# Building a RESTful Web Application with Spring Boot



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#### Overview



**Build a RESTful service** 

**REST** architecture style

**HTTP** response codes

**Annotations** 

**Exception Handling** 



## REST Architecture Style



#### REST Architecture Style



Data and functionality are considered resources



Resources are manipulated using a fixed set of operations



Resources can be represented in multiple formats



Communication between the client and endpoint is stateless



#### Demo



#### **RESTful APIs**

- @RestController annotation
- @RequestMapping/@GetMapping



## Response Formats



#### Class ResponseEntity<T>

■ ResponseEntity is generic

return new
ResponseEntity<List<Ticket>
>(list, HttpStatus.OK);

**◄** Returning Tickets

return new
ResponseEntity<List<Applica
tion>>(list,HttpStatus.OK);

**◄** Returning Applications



#### Response Codes

HttpStatus.OK - 200

HttpStatus.BAD\_REQUEST - 400

HttpStatus.CONFLICT - 409

HttpStatus.NOT\_FOUND - 404 Not Found



## **Exception Handling**



## Response Codes



**Success Status Code 200** 



Failure Status Code 404



#### ResponseStatusExcpeption



Programmatic alternative to @ResponseStatus



Provide HttpStatus and a reason and a cause



Exceptions can be created programmatically



Provides a default error mapping



#### Demo



Exception Handling ResponseStatusException ResponseStatusExceptionResolver



### Summary



**Build RESTful APIs** 

**REST** architecture style

@RestController

**Automatic Configuration** 

ResponseStatusException

