武汉纺织大学

Java应用开发课程设计

**机器人对话页面**

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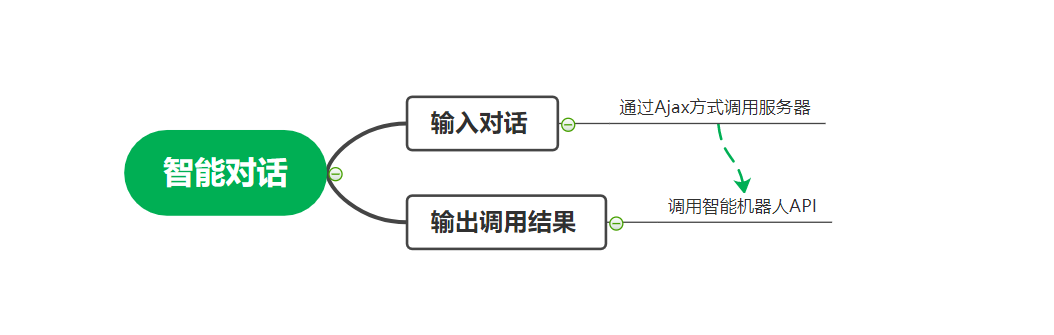
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# 1 需求分析

通过前端对显示页面进行布局，输入文字点击发送后Ajax方式调用服务器，在服务器程序中调用图灵机器人API，把API调用的结果返回到前端页面显示从而完成机器人对话。

