

Java MVC Frameworks

The Right Way: Control Flow



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Java MVC
Frameworks



spring

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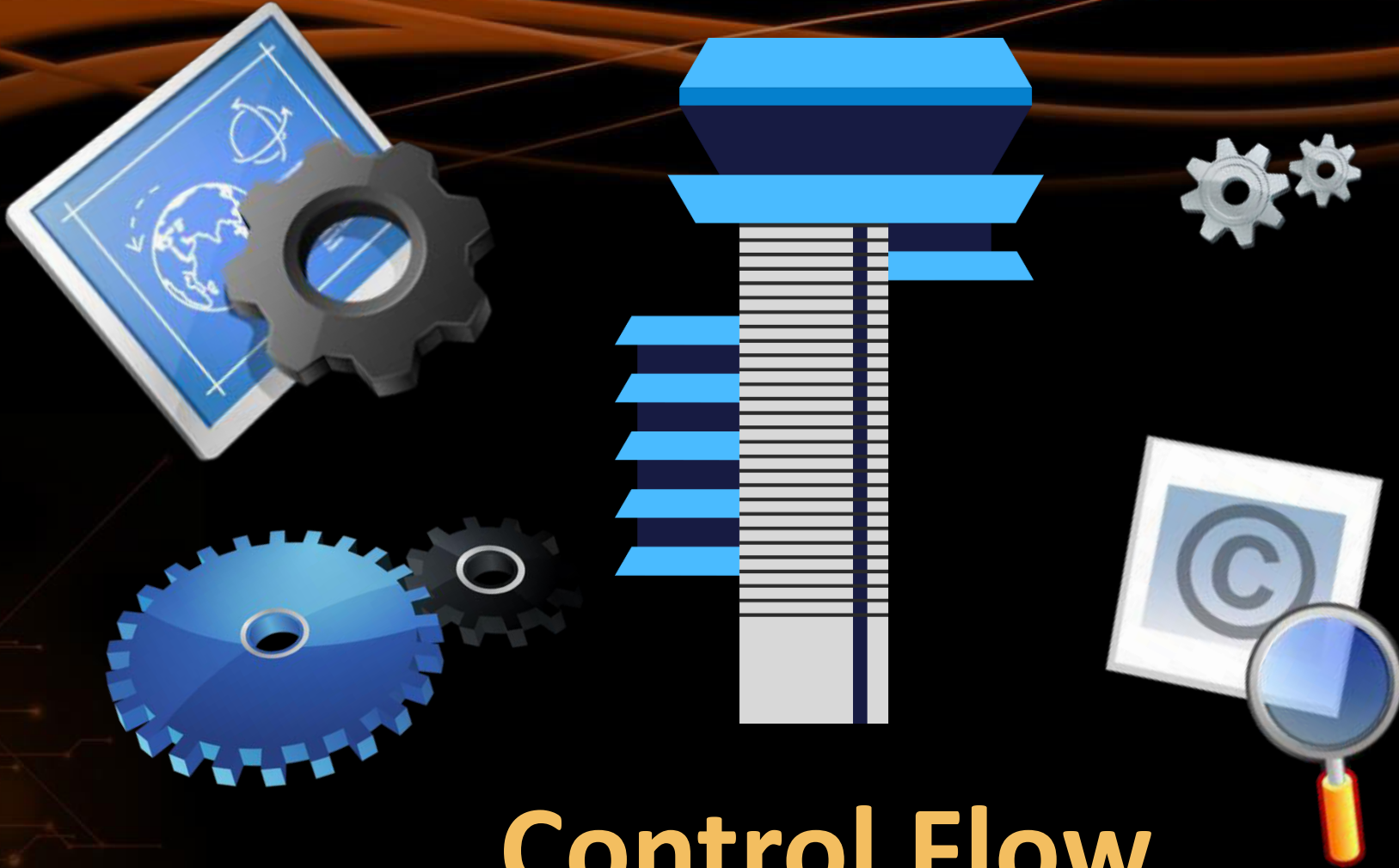


