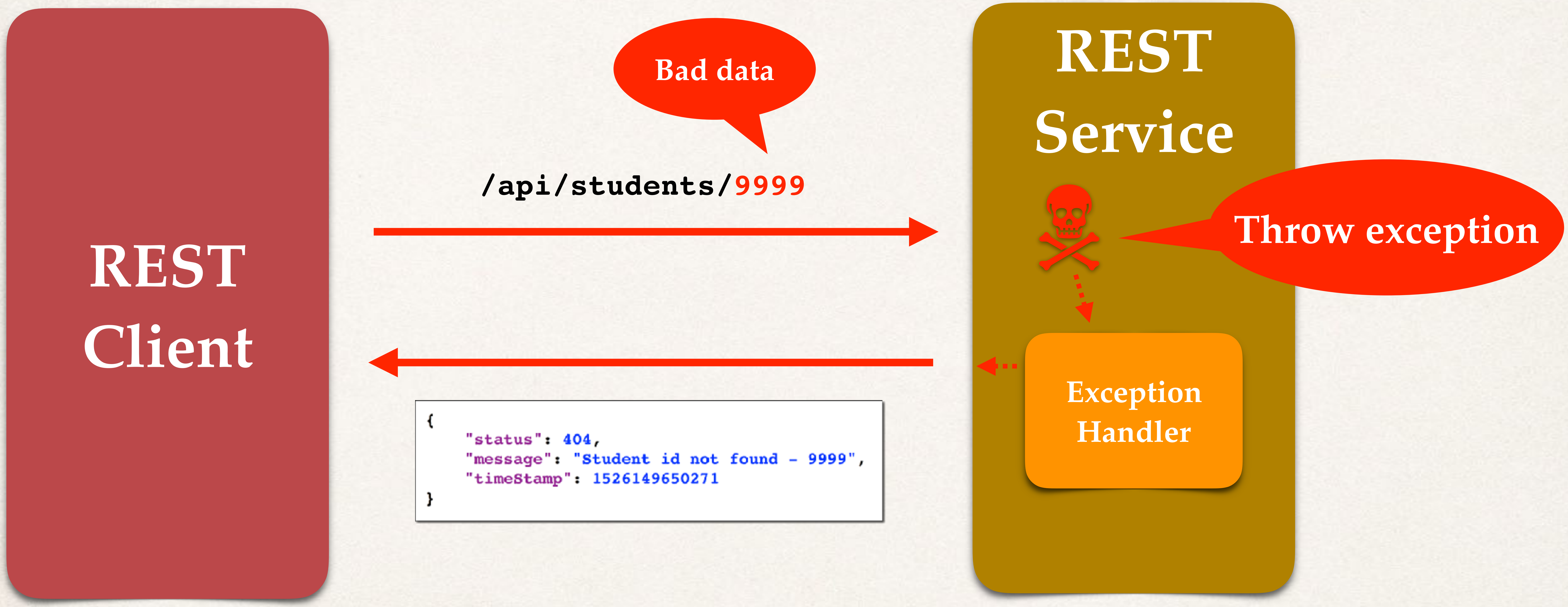
Spring REST - Global Exception Handling

Spring REST Exception Handling



```
{
    "status": 404,
    "message": "Student id not found - 9999",
    "timeStamp": 1526149650271
}
```

luv2code

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- Exception handler code is only for the specific REST controller
- Can't be reused by other controllers :-(

Large projects will have multiple controllers

- We need **global** exception handlers
  - Promotes reuse
  - Centralizes exception handling

