<https://www.infoq.com/presentations/java-component-design-spring4>

1. Autowired is optional in constructor injection. Like Convention over configuration.
2. A ***composed annotation*** is an annotation that is *meta-annotated* with one or more annotations with the intent of combining the behavior associated with those meta-annotations into a single custom annotation. Ex: @TransactionalService is composed annotation of Spring's @Transactional and @Service annotations
3. Composable Custom Annotation. Create your own annotation, add annotations like “Scope(“session”), “Transactional(), etc… Give your annotation to the Service class.
   1. <https://www.infoq.com/presentations/java-component-design-spring4>
      1. watch at 15 minutes

@Service

@Scope("session")

@Primary

@Transactional(rollbackFor=Exception.class)

@Retention(RetentionPolicy.RUNTIME)

public @interface MyService {}

@MyService

public class MyBookAdminService {

...

}

1. **Composable Annotations with Overridable Attributes**

@Scope(scopeName="session")

@Retention(RetentionPolicy.RUNTIME)

public @interface MySessionScoped {

@AliasFor(annotation=Scope.class, attribute="proxyMode")

ScopedProxyMode mode() default ScopedProxyMode.NO;

}

@Transactional(rollbackFor=Exception.class)

@Retention(RetentionPolicy.RUNTIME)

public @interface MyTransactional {

@AliasFor(annotation=Transactional.class)

boolean readOnly();

}