HOMEWORK_SPRING4

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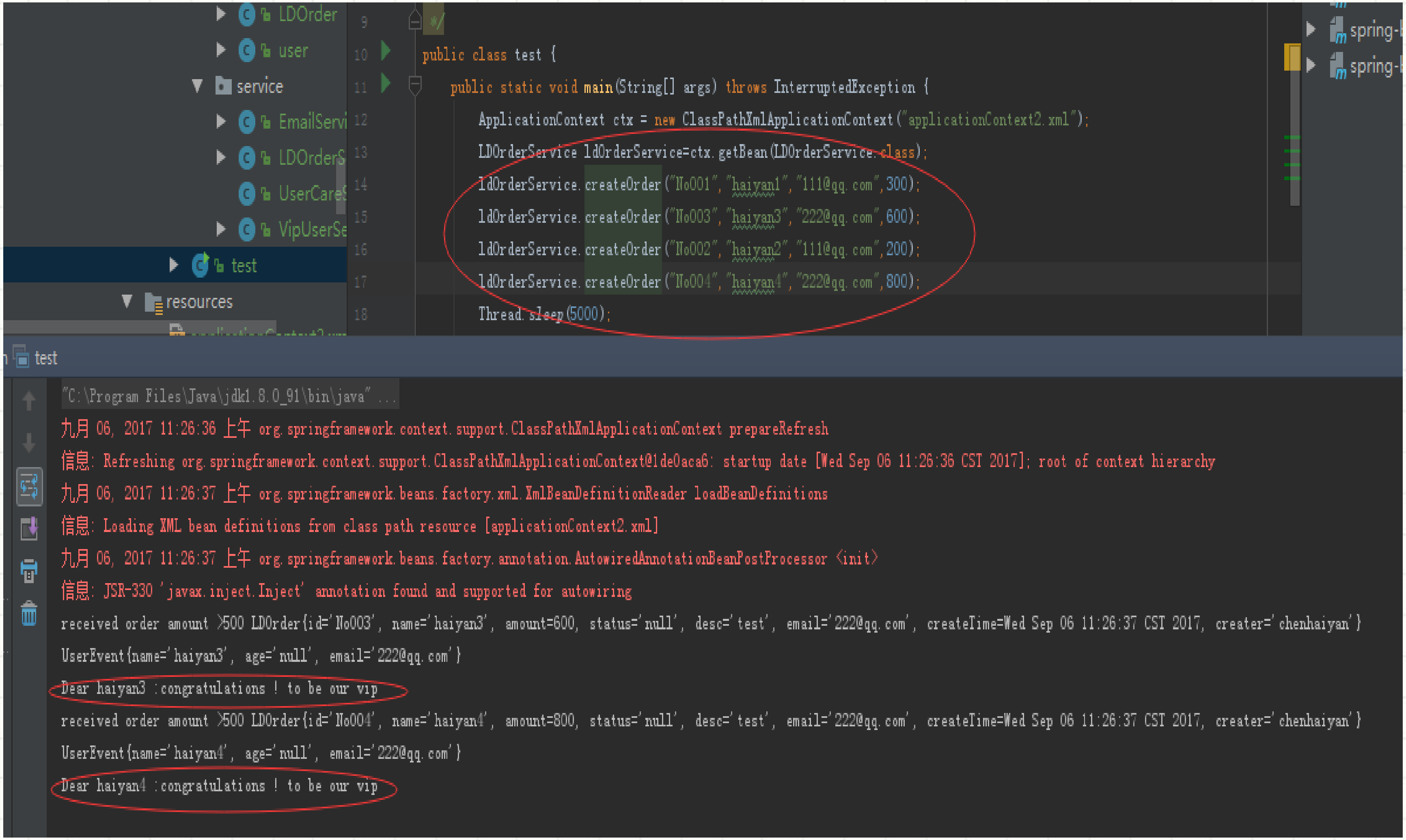
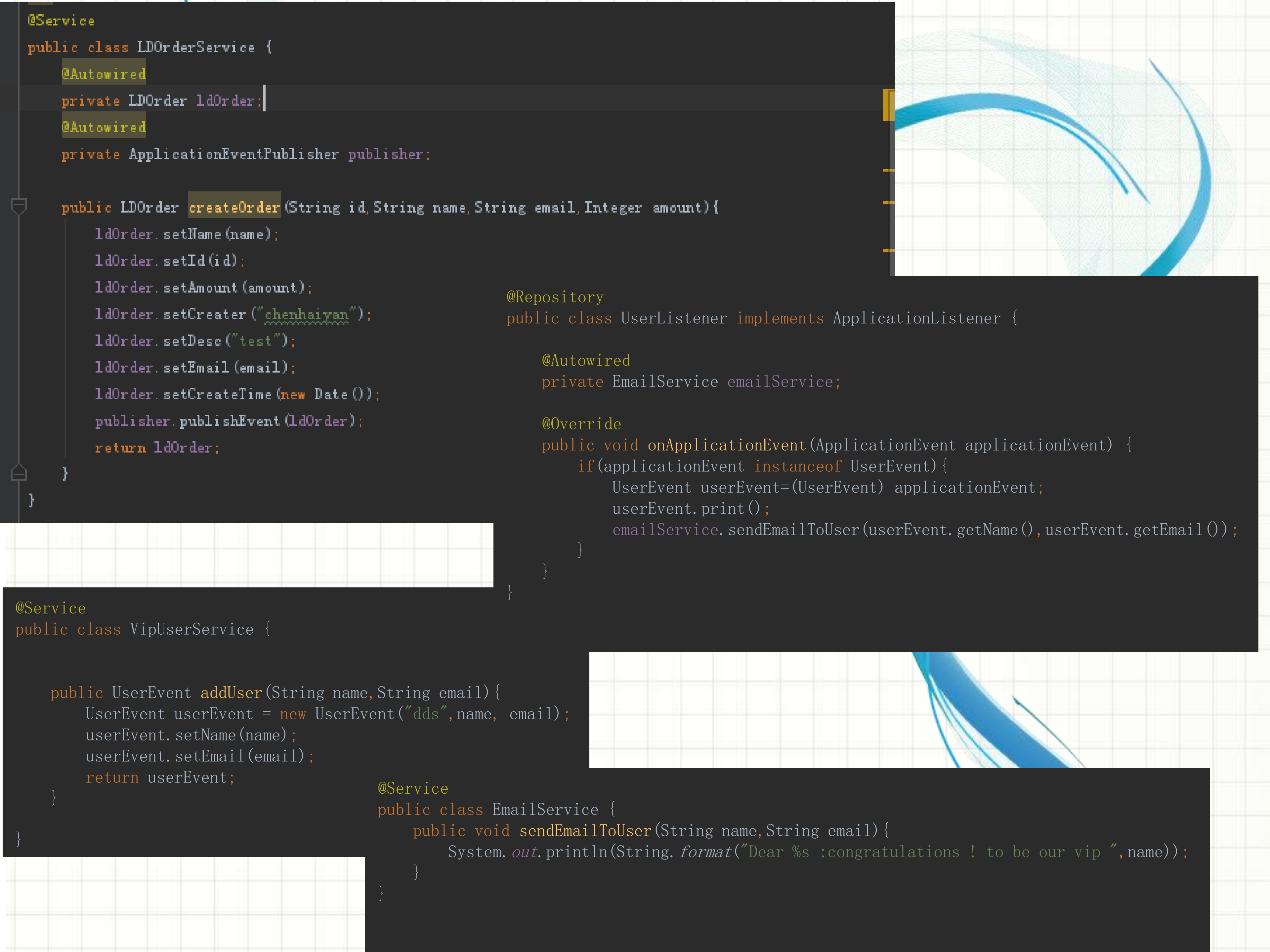
1 用Spring内嵌的消息通知机制，完成一个DEMO：订单服务(LdOrderService）产生一个新订单(LDOrder）的时候，如果订单金额大于500，则VIPUserDetector服务发现并且调动VipUserService的方法，通知增加一个新VIP用户.当新VIP用户产生时，此外，UserCareService监听到此事件，于是通知EmailService，发送一封邮件给用户。不用数据库，也不真正发邮件，只要打印日志证明流程走通即可。尽量用上所学各种技能。



```
    */
public class test {
    public static void main(String[] args) throws InterruptedException {
        ApplicationContext ctx = new ClassPathXmlApplicationContext("applicationContext2.xml");
        LDOrderService ldOrderService=ctx.getBean(LDOrderService.class);
        ldOrderService.createOrder("No001","haiyan1","111@qq.com",300);
        ldOrderService.createOrder("No003","haiyan3","222@qq.com",600);
        ldOrderService.createOrder("No002","haiyan2","111@qq.com",200);
        ldOrderService.createOrder("No004","haiyan4","222@qq.com",800);
        Thread.sleep(5000);
```

```
"C:\Program Files\Java\jdk1.8.0_91\bin\java" ...
九月 06, 2017 11:26:36 上午 org.springframework.context.support.ClassPathXmlApplicationContext prepareRefresh