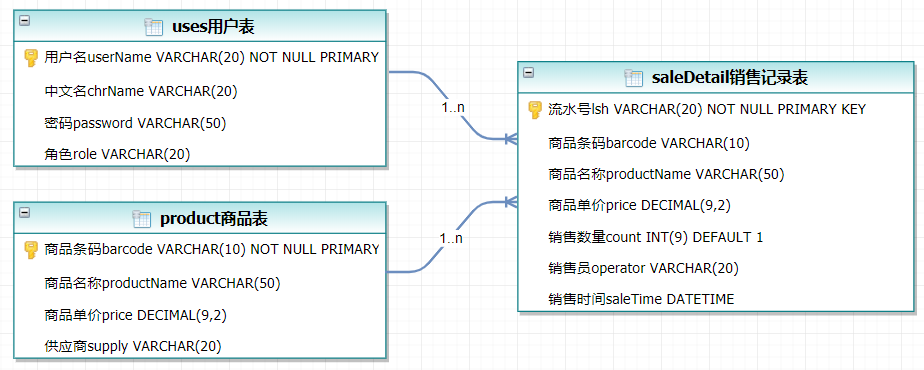
# 2 系统设计

## 2.1设计导图



## 2.2 ER图

数据库设计3张表，用户表，商品表，销售记录表，对应的ER图如图3-1所示。

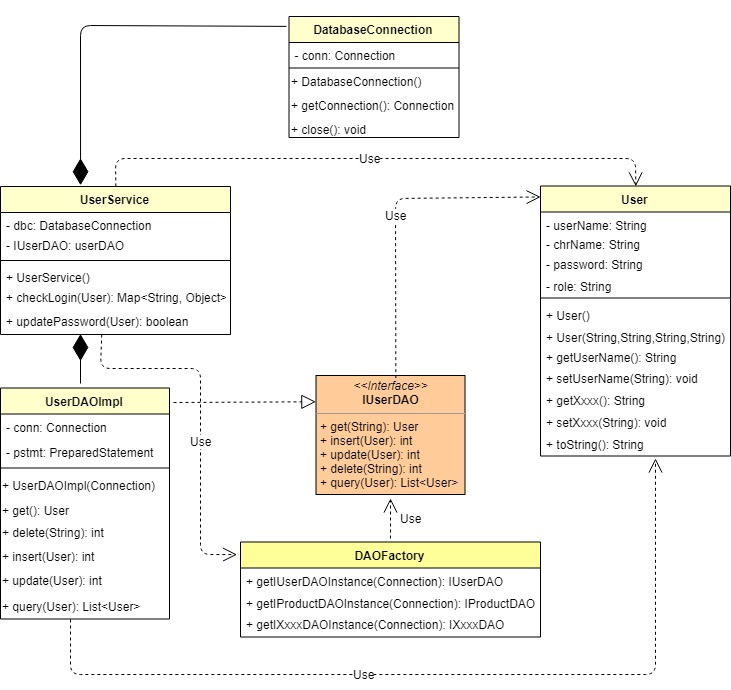
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ty.column.datalen%3D%22%22%20entity.column.dataType%3D%22DATETIME%22%20label%3D%22%26lt%3Bimg%20title%3D%26quot%3BPrimary%20Key%26quot%3B%20src%3D%26quot%3Bimages%2Fspacer.gif%26quot%3B%20width%3D%26quot%3B16%26quot%3B%20height%3D%26quot%3B16%26quot%3B%20align%3D%26quot%3Btop%26quot%3B%26gt%3B%26amp%3Bnbsp%3B%26lt%3Bfont%20size%3D%26quot%3B1%26quot%3B%20face%3D%26quot%3BTahoma%26quot%3B%26gt%3B%26lt%3Bspan%20style%3D%26quot%3Bfont-size%3A%2013px%26quot%3B%26gt%3B%26lt%3Bb%26gt%3Bname%20varchar(10)%26lt%3B%2Fb%26gt%3B%26lt%3B%2Fspan%26gt%3B%26lt%3B%2Ffont%26gt%3B%22%20entity.column.oldName%3D%22count%22%20entity.column.decimals%3D%22%22%20entity.column.autoIncreament%3D%22%22%20entity.column.unsigned%3D%22%22%20entity.column.bin%3D%22%22%20entity.column.ascii%3D%22%22%20entity.column.unicode%3D%22%22%20entity.column.PK%3D%22false%22%20entity.column.unique%3D%22%22%20entity.column.isNotNull%3D%22%22%20entity.column.defaultValue%3D%22%22%20entity.column.comment%3D%22%22%20entity.column.enum%3D%22%22%20entity.column.set%3D%22%22%20entity.column.enumSetValue%3D%22%22%20id%3D%2219%22%3E%3CmxCell%20style%3D%22text%3Bhtml%3D1%3BstrokeColor%3Dnone%3BfillColor%3Dnone%3BspacingLeft%3D4%3BspacingRight%3D4%3Boverflow%3Dhidden%3Brotatable%3D0%3BportConstraint%3Deastwest%3BfontSize%3D12%3BverticalAlign%3Dmiddle%3B%22%20vertex%3D%221%22%20parent%3D%2212%22%3E%3CmxGeometry%20y%3D%22182%22%20width%3D%22280%22%20height%3D%2226%22%20as%3D%22geometry%22%2F%3E%3C%2FmxCell%3E%3C%2Fmysql.column%3E%3CmxCell%20id%3D%2220%22%20value%3D%221..n%22%20style%3D%22edgeStyle%3DentityRelationEdgeStyle%3BfontSize%3D12%3Bhtml%3D1%3BendArrow%3DERoneToMany%3BstrokeWidth%3D2%3BstrokeColor%3D%236c8ebf%3BexitX%3D1%3BexitY%3D0.25%3BentryX%3D0%3BentryY%3D0.5%3B%22%20edge%3D%221%22%20source%3D%224%22%20target%3D%2214%22%20parent%3D%221%22%3E%3CmxGeometry%20relative%3D%221%22%20as%3D%22geometry%22%2F%3E%3C%2FmxCell%3E%3CmxCell%20id%3D%2221%22%20value%3D%221..n%22%20style%3D%22edgeStyle%3DentityRelationEdgeStyle%3BfontSize%3D12%3Bhtml%3D1%3BendArrow%3DERoneToMany%3BstrokeWidth%3D2%3BstrokeColor%3D%236c8ebf%3BexitX%3D1%3BexitY%3D0.5%3BentryX%3D0%3BentryY%3D0.5%3B%22%20edge%3D%221%22%20source%3D%228%22%20target%3D%2216%22%20parent%3D%221%22%3E%3CmxGeometry%20relative%3D%221%22%20as%3D%22geometry%22%2F%3E%3C%2FmxCell%3E%3C%2Froot%3E%3C%2FmxGraphModel%3E