Control Flow
General Knowledge

4

sli.do

#java-web

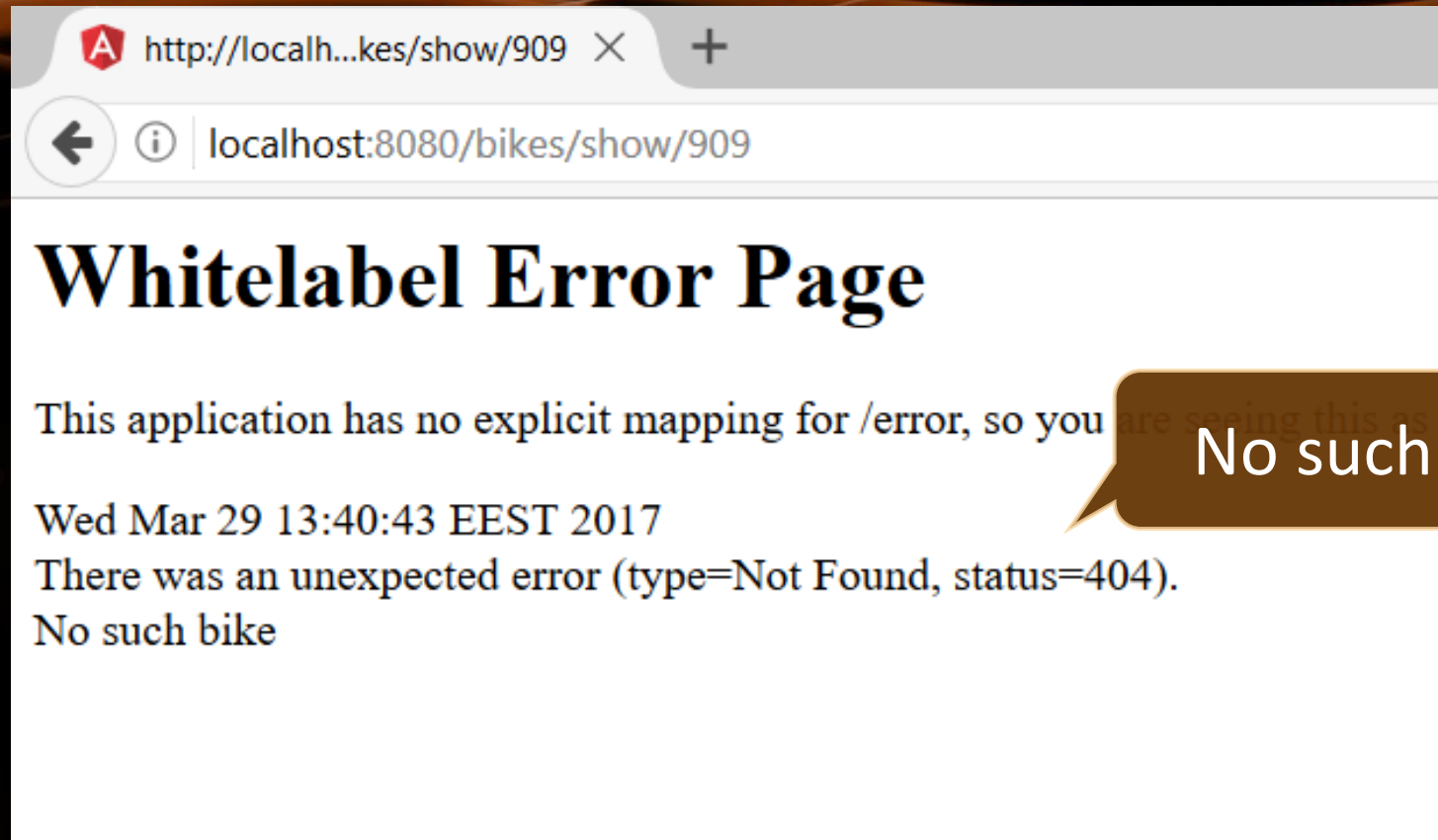


Control Flow

General Knowledge



Exception Handling



Problem

Custom Exception

BikeNotFoundException.java

@ResponseStatus

Status Code

Exception Message

```
(value = HttpStatus.NOT_FOUND, reason = "No such bike")  
public class BikeNotFoundException extends RuntimeException {  
}
```

