

# Java设计模式

## Builder模式

创建个辅助类（一般使用内部类） `Builder`，先将属性设置到 `Builder` 中，然后调用 `Builder#build` 方法生成实例：

```
public class Toy {
    private String head;
    private String body;
    private ArrayList legs;
    private ArrayList hands;

    public String getHead() {
        return head;
    }

    public void setHead(String head) {
        this.head = head;
    }

    public String getBody() {
        return body;
    }

    public void setBody(String body) {
        this.body = body;
    }

    public ArrayList getLegs() {
        return legs;
    }

    public void setLegs(ArrayList legs) {
        this.legs = legs;
    }

    public ArrayList getHands() {
        return hands;
    }

    public void setHands(ArrayList hands) {
        this.hands = hands;
    }

    static class Builder {
        private Toy toy;

        public Builder() {
            toy = new Toy();
        }

        public Builder setHead(String head) {
            toy.setHead(head);
            return this;
        }

        public Builder setBody(String body) {
            toy.setBody(body);
            return this;
        }
    }
}
```

```

    public Builder setLegs(ArrayList legs) {
        toy.setLegs(legs);
        return this;
    }

    public Builder setHands(ArrayList hands) {
        toy.setHands(hands);
        return this;
    }

    public Toy build() {
        return toy;
    }
}

public static void main(String[] hh) {
    ArrayList hands = new ArrayList();
    hands.add("left");
    hands.add("right");

    ArrayList legs = new ArrayList();
    legs.add("left");
    legs.add("right");

    Toy toy = new Toy.Builder()
        .setBody("body")
        .setHands(hands)
        .setLegs(legs)
        .setHead("head")
        .build();
}
}

```

## 策略模式

### 定义

- 策略模式定义了一系列的算法，并将每一个算法封装起来，而且使它们可以相互替换，让算法独立于使用它的客户而独立变化。
- 行为参数化模式与策略模式比较相近