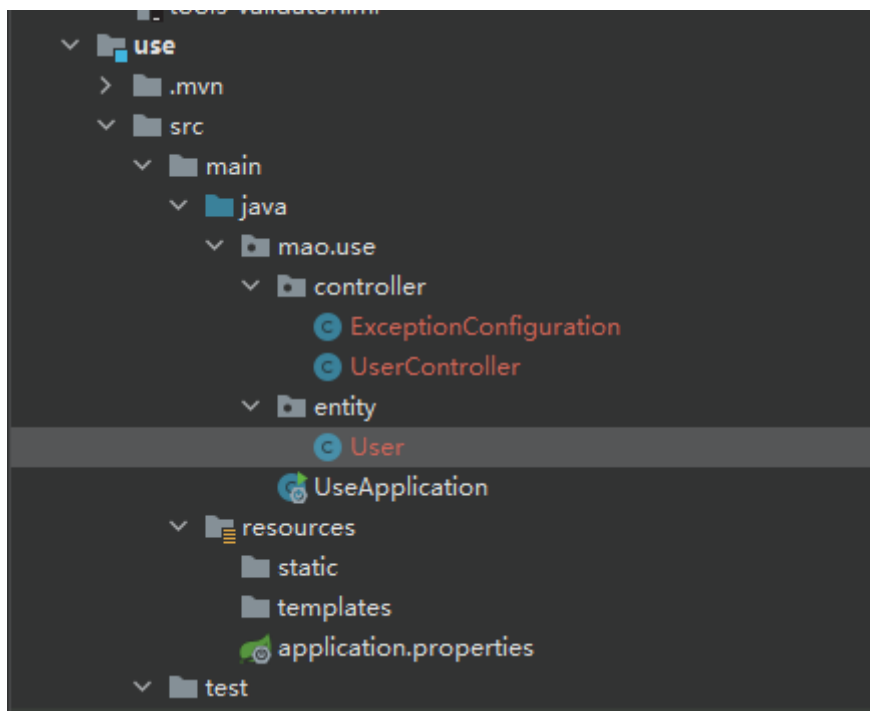
第三步：在启动类上添加对应的注解

```
1  package mao.use;
2
3  import mao.toolsvalidator.config.EnableFormValidator;
4  import org.springframework.boot.SpringApplication;
5  import org.springframework.boot.autoconfigure.SpringBootApplication;
6
7  @SpringBootApplication
8  @EnableFormValidator
9  public class UseApplication
10 {
11
12     public static void main(String[] args)
```

```
13        {
14            SpringApplication.run(UseApplication.class, args);
15        }
16
17    }
```

第四步：启动程序

```
1
2     .   ____          _            __ _ _
3    /\\ / ___'_ __ _ _(_)_ __  __ _ \ \ \ \
4   ( ( )\___ | '_ | '_| | '_ \/ _` | \ \ \ \
5    \\/  ___)| |_)| | | | | || (_| |  ) ) ) )
6     '  |____| .__|_| |_|_| |_\__, | / / / /
7    =========|_|==============|___/=/_/_/_/
8    :: Spring Boot ::                (v2.7.1)
9
10   2022-10-29 14:00:05.191  INFO 14504 --- [           main]
     mao.use.UseApplication              : Starting UseApplication using
     Java 16.0.2 on mao with PID 14504 (H:\程序\大四上期
     \demo\hibernate_validator_demo2\use\target\classes started by mao in H:\程序
     \大四上期\demo\hibernate_validator_demo2)
11   2022-10-29 14:00:05.193  INFO 14504 --- [           main]
     mao.use.UseApplication              : No active profile set, falling
     back to 1 default profile: "default"
12   2022-10-29 14:00:05.672  INFO 14504 --- [           main]
     trationDelegate$BeanPostProcessorChecker : Bean
     'mao.toolsvalidator.config.ValidatorConfig' of type
     [mao.toolsvalidator.config.ValidatorConfig] is not eligible for getting
     processed by all BeanPostProcessors (for example: not eligible for auto-
     proxying)
13   2022-10-29 14:00:05.871  INFO 14504 --- [           main]
     o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat initialized with port(s):
     8080 (http)
14   2022-10-29 14:00:05.878  INFO 14504 --- [           main]
     o.apache.catalina.core.StandardService   : Starting service [Tomcat]
15   2022-10-29 14:00:05.879  INFO 14504 --- [           main]
     org.apache.catalina.core.StandardEngine  : Starting Servlet engine: [Apache
     Tomcat/9.0.64]
16   2022-10-29 14:00:05.953  INFO 14504 --- [           main] o.a.c.c.C.
     [Tomcat].[localhost].[/]        : Initializing Spring embedded
     WebApplicationContext
17   2022-10-29 14:00:05.953  INFO 14504 --- [           main]
     w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext:
     initialization completed in 727 ms
18   2022-10-29 14:00:06.215  INFO 14504 --- [           main]
     o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat started on port(s): 8080
     (http) with context path ''
19   2022-10-29 14:00:06.224  INFO 14504 --- [           main]
     mao.use.UseApplication              : Started UseApplication in 1.285
     seconds (JVM running for 1.756)
```

```
20   2022-10-29 14:00:18.298  INFO 14504 --- [nio-8080-exec-2] o.a.c.c.C.
     [Tomcat].[localhost].[/]       : Initializing Spring DispatcherServlet
     'dispatcherServlet'
21   2022-10-29 14:00:18.298  INFO 14504 --- [nio-8080-exec-2]
     o.s.web.servlet.DispatcherServlet        : Initializing Servlet
     'dispatcherServlet'
22   2022-10-29 14:00:18.299  INFO 14504 --- [nio-8080-exec-2]
     o.s.web.servlet.DispatcherServlet        : Completed initialization in 1 ms
```

