# spring annotations cheat sheet



#### **Spring Boot and Web annotations**

Use annotations to configure your web application.

- **©SpringBootApplication** uses @Configuration, @EnableAutoConfiguration and @ComponentScan.
- **@EnableAutoConfiguration** make Spring guess the configuration based on the classpath.
- **@Controller** marks the class as web controller, capable of handling the requests. **@RestController** a convenience annotation of a @Controller and @ResponseBody.
- **M T @ResponseBody** makes Spring bind method's return value to the web response body.
- @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.

**@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.

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

- **@ComponentScan** make Spring scan the package for the @Configuration classes.
- **©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.
- **@Component** turns the class into a Spring bean at the auto-scan time. **@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.
- **M @Lazy** makes @Bean or @Component be initialized on demand rather than eagerly.
- © 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}"
- © F M @Required fail the configuration, if the dependency cannot be injected.

## Legend

- class
- F field annotation
- constructor annotation
- M method
  - parameter