Spring @ControllerAdvice

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Real-time use of AOP

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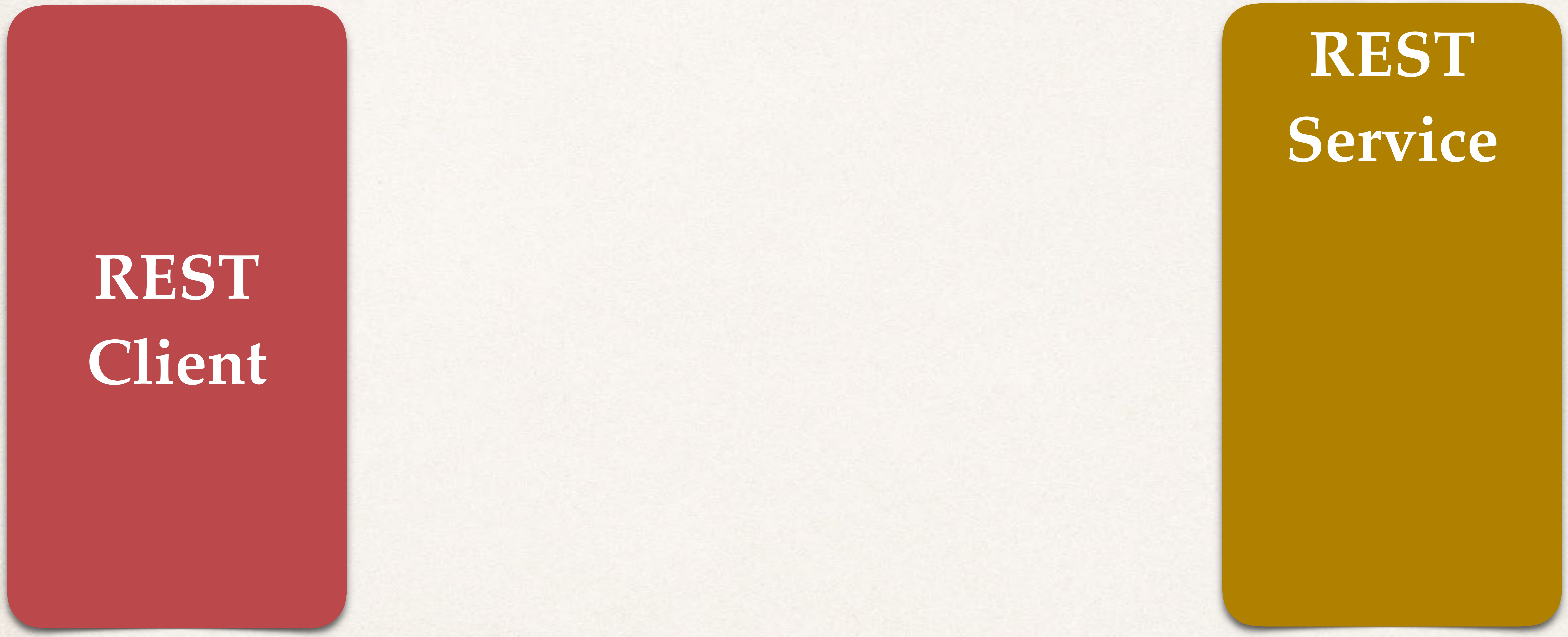

