

CPAN-252 WEB APPLICATION DEVELOPMENT FOR
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**DIVING DEEPER INTO SPRING WEB,
PRESENTING MODEL DATA, PROCESSING INPUT**

DOMAIN MODEL FIGHTER

- ▶ Now we will create domain model of Fighter class to be able to create characters
- ▶ We will use Lombok library to reduce some boilerplate code, like getters, setters, toString, equals, Hashcode and provides arg constructor

```
package com.cpan252.tekkenreborn.model;

import lombok.Data;

@Data
public class Fighter {
    private final String name;
    private final int damagePerHit;
    private final int health;
    private final double resistance;
    private final Anime animeFrom;

    public enum Anime {
        NARUTO, BLEACH, TEKKEN, ONE_PIECE, FULL_METAL_ALCHEMIST
    }
}
```

LOMBOK PROJECT

- ▶ We can also find it in maven code of pom.xml file, we need to exclude it from build, because essentially it's not used in runtime, but acts more as syntactic sugar.
- ▶ If you want to see more features of it, you can visit this website <https://projectlombok.org/>

CREATING CHARACTER POOL

- ▶ We will create character pool which will act as a list of characters, it will be a simple class that contains collection of fighters

```
import java.util.List;

import lombok.Data;

@Data
public class CharacterPool {
    private List<Fighter> fighters;
    public void addHero(Fighter fighter) {
        fighters.add(fighter);
    }
}
```



FIGHTER DESIGN CONTROLLER

- ▶ Annotate class as controller
- ▶ Create some model attributes to work with them when designing your hero
- ▶ Define GET method to return design page
- ▶ Define submit button

DESIGN CONTROLLER

```
@Controller
clazz: @Slf4j
@RequestMapping("/design")
@SessionAttributes("characterPool")
public class DesignController {

    @ModelAttribute
    public void addAttributes(Model model) {
        model.addAttribute(attributeName: "characterPool", new CharacterPool());
        log.info(msg: "Added characterPool to model");
    }

    @ModelAttribute
    public void addAnimes(Model model) {
        var animes = List.of(Anime.values()).stream().map(Anime::name).collect(Collectors.toList());
        model.addAttribute(attributeName: "animes", animes);
        log.info(msg: "Added animes to model");
    }

    @ModelAttribute(name = "fighter")
    public Fighter fighter() {
        return new Fighter(name: null, damagePerHit: 0, health: 0, resistance: 0, animeFrom: null);
    }

    @GetMapping
    public String showDesign() {
        return "design";
    }
}
```

DESIGN TEMPLATE

- ▶ Overall we need to define the hero form to create the new fighter, by using model anime attributes specified and binding each form input to character attribute
- ▶ Define some basic styling to make app look a little bit aligned
- ▶ Template is too big to paste it, so let's open IDE and take a look there

A black and white photograph of three wind turbines against a cloudy sky. The largest turbine is in the foreground on the left, with two smaller ones behind it to the right.

QUESTIONS?

On the lab we going to add some validations to our design page and add post method to add character to hero pool.