

AOP people-management 程序设计文档

Management.java 接口定义 CRUD 方法。

EmployeeManagementService.java 和 ManagerManagementService.java 分别实现了这些借口, 通过@Component 注解向 IOC 容器声明。用 sysout 模拟 CRUD。

根据 AOP 设计思想, 定义了基于@Aspect 注解的 PeopleCRUDAspect.java logger 程序。并且在 XML 中声明该 bean, 并且启用 aspectj 的注解支持。

```
@AfterReturning("execution(* com.wxy8866.demo.netease.mgt.*(..))")
```

```
@AfterThrowing(pointcut = "execution(* com.wxy8866.demo.netease.mgt.*(..))",  
throwing = "exception")
```

则定义了两个分别为正常返回和异常返回的 PointCut

```
11  
12 <aop:aspectj-autoproxy proxy-target-class="true" />  
13 <context:component-scan base-package="com.wxy8866.demo.netease.mgt" />  
14 <bean id="loggingAspect" class="com.wxy8866.demo.netease.mgt.PeopleCRUDAspect" />  
15
```

通过查阅 JoinPoint 的 API, 分别可取到类名, 方法和参数。

```
String className = jp.getSignature().getDeclaringTypeName();
```

```
String methodName = jp.getSignature().getName();
```

```
jp.getArgs()
```

测试结果：

```
三月 04, 2017 9:30:35 下午 org.springframework.context.support.ClassPathXmlApplicationContext prepareRefresh  
信息: Refreshing org.springframework.context.support.ClassPathXmlApplicationContext@7daf6ecc: startup date [Sat Mar 04 21:30:35 CST 2017]; root of context hierarchy  
三月 04, 2017 9:30:35 下午 org.springframework.beans.factory.xml.XmlBeanDefinitionReader loadBeanDefinitions  
信息: Loading XML bean definitions from class path resource [applicationContext.xml]  
Method getById() in EmployeeManagementService called  
Called: com.wxy8866.demo.netease.mgt.EmployeeManagementService, Method: getById, Params: 1  
Method create() in EmployeeManagementService called  
Called: com.wxy8866.demo.netease.mgt.EmployeeManagementService, Method: create, Params: com.wxy8866.demo.netease.mgt.EmployeeDTO@49e5f737  
Method getById() in EmployeeManagementService called  
Called: com.wxy8866.demo.netease.mgt.EmployeeManagementService, Method: getById, Params: 1  
Method update() in EmployeeManagementService called  
Called: com.wxy8866.demo.netease.mgt.EmployeeManagementService, Method: update, Params: com.wxy8866.demo.netease.mgt.EmployeeDTO@5c671d7f  
Method delete() in EmployeeManagementService called  
Called: com.wxy8866.demo.netease.mgt.EmployeeManagementService, Method: delete, Params: 1  
Method create() in ManagerManagementService called  
Called: com.wxy8866.demo.netease.mgt.ManagerManagementService, Method: create, Params: com.wxy8866.demo.netease.mgt.ManagerDTO@757277dc  
Method getById() in ManagerManagementService called  
Called: com.wxy8866.demo.netease.mgt.ManagerManagementService, Method: getById, Params: 2  
Method update() in ManagerManagementService called  
!!!Exception thrown !!!Exception: Throw exception manually, Called: com.wxy8866.demo.netease.mgt.ManagerManagementService, Method: update, Params: com.wxy8866.demo.netease.mgt.ManagerDTO@687e99  
Method delete() in ManagerManagementService called  
Called: com.wxy8866.demo.netease.mgt.ManagerManagementService, Method: delete, Params: 2  
三月 04, 2017 9:30:35 下午 org.springframework.context.support.ClassPathXmlApplicationContext doClose  
信息: Closing org.springframework.context.support.ClassPathXmlApplicationContext@7daf6ecc: startup date [Sat Mar 04 21:30:35 CST 2017]; root of context hierarchy
```