## **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.
- @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 Framework Annotations**

Spring uses dependancy injection to configure and bind your appliation together.

- @Configuration used to mark a class as a source of the bean definitions.
- @ComponentScan makes Spring scan the packages configured with it for the @Configuration classes.
- [ ] @Import loads additional configuration. This one works even when you specify the beans in an XML file.
- @Component turns the class into a Spring bean at the auto-scan time.
- **Service** tells Spring that it's safe to manage @Components with more freedom than regular components.
- C F M @Autowired wires the application parts together, on the fields, constructors, or methods in a component.
- M @Bean specifies a returned bean to be managed by Spring context. The returned bean has the same name as the factory method.
- M @Lookup tells Spring to return an instance of the method's return type when we invoke it.

- M @Primary gives higher preference to a bean when there are multiple beans of the same type.
- C F M @Required shows that the setter method must be configured to be dependency-injected with a value at configuration time.
- C F M @Value used to assign values into fields in Spring-managed beans. It's compatible with the constructor, setter, and field injection.
- M @DependsOn makes Spring initialize other beans before the annotated one.
- M @Lazy makes beans to initialize lazily. @Lazy annotation may be used on any class directly or indirectly annotated with @Component or on methods annotated with @Bean.
- M @Scope used to define the scope of a @Component class or a @Bean definition and can be either singleton, prototype, request, session, globalSession, or custom scope.
- @Profile adds beans to the application only when that profile is active.

Legend: T - Class

F - Field Annotation

Constructor Annotation

M - Method

P - Parameter

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