

Friday - Week 3

Java Spring



Spring

- We've been using the most of this week
- Spring Framework is designed to be a modern implantation of java builds
- We focus mostly on the “Spring Boot” side of things



Why modern?

- The servers that you have been running are actually Apache TomCat servers
- Generate a project on:
start.spring.io
- Import and Run, no lengthy configuration

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Spring Build and Annotations



Annotations

- These are the @ sign things we have been using
- Annotations are part of the Java language
- They remove the requirement of needing various configuration files



@Bean

- Simple POJOs that:
 - Are Serializable
 - Have a constructor with no arguments
 - Has getters and setters for all properties
- No behaviours
- Essentially structs

@Required

- For a bean property to require a value
- Obviously the bean has a no-args constructor, so this property must be set at configuration
- Otherwise: `BeanInitializationException`



@Autowired

- Creates (injects) implicit object dependency
- Can be controlled with @Qualifier (If needed)



@Configuration

- Used to mark a class that defines beans
- Replaces the need for XML configurations
- Used alongside @ComponentScan
 - By implication @Component



@Lazy

- Used to mark a bean that need only be created when it is first needed



@Value

- Used to set a property that has been marked as @Autowired



@Component

- Marks a class/bean to be added to application context



@Controller

- Marks a class that contains @RequestMapping
- This is how Java knows where to find mappings



@RequestMapping

- Maps a web request to a specific function (handler)
- Can be applied at the class or methods



Composed versions of @RequestMapping

- @GetMapping
- @PostMapping
- @PutMapping
- @PatchMapping
- @DeleteMapping



Many many more annotations

- Useful reference here:

<https://springframework.guru/spring-framework-annotations/>

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Tasks

Task - It's Friday