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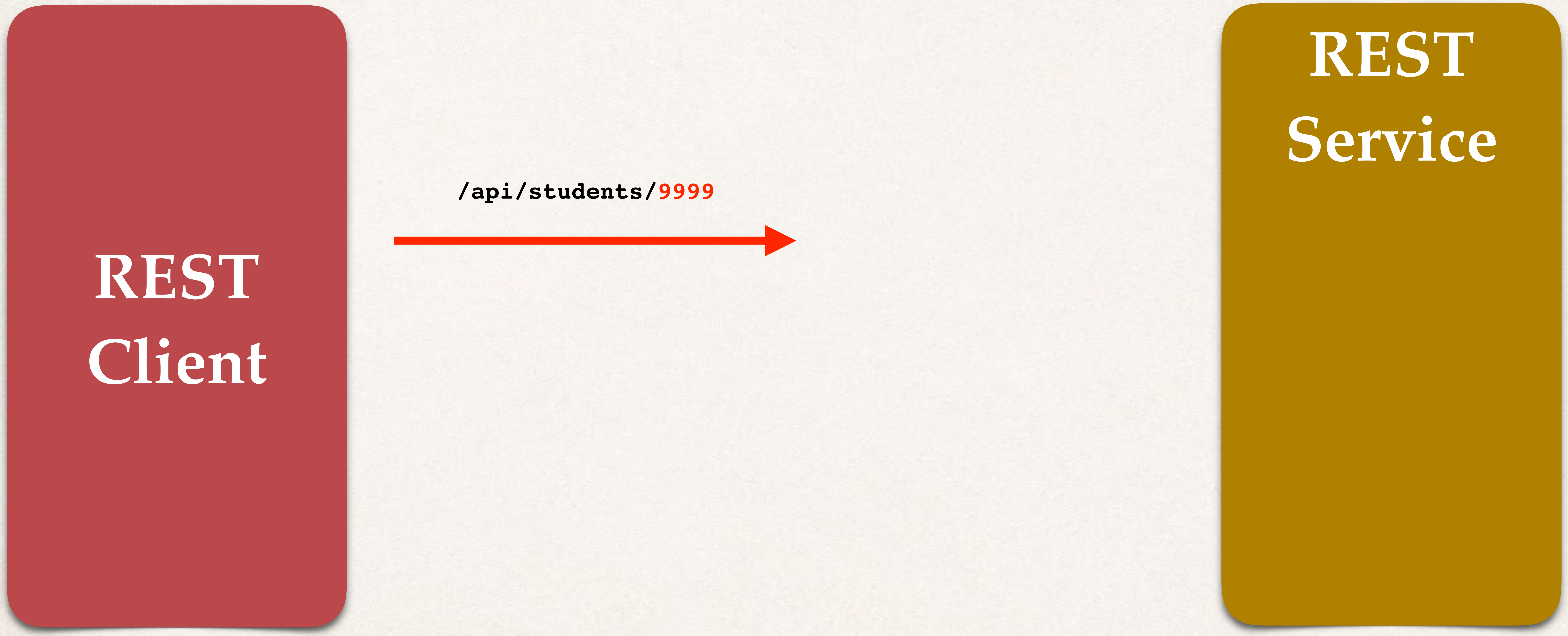

