

Design Patterns

MSc in Communications Software

Produced
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Pattern Happy

Design Patterns “Case Study”

Pseuds Corner

- “Eric Gamma shared his joy in the order and beauty of software design as co-author of the classic Design Patterns”
- From the back cover of Contributing to Eclipse, Gamma & Beck, Addison-Wesley 2003

AbstractFactory & Strategy

```
public abstract class AbstractStrategyFactory
{
    public abstract MessageStrategy createStrategy(MessageBody mb);
}
```

```
public interface MessageStrategy
{
    public void sendMessage();
}
```

Concrete Factory & Singleton

```
public class DefaultFactory extends AbstractStrategyFactory
{
    private DefaultFactory()
    {
        ;
    }

    static DefaultFactory instance;

    public static AbstractStrategyFactory getInstance()
    {
        if (instance == null)
            instance = new DefaultFactory();
        return instance;
    }

    public MessageStrategy createStrategy(final MessageBody mb)
    {
        return new MessageStrategy()
        {
            MessageBody body = mb;

            public void sendMessage()
            {
                Object obj = body.getPayload();
                System.out.println((String) obj);
            }
        };
    }
}
```

Strategy Context

```
public class MessageBody
{
    Object payload;

    public Object getPayload()
    {
        return payload;
    }

    public void configure(Object obj)
    {
        payload = obj;
    }

    public void send(MessageStrategy ms)
    {
        ms.sendMessage();
    }
}
```

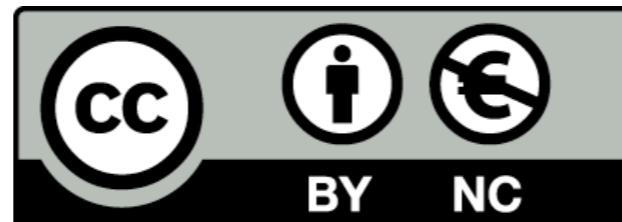
HelloWorld!

```
public class HelloWorld
{
    public static void main(String[] args)
    {
        MessageBody mb = new MessageBody();
        mb.configure("Hello World!");
        AbstractStrategyFactory asf = DefaultFactory.getInstance();
        MessageStrategy strategy = asf.createStrategy(mb);
        mb.send(strategy);
    }
}
```

HelloWorld?

```
public class HelloWorld
{
    public static void main(String[] args)
    {
        System.out.println("Hello, world!");
    }
}
```

- <http://developers.slashdot.org/comments.pl?sid=33602&cid=3636102>



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