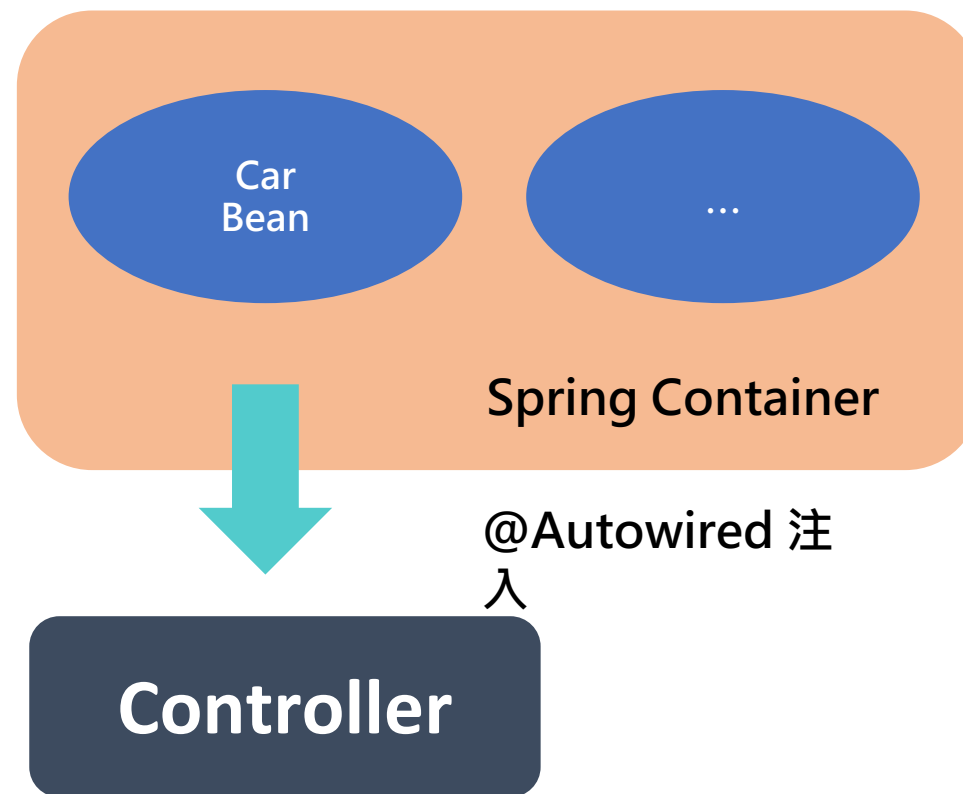# 6-3 使用@Autowired

@Autowired用法

Sprng 2.5導入@Autowired

之前版本我們使用 Config(XML)配置Spring Bean

使用@Autowired可以避免使用 setter/getter注入相依賴物件(DI)

可用在Constructor/Data Field/setter Method(Property Injection)配置鄉依賴的物件

Spring Bean可使用@Bean與@Component與@Repository進行定義配置

Car Bean

...

Spring Container

@Autowired 注入

Controller

@Autowired Data Field注入

透過封裝的Data Field進行注入

- **注入Car應用**

Car本身為建構子注入依賴的引擎與變速箱物件

```java
@Controller
public class CarController {
    //Data Field注入依賴物件
    @Autowired
    private Car car;


    @RequestMapping(path="/car/show",method= {RequestMethod.GET})
    public String showCar(Model model) {
        //參照注入的Car物件(持續狀態到View)
        model.addAttribute("car",car);
        return "carshow";
    }

}
```

```java
@Component
public class Car {
    private Engine engine;
    private Transmission transmission;

    //建構子注入
    @Autowired
    public Car(Engine engine, Transmission transmission) {
        System.out.println(engine);
        this.engine = engine;
        this.transmission = transmission;
    }
}
```

@Bean Confing或者@Component配置

需要經由@ComponentScan()進行掃描產生Spring Bean進入Spring Container

```java
import org.springframework.boot.SpringApplication;
//配置自動掃描元件註冊到Spring Container
@SpringBootApplication
@ComponentScan(basePackages= {"com.tibame.controller","com.tibame.component"})
public class MywebApplication {

    public static void main(String[] args) {
        SpringApplication.run(MywebApplication.class, args);
    }

}
```

了解@Autowired注入依賴物件之後，我們來了解@Resource注入意義