## 2.3 UML类图（Class Diagram）

对于用户功能模块，共设计如下6个类。

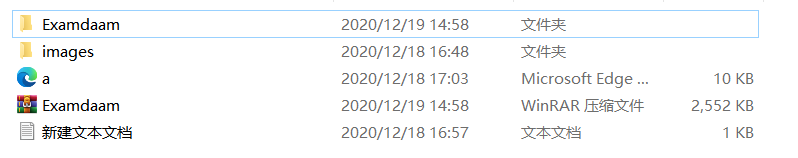
* 数据库连接类DatabaseConnection：连接数据库并获取连接对象，关闭连接对象。
* VO实体类User：与数据库结构进行映射的类。主要由属性，setter, getter方法组成，VO类中的属性与表中的字段相对应，每一个VO类的对象都表示表中的每一条记录
* DAO接口IUserDAO：主要定义操作的接口，定义一系列数据库的原子性操作，例如增删改查（通常称为CRUD）等。
* DAO实现类UserDAOImpl：DAO接口的真实实现类，主要完成具体数据库操作，但不负责数据库的打开和关闭。
* DAO工厂类DAOFactory：通过工厂类取得一个DAO的实例化对象
* 业务逻辑实现类UserService：对于数据层的原子操作进行整合。还要负责数据库的打开与关闭（不管是否出异常，数据库都要关闭）
* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*：