Runtime Exception

BikeServiceImpl.java

```
Bike bike = this.bikeRepository.findOne(id);  
if(bike == null){  
    throw new BikeNotFoundException();  
}
```

Throw Exception

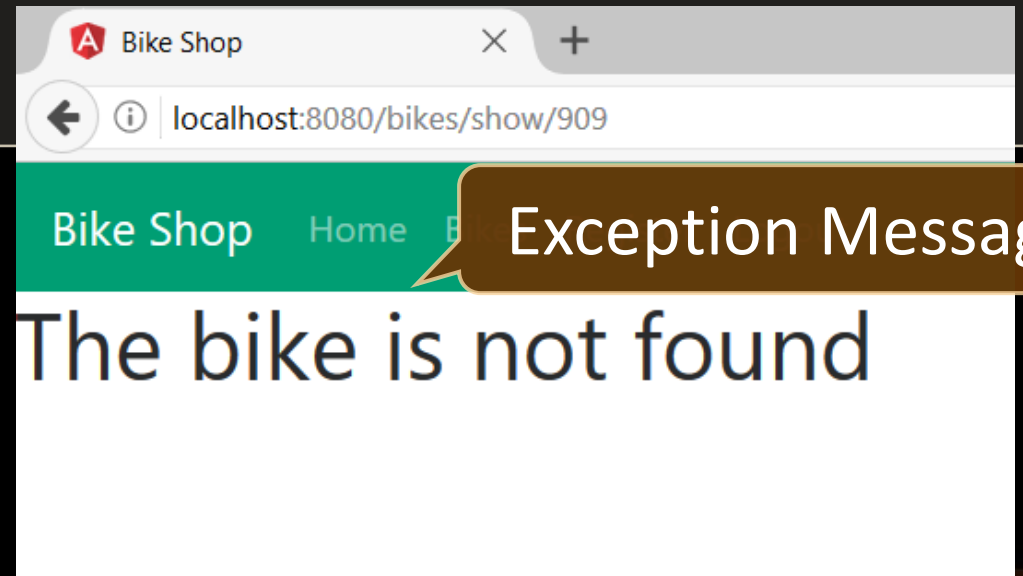
Exception Handling

BikeController.java

Exception Handling

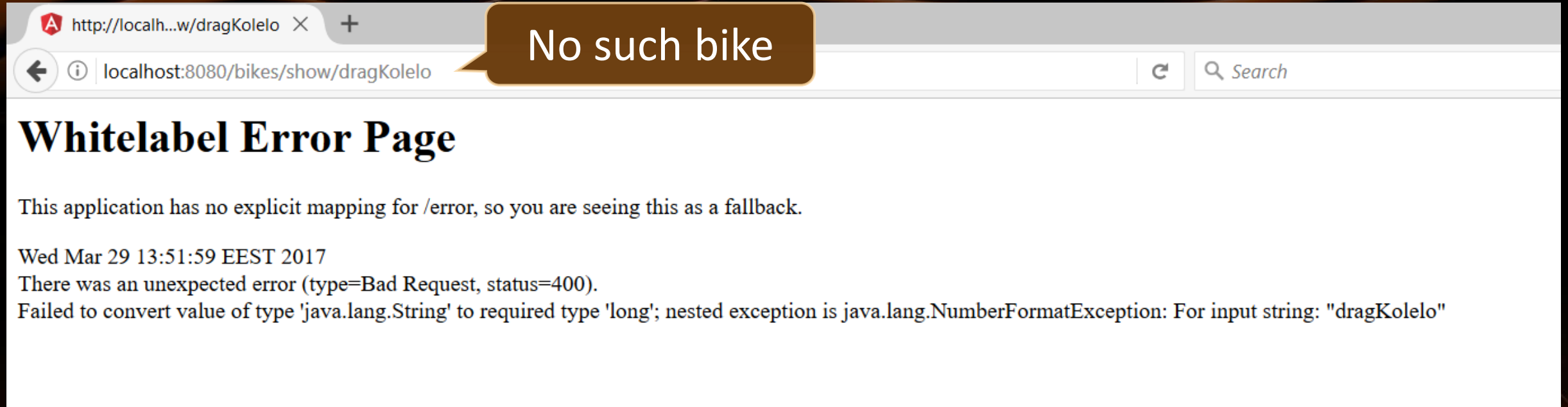
```
@ExceptionHandler(BikeNotFoundException.class)
public ModelAndView bikeNotFound(ModelAndView modelAndView){
    modelAndView.setViewName("bike-not-found");

    return modelAndView;
}
```