第五步：访问

http://localhost:8080/delete
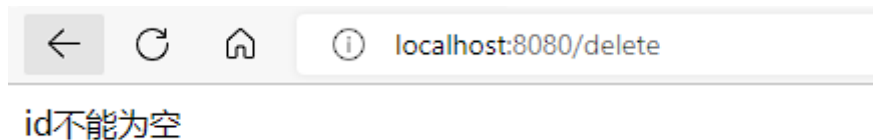
id不能为空

```
1    2022-10-29 14:01:31.769 ERROR 14504 --- [nio-8080-exec-6]
     m.use.controller.ExceptionConfiguration  : 异常：
2
3    javax.validation.ConstraintViolationException: delete.id: id不能为空
4        at
     org.springframework.validation.beanvalidation.MethodValidationInterceptor.in
     voke(MethodValidationInterceptor.java:120) ~[spring-context-
     5.3.21.jar:5.3.21]
5        at
     org.springframework.aop.framework.ReflectiveMethodInvocation.proceed(Reflect
     iveMethodInvocation.java:186) ~[spring-aop-5.3.21.jar:5.3.21]
6        at
     org.springframework.aop.framework.CglibAopProxy$CglibMethodInvocation.procee
     d(CglibAopProxy.java:763) ~[spring-aop-5.3.21.jar:5.3.21]
7        at
     org.springframework.aop.framework.CglibAopProxy$DynamicAdvisedInterceptor.in
     tercept(CglibAopProxy.java:708) ~[spring-aop-5.3.21.jar:5.3.21]
8        at
     mao.use.controller.UserController$$EnhancerBySpringCGLIB$$dedeecd2.delete(<g
     enerated>) ~[classes/:na]
9    ...
10   ...
11   ...
```

```
GET        ∨    http://localhost:8080/save

Params ●    Authorization    Headers (8)    Body ●    Pre-request Script    Tests    Settings

● none    ● form-data    ● x-www-form-urlencoded    ● raw    ● binary    ● GraphQL    JSON  ∨

1  {
2      "id":"12",
3      "userName": "2222222222222222222222222222222222222222222222222222222222"
4  }
```

Body   Cookies   Headers (5)   Test Results   ⊕   Stat

Pretty   Raw   Preview   Visualize   Text ∨   ⇄

1   用户名长度不能超过40位

GET ∨ http://localhost:8080/save

Params ● | Authorization | Headers (8) | Body ● | Pre-request Script | Tests | Settings

● none ● form-data ● x-www-form-urlencoded ● raw ● binary ● GraphQL JSON ∨

```
1  {
2      "id" : "12",
3      "userName": "222222222222222222",
4      "age":17
5  }
```

Body Cookies Headers (5) Test Results

Pretty Raw Preview Visualize Text ∨

1   年龄至少为18岁

GET   ∨   http://localhost:8080/save

Params ●   Authorization   Headers (8)   Body ●   Pre-request Script   Tests   Settings

● none   ● form-data   ● x-www-form-urlencoded   ● raw   ● binary   ● GraphQL   JSON ∨

```json
1  {
2      "id":"12",
3      "userName":"222222222222222222",
4      "age":63
5  }
```

Body   Cookies   Headers (5)   Test Results   ⊕ Status: 2(

Pretty   Raw   Preview   Visualize   Text ∨

1 年龄最大为60岁

http://localhost:8080/save

| GET | ∨ | http://localhost:8080/save |

Params ●   Authorization   Headers (8)   Body ●   Pre-request Script   Tests   Settings

● none   ● form-data   ● x-www-form-urlencoded   ● raw   ● binary   ● GraphQL   JSON ∨

```
1  {
2      "id":"12",
3      "userName":"222222222222222222",
4      "age":63,
5      "email":"13@.com"
6  }
```

Body   Cookies   Headers (5)   Test Results

Pretty   Raw   Preview   Visualize   Text ∨

```
1  邮箱格式不正确
```

end

by mao

2022 10 29