Components và Injection

Beans là gì?

"Bean" là một đối tượng được quản lý bởi Spring

@

@Component

Đánh dấu các Class có thể trở thành Bean, Spring sẽ quét và tạo một Bean từ class này

```java
import org.springframework.stereotype.Component;


@Component
public class MyComponent {
    public void doSomething() {
        System.out.println("Doing something...");
    }
}
```

```java
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Component;


@Component
public class AnotherComponent {
    private MyComponent myComponent;

    @Autowired
    public AnotherComponent(MyComponent myComponent) {
        this.myComponent = myComponent;
    }

    public void doSomethingElse() {
        myComponent.doSomething();
        System.out.println("Doing something else...");
    }
}
```

```java
import org.springframework.stereotype.Component;

@Component
public class Student {

    private String name;

    public Student() {
    }

    public Student(String name) {
        this.name = name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public void study() {
        System.out.println("Student " + name + " is studying...");
    }
}
```

```java
import org.springframework.stereotype.Component;

@Component
public class Teacher {

    private String name;

    public Teacher() {
    }

    public Teacher(String name) {
        this.name = name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public void teach() {
        System.out.println("Teacher " + name + " is teaching...");
    }
}
```

```java
import org.springframework.beans.factory.annotation.Autowired;

import org.springframework.stereotype.Component;

@Component
public class Classroom {
    private Student student;
    private Teacher teacher;

    @Autowired
    public Classroom(Student student, Teacher teacher) {
        this.student = student;
        this.teacher = teacher;
    }

    public void startClass() {
        student.study();
        teacher.teach();
    }
}
```