Annotations - Spring Boot, Spring Cloud & Spring Framework

Spring Boot and Web annotations

Use annotations to configure your web application.

T **@SpringBootApplication** - uses @Configuration, @EnableAutoConfiguration and @ComponentScan.

T **@EnableAutoConfiguration** - make Spring guess the configuration based on the classpath.

T **@Controller** - marks the class as web controller, capable of handling the requests. T **@RestController** - a convenience annotation of a @Controller and @ResponseBody.

M T **@ResponseBody** - makes Spring bind method's return value to the web response body.

M **@RequestMapping** - specify on the method in the controller, to map a HTTP request to the URL to this method.

P **@RequestParam** - bind HTTP parameters into method arguments.

P **@PathVariable** - binds placeholder from the URI to the method parameter.

Spring Cloud annotations

Make you application work well in the cloud.

T **@EnableConfigServer** - turns your application into a server other apps can get their configuration from.

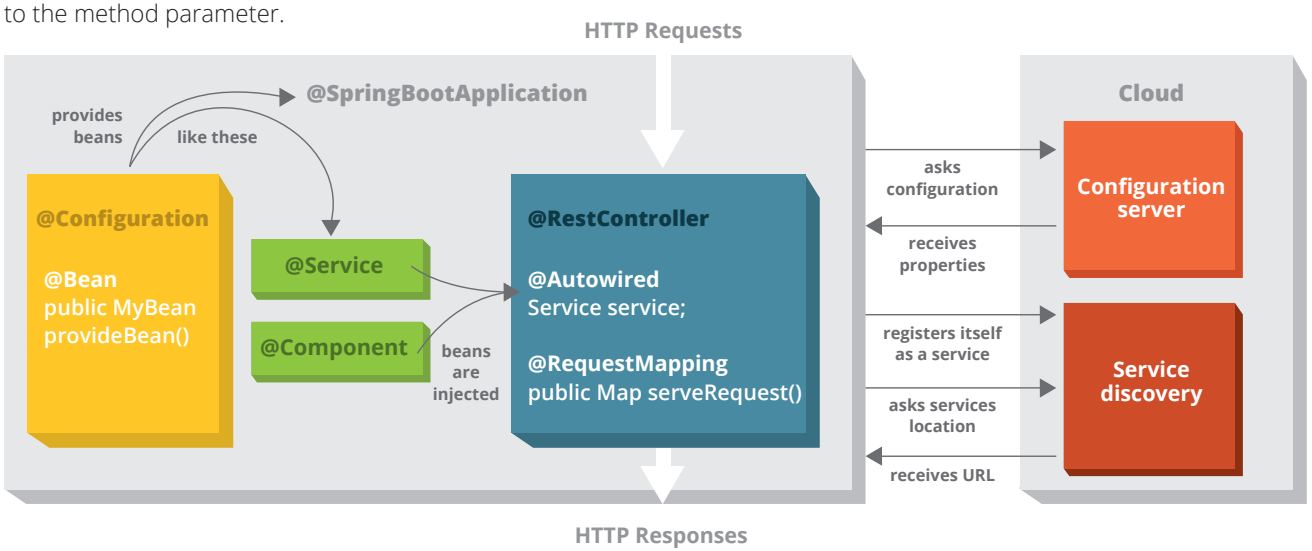
Use `spring.application.cloud.config.uri` in the client @SpringBootApplication to point to the config server.

T **@EnableEurekaServer** - makes your app an Eureka discovery service, other apps can locate services through it.

T **@EnableDiscoveryClient** - makes your app register in the service discovery server and discover other services through it.

T **@EnableCircuitBreaker** - configures Hystrix circuit breaker protocols.

M **@HystrixCommand(fallbackMethod = "fallbackMethodName")** - marks methods to fall back to another method if they cannot succeed normally.



Spring Framework annotations

Spring uses dependency injection to configure and bind your application together.

T **@ComponentScan** - make Spring scan the package for the @Configuration classes.

T **@Configuration** - mark a class as a source of bean definitions.

M **@Bean** - indicates that a method produces a bean to be managed by the Spring container.

T **@Component** - turns the class into a Spring bean at the auto-scan time. T **@Service** - specialization of the @Component, has no encapsulated state.

C F M **@Autowired** - Spring's dependency injection wires an appropriate bean into the marked class member.

T M **@Lazy** - makes @Bean or @Component be initialized on demand rather than eagerly.

C F M **@Qualifier** - filters what beans should be used to @Autowire a field or parameter.

C F M **@Value** - indicates a default value expression for the field or parameter, typically something like `"#{systemProperties.myProp}"`

C F M **@Required** - fail the configuration, if the dependency cannot be injected.

Legend

T - class
F - field annotation
C - constructor annotation
M - method
P - parameter