各类的结构及类之间的关系如图所示：

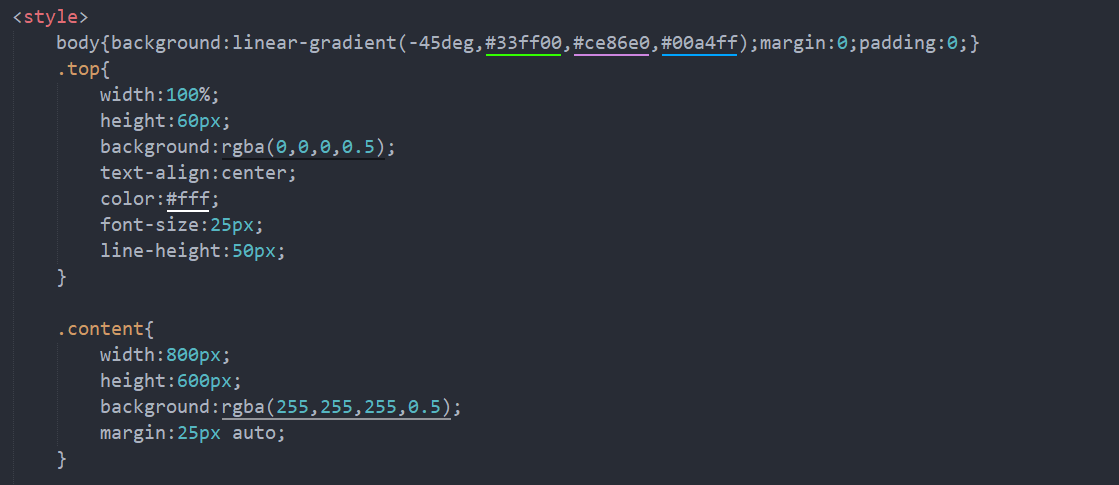


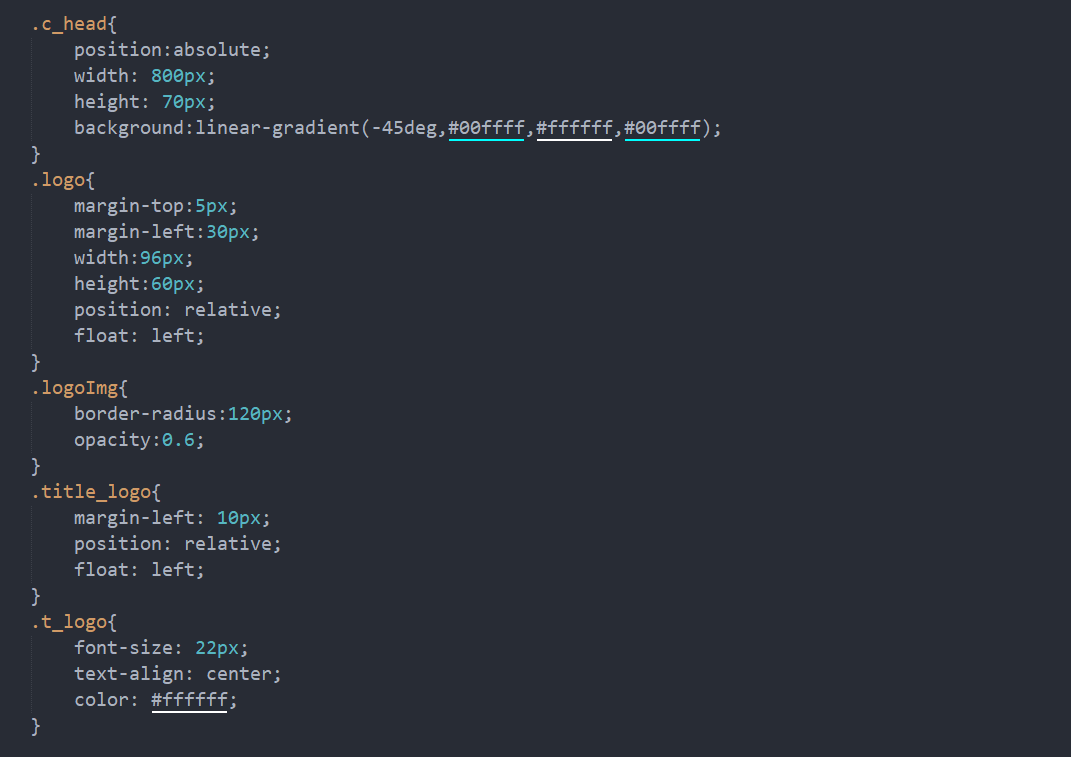
# 3 系统实现

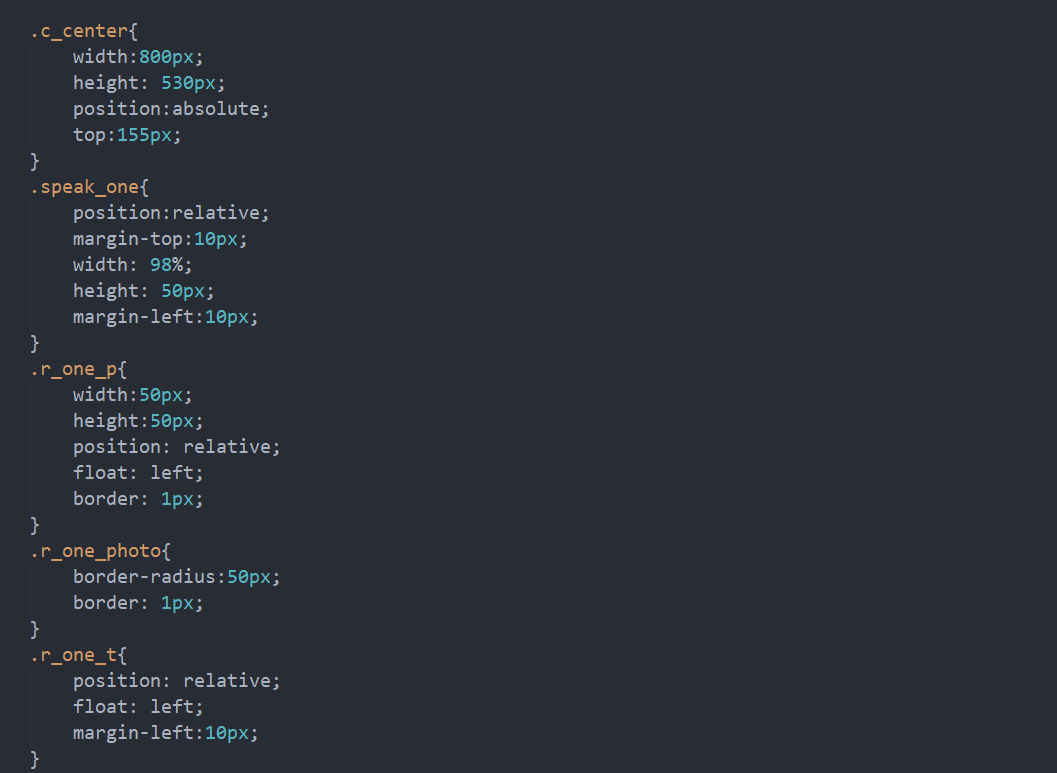
## 3.1 项目结构

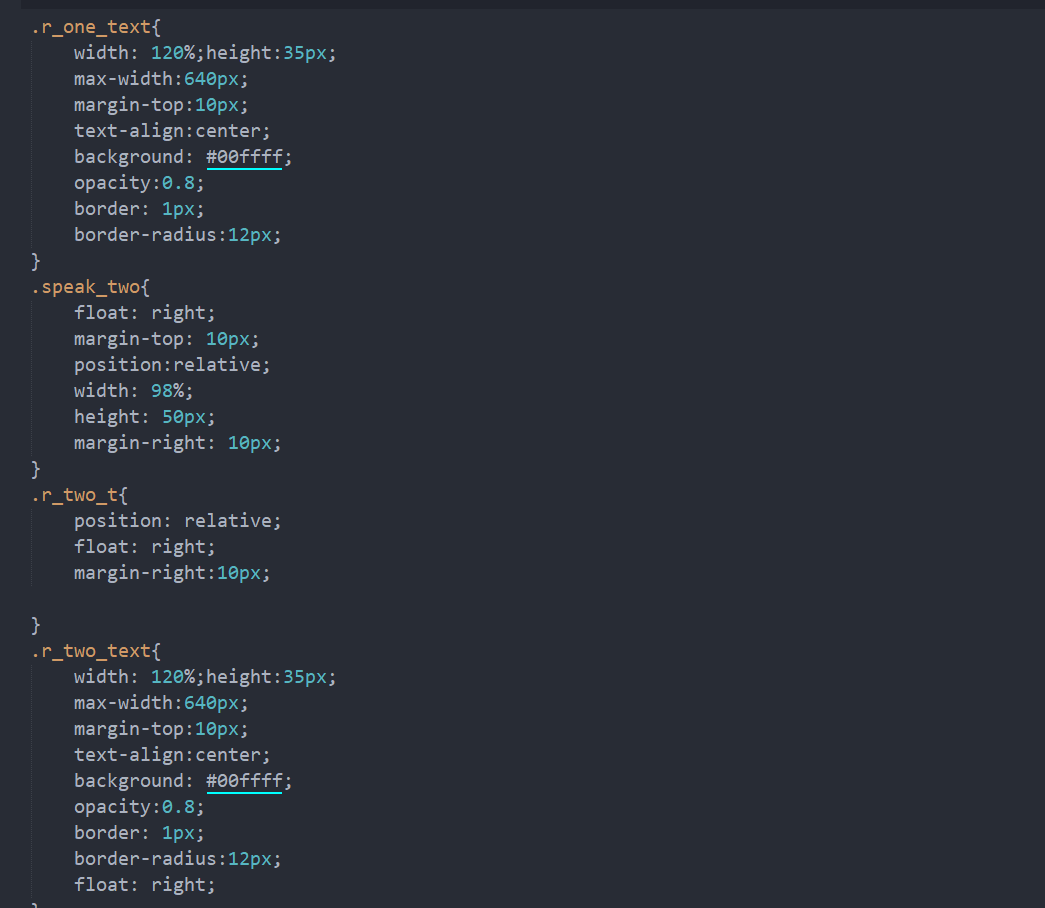


