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package com.Uvisitor;
import java.awt.event.*;
import java.util.*;
import javax.swing.*;
public class VisitorProducer
{
    public static void main(String[] args)
    {
        new MaterialWin();
    }
}
//窗体类
class MaterialWin extends JFrame implements ItemListener
{
    private static final long serialVersionUID=1L;
    JPanel CenterJP;
    SetMaterial os; //材料集对象
    Company visitor1,visitor2; //访问者对象
    String[] select;
    MaterialWin()
    {
        super("利用访问者模式设计艺术公司和造币公司");
        JRadioButton Art;
        JRadioButton mint;
        os=new SetMaterial();
        os.add(new Cuprum());
        os.add(new Paper());
        visitor1=new ArtCompany();//艺术公司
        visitor2=new Mint(); //造币公司
        this.setBounds(10,10,750,350);
        this.setResizable(false);
        CenterJP=new JPanel();
        this.add("Center",CenterJP);
        JPanel SouthJP=new JPanel();
        JLabel yl=new JLabel("原材料有：铜和纸，请选择生产公司：");
        Art=new JRadioButton("艺术公司",true);
        mint=new JRadioButton("造币公司");
        Art.addItemListener(this);
        mint.addItemListener(this);
        ButtonGroup group=new ButtonGroup();
        group.add(Art);
        group.add(mint);
        SouthJP.add(yl);
        SouthJP.add(Art);
        SouthJP.add(mint);
        this.add("South",SouthJP);
    }
}

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        select=(os.accept(visitor1)).split(" "); //获取产品名
        showPicture(select[0],select[1]); //显示产品
    }
    //显示图片
    void showPicture(String Cuprum,String paper)
    {
        CenterJP.removeAll(); //清除面板内容
        CenterJP.repaint(); //刷新屏幕
        String
        FileName1="D:\\workspace\\DesignPattern\\src\\com\\Uvisitor\\"+Cuprum+".jpg";
        String
        FileName2="D:\\workspace\\DesignPattern\\src\\com\\Uvisitor\\"+paper+".jpg";
        JLabel lb=new JLabel(new ImageIcon(FileName1),JLabel.CENTER);
        JLabel rb=new JLabel(new ImageIcon(FileName2),JLabel.CENTER);
        CenterJP.add(lb);
        CenterJP.add(rb);
        this.setVisible(true);
        this.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    }
    @Override
    public void itemStateChanged(ItemEvent arg0)
    {
        JRadioButton jc=(JRadioButton) arg0.getSource();
        if (jc.isSelected())
        {
            if (jc.getText()=="造币公司")
            {
                select=(os.accept(visitor2)).split(" ");
            }
            else
            {
                select=(os.accept(visitor1)).split(" ");
            }
            showPicture(select[0],select[1]); //显示选择的产品
        }
    }
}
//抽象访问者:公司
interface Company
{
    String create(Paper element);
    String create(Cuprum element);
}
//具体访问者: 艺术公司
class ArtCompany implements Company
{
    public String create(Paper element)

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    {
        return "讲学图";
    }
    public String create(Cuprum element)
    {
        return "朱熹铜像";
    }
}
//具体访问者：造币公司
class Mint implements Company
{
    public String create(Paper element)
    {
        return "纸币";
    }
    public String create(Cuprum element)
    {
        return "铜币";
    }
}
//抽象元素：材料
interface Material
{
    String accept(Company visitor);
}
//具体元素：纸
class Paper implements Material
{
    public String accept(Company visitor)
    {
        return(visitor.create(this));
    }
}
//具体元素：铜
class Cuprum implements Material
{
    public String accept(Company visitor)
    {
        return(visitor.create(this));
    }
}
//对象结构角色:材料集
class SetMaterial
{
    private List<Material> list=new ArrayList<Material>();
    public String accept(Company visitor)
    {

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    Iterator<Material> i=list.iterator();
    String tmp="";
    while(i.hasNext())
    {
        tmp+=((Material) i.next()).accept(visitor)+" ";
    }
    return tmp; //返回某公司的作品集
}
public void add(Material element)
{
    list.add(element);
}
public void remove(Material element)
{
    list.remove(element);
}
}
```