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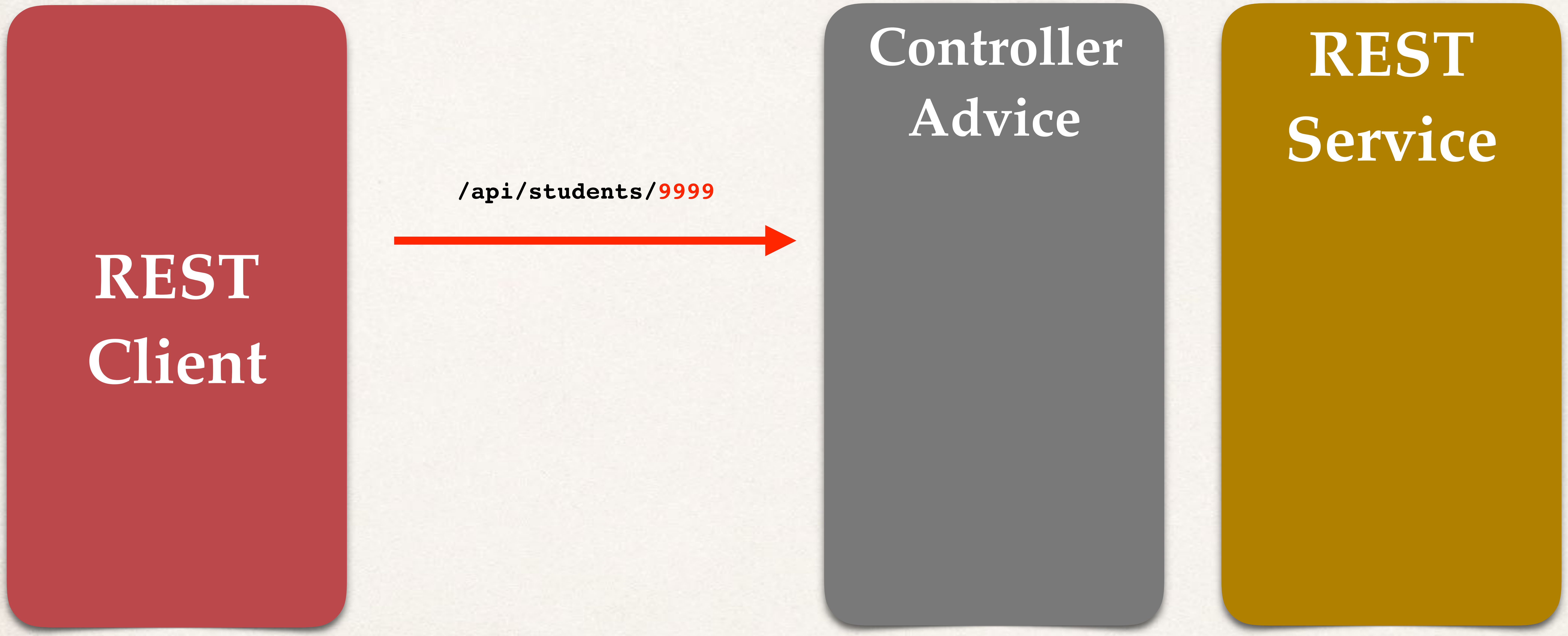

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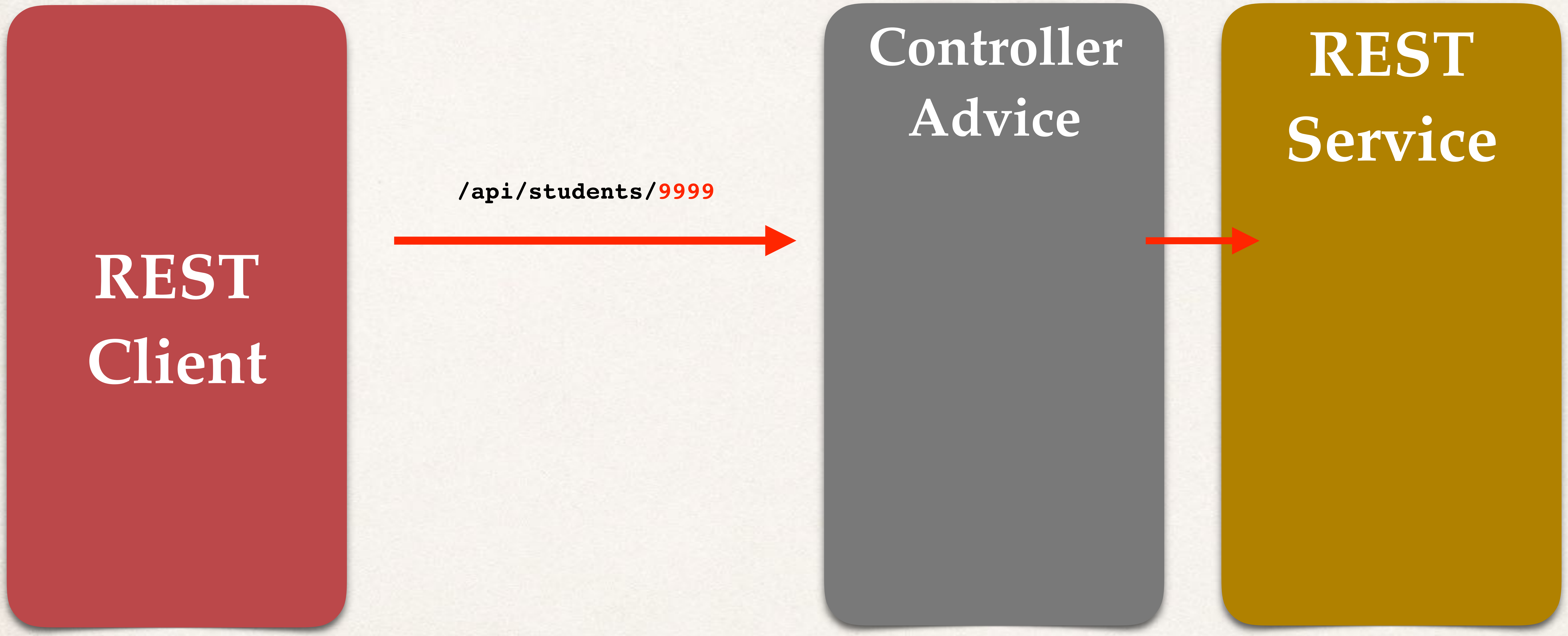