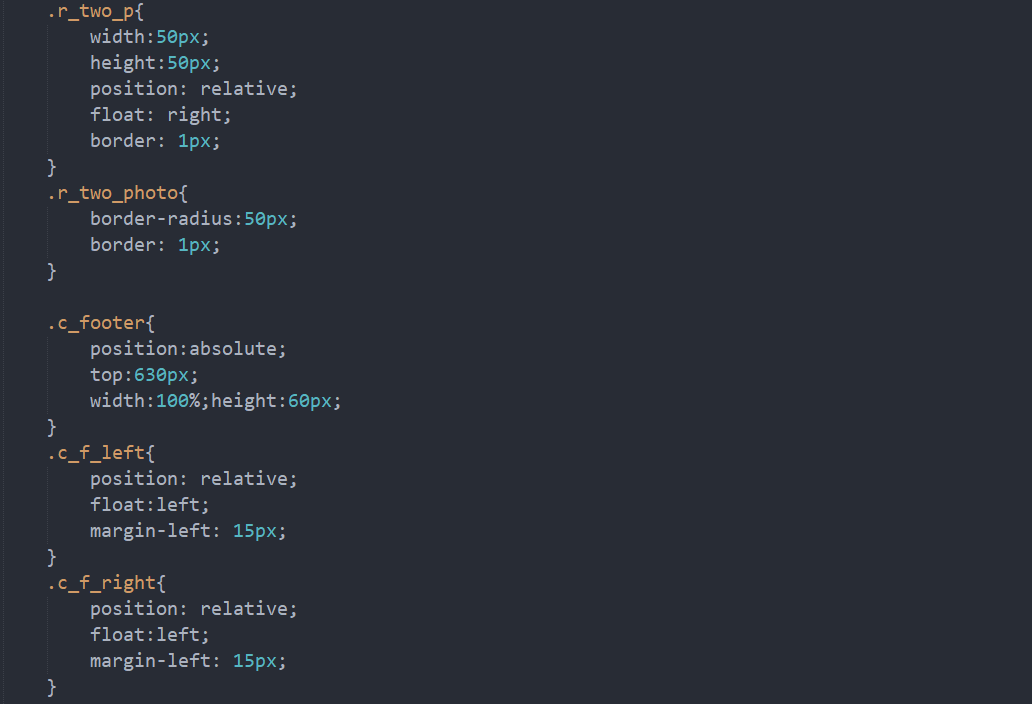
## 3.2 基本布局

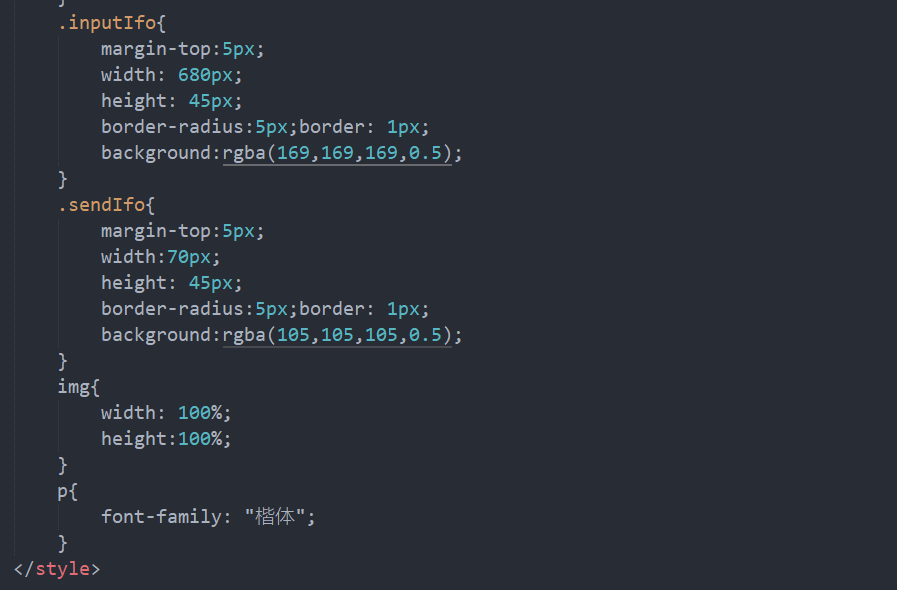














**4 系统测试**



# 5 系统总结

主要问题就是知识掌握的还是不够熟练，导致完成作业时困难还是很多的，代码这东西还是要自己多动手练习练习，自己还是实践少了，不能仅仅停留在java表层，不是抄书上的例子运行出结果就可以，还是要有耐心去琢磨、调试、改动。

这门课程的收获就是开始融合之前学过的很多学科的知识来组建一个比较完整的项目，可以说是在靠自己完成一个很基础的工程，用前端来对页面进行布局，美化页面，用Java来完成应用主体部分，再调用数据库的内容来返回前端显示给用户看，算是对于以后工作的内容有了个初步的了解。

自评成绩：70

感谢老师在这段时间对我们的悉心教导，老师辛苦了！