

完成第一阶段任务的类图编程，其他要求：

- 1) 每个类的撰写必须符合Sun公司编程规范、必须有注释
- 2) 至少有2个类必须包含toString方法和equals方法
- 3) 增加策略设计模式的应用
- 4) 增加文件读写功能
- 5) 增加界面

注意：如果在第一阶段任务的需求和类图有变化，则在第二阶段编程实现时，把新需求和新类图附上同时附上。

- (1) 完成，符合类撰写规范，方法和类都有注释
- (2) 完成，Skirt类和Dress类包含toString方法和equals方法

```
ShowingColumn.java x Skirt.java x WomenClothing.java x ShoppingColumn.java x WomenClothingSalesSystem.java x
@Override
public String toString() {
    return super.toString() +
        String.format("\n%-30s\n%-30s\n%-30s\n%-30s",
            WomenClothingSalesSystem.BLUE+"waistCircumference:", WomenClothingSalesSystem.BLUE+"hips:",
            WomenClothingSalesSystem.BLUE+"hemline:", WomenClothingSalesSystem.BLUE+"sleeveLength:" );
}

@Override
public boolean equals(Object o) {
    if (this == o) return true;
    if (!(o instanceof Skirt)) return false;
    Skirt skirt = (Skirt) o;
    return Double.compare(skirt.getWaistCircumference(), getWaistCircumference()) == 0 &&
        Double.compare(skirt.getHips(), getHips()) == 0 &&
        getHemline().equals(skirt.getHemline());
}
```

```
Skirt.java x Dress.java x WomenClothing.java x ShoppingColumn.java x WomenClothingSalesSystem.java x
@Override
public String toString() {
    return super.toString() +
        String.format("\n%-30s\n%-30s\n%-30s\n%-30s\n%-30s\n%-30s\n%-30s",
            WomenClothingSalesSystem.BLUE+"waistCircumference", WomenClothingSalesSystem.BLUE+"hips",
            WomenClothingSalesSystem.BLUE+"hemline", WomenClothingSalesSystem.BLUE+"shoulderAcross",
            WomenClothingSalesSystem.BLUE+"bustWidth", WomenClothingSalesSystem.BLUE+"sleeveLength",
            WomenClothingSalesSystem.BLUE+"waistCircumference");
}

@Override
public boolean equals(Object o) {
    if (this == o) return true;
    if (!(o instanceof Dress)) return false;
    Dress dress = (Dress) o;
    return Double.compare(dress.getWaistCircumference(), getWaistCircumference()) == 0 &&
        Double.compare(dress.getHips(), getHips()) == 0 &&
        Double.compare(dress.getShoulderAcross(), getShoulderAcross()) == 0 &&
        Double.compare(dress.getBustWidth(), getBustWidth()) == 0 &&
        Double.compare(dress.getSleeveLength(), getSleeveLength()) == 0 &&
        getHemline().equals(dress.getHemline());
}
```

(3) 有写到相关思想，但未具体实现三个类一个接口，主要是该软件已经有了19个类，新增三个策略类和一个策略接口会导致UML类图过于庞大，不利于查看。

在面向对象实验中完成了该任务

(4) 在loadClothingDataBase方法中实现了文件读入的功能（如下图），由于是本软件是类似于淘宝的购物系统，不存在文件写的功能需求，故未实现文件写的功能。

```
public static ClothingDataBase loadClothingDataBase(String fileName) throws IOException {
    FileInputStream fis = new FileInputStream(fileName);
    BufferedReader fileIn = new BufferedReader(
        new InputStreamReader(fis));

    ClothingDataBase clothingDataBase = new ClothingDataBase();

    String inputLine;
    while ((inputLine = fileIn.readLine()) != null){
        String[] s = inputLine.split( regex: " ");
        switch (s[0]){
            case "Skirt":{
                clothingDataBase.addWomenClothing(new Skirt(s[0],s[1],Double.parseDouble(s[2]),Double.parse
                    s[4],s[5],Double.parseDouble(s[6]),Double.parseDouble(s[7]),s[8]));
                break;
            }
            case "Pants":{
                clothingDataBase.addWomenClothing(new Pants(s[0],s[1],Double.parseDouble(s[2]),Double.parse
                    s[4],s[5],Double.parseDouble(s[6]),Double.parseDouble(s[7]),Double.parseDouble(s[8]
                break;
            }
        }
    }
}
```

(5) 完成，实现了控制台界面（使用方法见[控制台版本操作指南.md](#)）和用户界面

```
choice> 3
there are some hot choices or you can just search other choice
0. other choice
1. dress_1      HOT
2. skirt_1      HOT
3. dress_5      HOT
4. skirt_4      HOT
choice> 4

name:           skirt_4
price:          124.0
length:         5.0
size:           L
color:          White
type:           Skirt
waistCircumference: 24.0
hips:           24.1
hemline:        Short
choosed quantity: 0
```

ShowCasePageSearchPageDetailPageShoppingPage

Choosed Status	Price	Quantity	Name
<input type="checkbox"/>	121.0	3	skirt_1
<input checked="" type="checkbox"/>	122.0	4	skirt_2
<input checked="" type="checkbox"/>	123.0	7	skirt_3

add all choosed

reduce all choosed

buy all choosed

remove all choosed