

DEPARTEMENT MATHÉMATIQUES ET INFORMATIQUE

# Design Pattern

**Filière :**  
**« Génie du Logiciel et des Systèmes Informatiques Distribués »**  
**GLSID**

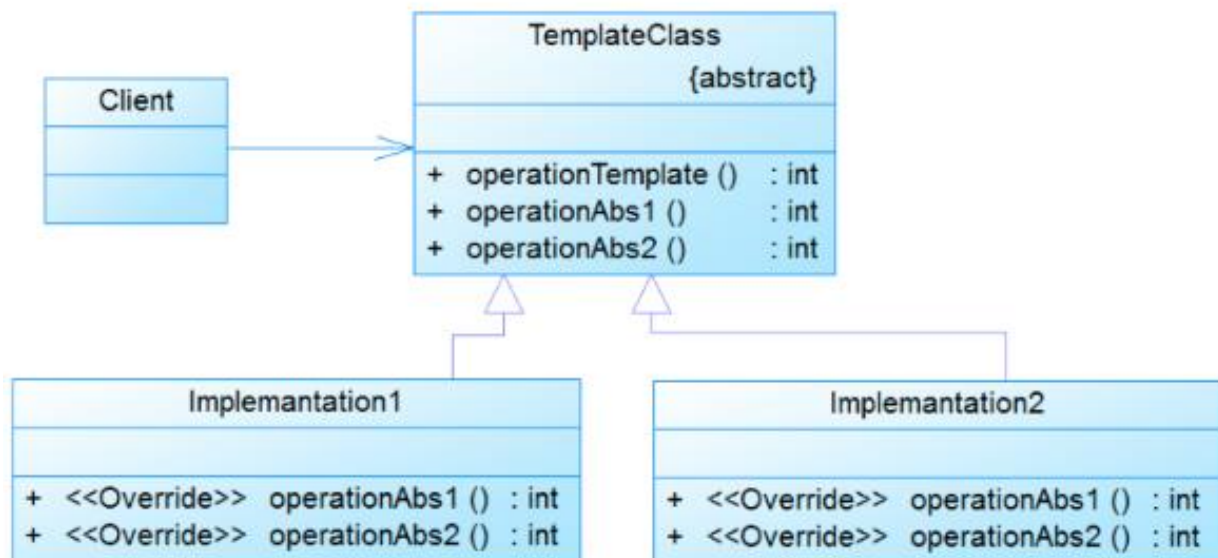
## Pattern Template Method

Réalisé par :

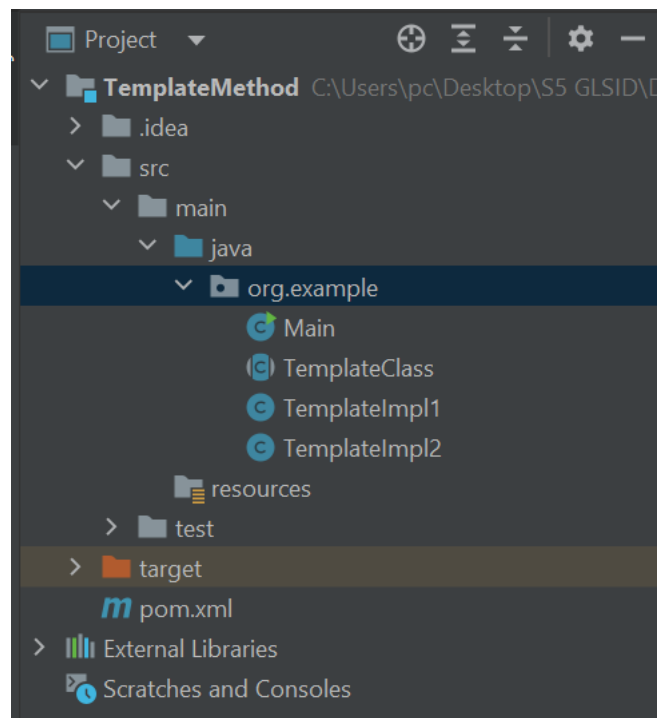
Najat ES-SAYYAD

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# Pattern Template Method



## Structure de projet :



## La classe abstraite TemplateClass :

```
1 package org.example;
2
3 3 usages 2 inheritors
4 public abstract class TemplateClass {
5     2 usages
6     public double TemplateMethod(){
7         int n=operation1();
8         double somme=0;
9         for (int i = 0; i < n; i++) {
10             somme+=operation2(i);
11         }
12         return somme;
13     }
14
15     1 usage 2 implementations
16     protected abstract double operation2(int i);
17     1 usage 2 implementations
18     protected abstract int operation1() ;
19 }
```

### La classe TemplateImpl1 :

```
package org.example;

1 usage
public class TemplateImpl1 extends TemplateClass{
    1 usage
    @Override
    protected double operation2(int i) {
        return 22;
    }

    1 usage
    @Override
    protected int operation1() {
        return 90;
    }
}
```

### La classe TemplateImpl 2 :

```
package org.example;

1 usage
public class TemplateImpl2 extends TemplateClass{
    1 usage
    @Override
    protected double operation2(int i) {
        return 74;
    }

    1 usage
    @Override
    protected int operation1() {
        return 12;
    }
}
```

## Test :

```
package org.example;

no usages
public class Main {
    no usages
    public static void main(String[] args) {
        TemplateClass templateClass=new TemplateImpl1();
        System.out.println(templateClass.TemplateMethod());
        System.out.println("*****");
        templateClass=new TemplateImpl2();
        System.out.println(templateClass.TemplateMethod());
    }
}
```

## Résultat :

```
1980.0
*****
888.0

Process finished with exit code 0
```