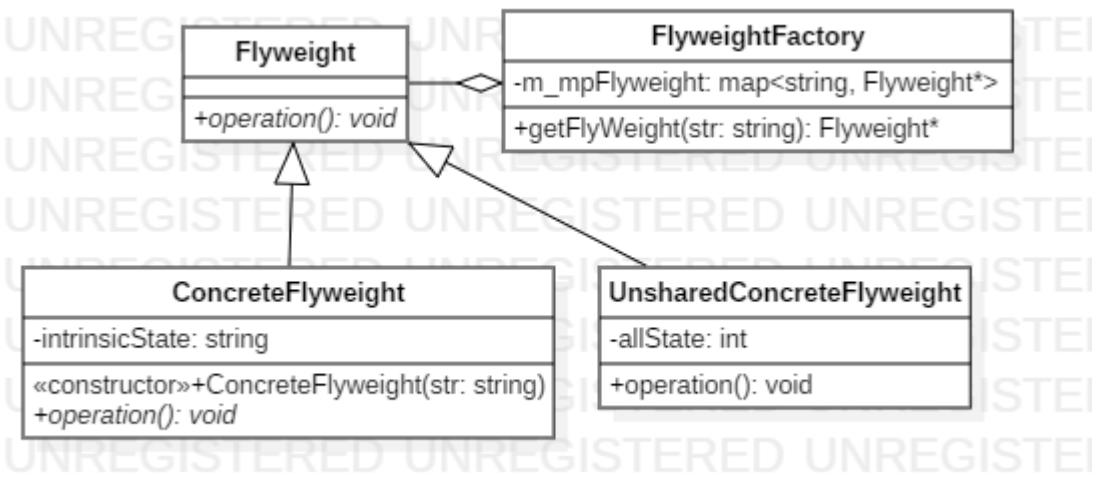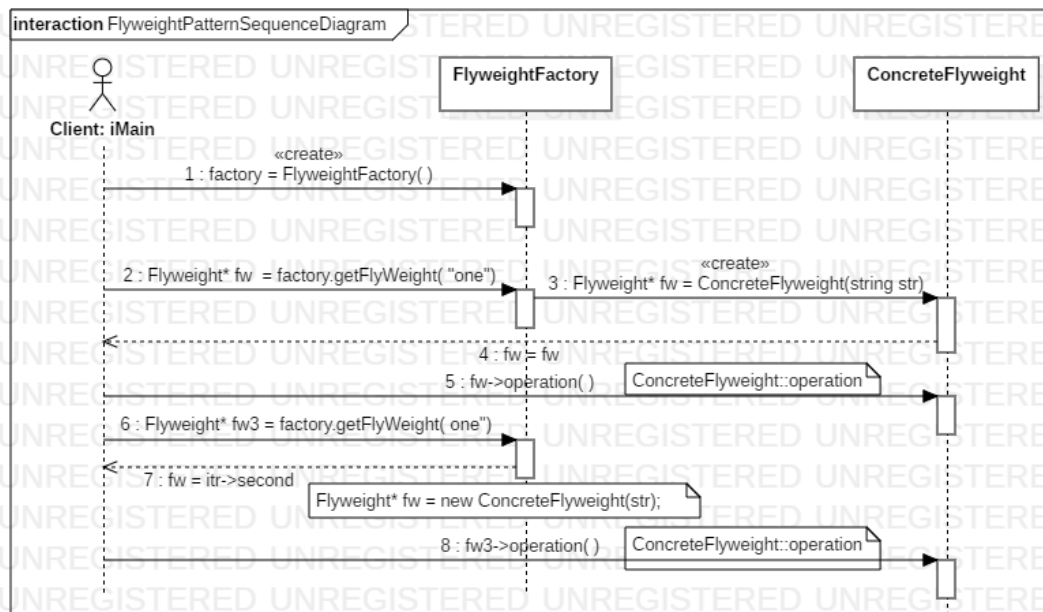# 模式定义

享元模式(Flyweight Pattern)：运用共享技术有效地支持**大量**细粒度对象的复用。系统只使用少量的对象，而这些对象都很相似，状态变化很小，可以实现对象的多次复用。由于享元模式要求能够共享的对象必须是细粒度对象，因此它又称为轻量级模式，它是一种对象结构型模式。

模式结构

- Flyweight：抽象享元类
- ConcreteFlyweight：具体享元类
- UnsharedConcreteFlyweight：非共享具体享元类
- FlyweightFactory：享元工厂类

时序图

测试结果

```cpp
int main()
{
    FlyweightFactory factory;
    Flyweight* fw = factory.getFlyWeight("one");
    fw->operation();

    Flyweight* fw2 = factory.getFlyWeight("two");
    fw2->operation();

    Flyweight* fw3 = factory.getFlyWeight("one");
    fw3->operation();

    system("pause");
    return 0;
}
```

```
D:\Design Pattern1\DesignPatterDemo\Structural
Flyweight[one] do operation.
Flyweight[two] do operation.
aready in the pool,use the exist one:
Flyweight[one] do operation.
请按任意键继续. . .
```