Exception Message

The bike is not found



Problem 2

Global Exceptions

GlobalExceptionHandler.java

@ControllerAdvice

Global Exception Handling

```
public class GlobalExceptionHandler {
```

```
    @ExceptionHandler(Exception.class)
```

Handles All Exceptions

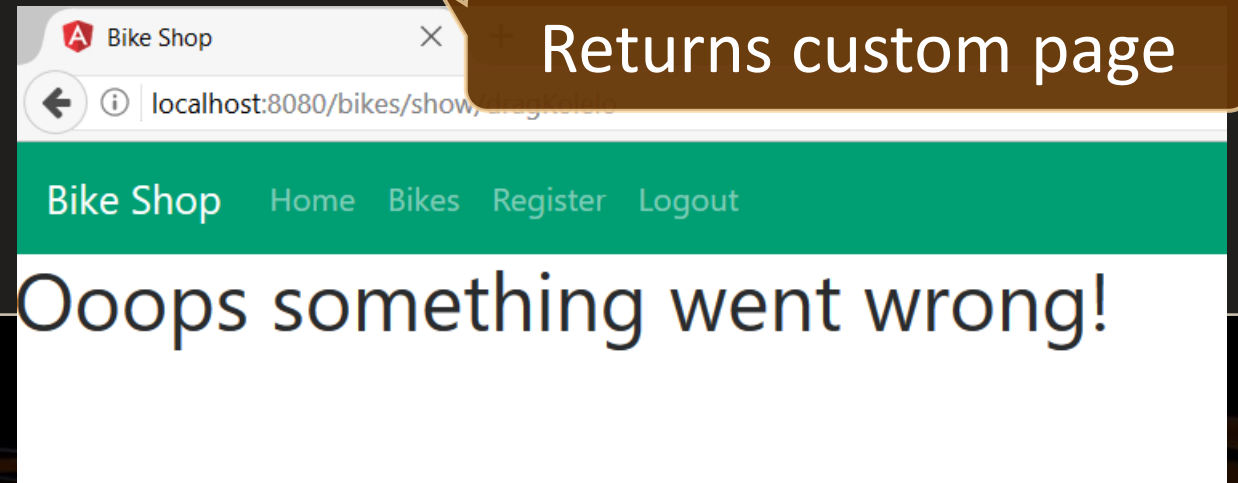
```
    public ModelAndView getException(ModelAndView modelAndView){  
        modelAndView.setViewName("bike-not-found");
```

```
        return modelAndView;
```

```
    }
```

```
}
```

Returns custom page





Pagination

<div>Lajo</div> <div>Id: 29</div>	<div>Wikido</div> <div>Id: 30</div>
Gears: 25	Gears: 7
Is Sold: false	Is Sold: true
Check it out!	Check it out!

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Problem

Pagination (1)

BikeRepository.java

```
@Repository
public interface BikeRepository extends
PagingAndSortingRepository<Bike, Long> {
}
```

Pagination Repository

BikeServiceImpl.java

```
@Override
public Page<BikeViewModel> listAllByPage(Pageable pageable) {
    Page<Bike> bikePage = this.bikeRepository.findAll(pageable);
    ...
}
```

Page

Pagination (2)

BikeRepository.java

```
@GetMapping("/bikes")
public String getBikes(Model model,
@PageableDefault(size = 10)Pageable pageable){
}
```

Pageable Instance
(has Page and Size)

Bike Shop

localhost:8080/bikes?page=0&size=12

Page and Size

Dynazzy	Livetube
Id: 1	Id: 2
Gears: 13	Gears: 7
Is Sold: true	Is Sold: false
Check it out!	Check it out!

Summary

- **Control Flow** – doing things, the right way!
- **Error Handling**
 - Spring's easy error handling **@ExceptionHandler**
- **Pagination**
 - Formatting data, elegantly.



Java MVC Frameworks – Architecture



Questions?



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