信息: Refreshing org.springframework.context.support.ClassPathXmlApplicationContext@1de0aca6: startup date [Wed Sep 06 11:26:36 CST 2017]; root of context hierarchy
九月 06, 2017 11:26:37 上午 org.springframework.beans.factory.xml.XmlBeanDefinitionReader loadBeanDefinitions
信息: Loading XML bean definitions from class path resource [applicationContext2.xml]
九月 06, 2017 11:26:37 上午 org.springframework.beans.factory.annotation.AutowiredAnnotationBeanPostProcessor <init>
信息: JSR-330 'javax.inject.Inject' annotation found and supported for autowiring
received order amount >500 LDOrder{id='No003', name='haiyan3', amount=600, status='null', desc='test', email='222@qq.com', createTime=Wed Sep 06 11:26:37 CST 2017, creater='chenhaiyan'}
UserEvent{name='haiyan3', age='null', email='222@qq.com'}
Dear haiyan3 :congratulations ! to be our vip
received order amount >500 LDOrder{id='No004', name='haiyan4', amount=800, status='null', desc='test', email='222@qq.com', createTime=Wed Sep 06 11:26:37 CST 2017, creater='chenhaiyan'}
UserEvent{name='haiyan4', age='null', email='222@qq.com'}
Dear haiyan4 :congratulations ! to be our vip
```

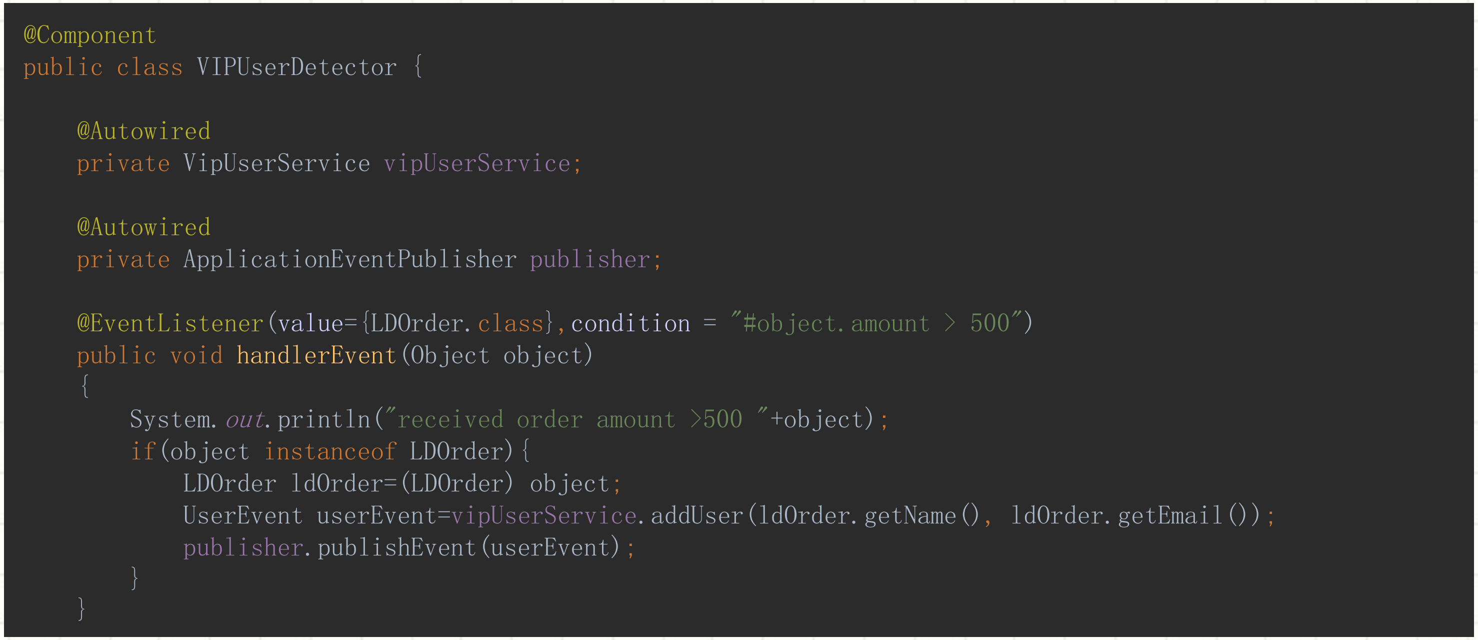


```java
@Service
public class LDOrderService {
    @Autowired
    private LDOrder ldOrder;
    @Autowired
    private ApplicationEventPublisher publisher;

    public LDOrder createOrder(String id,String name,String email,Integer amount){
        ldOrder.setName(name);
        ldOrder.setId(id);
        ldOrder.setAmount(amount);
        ldOrder.setCreater("chenhaiyan");
        ldOrder.setDesc("test");
        ldOrder.setEmail(email);
        ldOrder.setCreateTime(new Date());
        publisher.publishEvent(ldOrder);
        return ldOrder;
    }
}
```

```java
@Repository
public class UserListener implements ApplicationListener {

    @Autowired
    private EmailService emailService;

    @Override
    public void onApplicationEvent(ApplicationEvent applicationEvent) {
        if(applicationEvent instanceof UserEvent){
            UserEvent userEvent=(UserEvent) applicationEvent;
            userEvent.print();
            emailService.sendEmailToUser(userEvent.getName(),userEvent.getEmail());
        }
    }
}
```

```java
@Service
public class VipUserService {


    public UserEvent addUser(String name,String email){
        UserEvent userEvent = new UserEvent("dds",name, email);
        userEvent.setName(name);
        userEvent.setEmail(email);
        return userEvent;
    }

}
```

```java
@Service
public class EmailService {
    public void sendEmailToUser(String name,String email){
        System.out.println(String.format("Dear %s :congratulations ! to be our vip ",name));
    }
}
```



```
@Component
public class VIPUserDetector {

    @Autowired
    private VipUserService vipUserService;

    @Autowired
    private ApplicationEventPublisher publisher;

    @EventListener(value={LDOrder.class},condition = "#object.amount > 500")
    public void handlerEvent(Object object)
    {
        System.out.println("received order amount >500 "+object);
        if(object instanceof LDOrder){
            LDOrder ldOrder=(LDOrder) object;
            UserEvent userEvent=vipUserService.addUser(ldOrder.getName(), ldOrder.getEmail());
            publisher.publishEvent(userEvent);
        }
    }
```

谢谢