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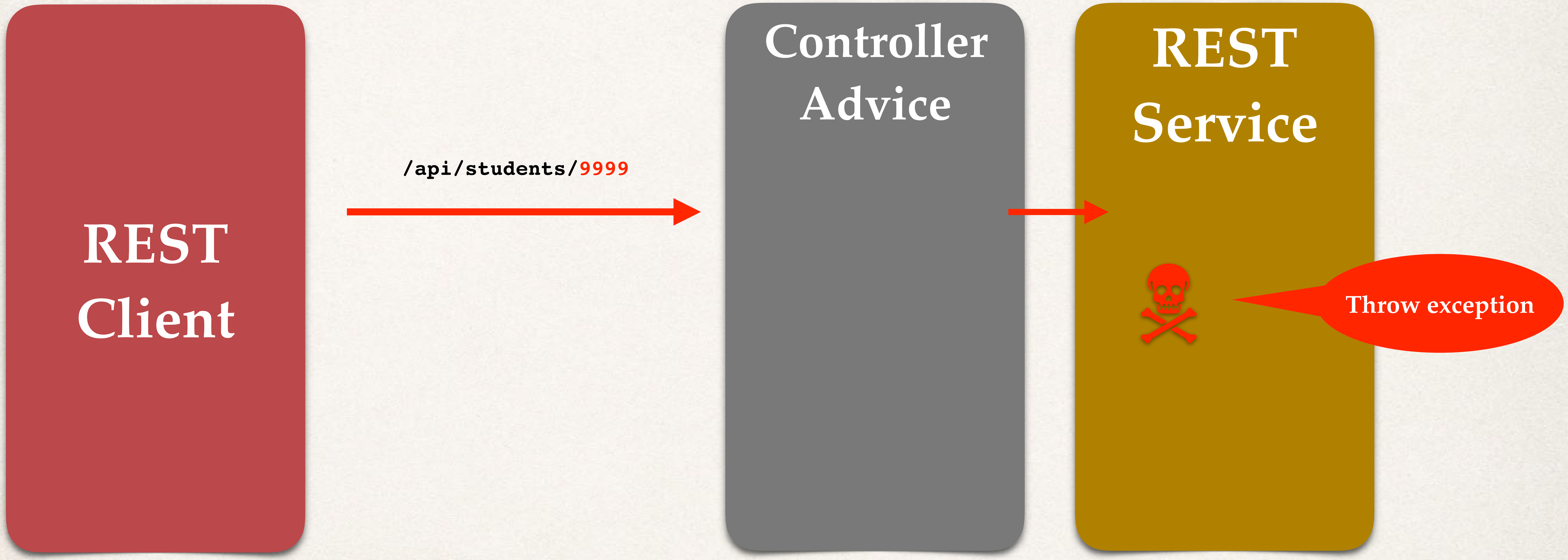

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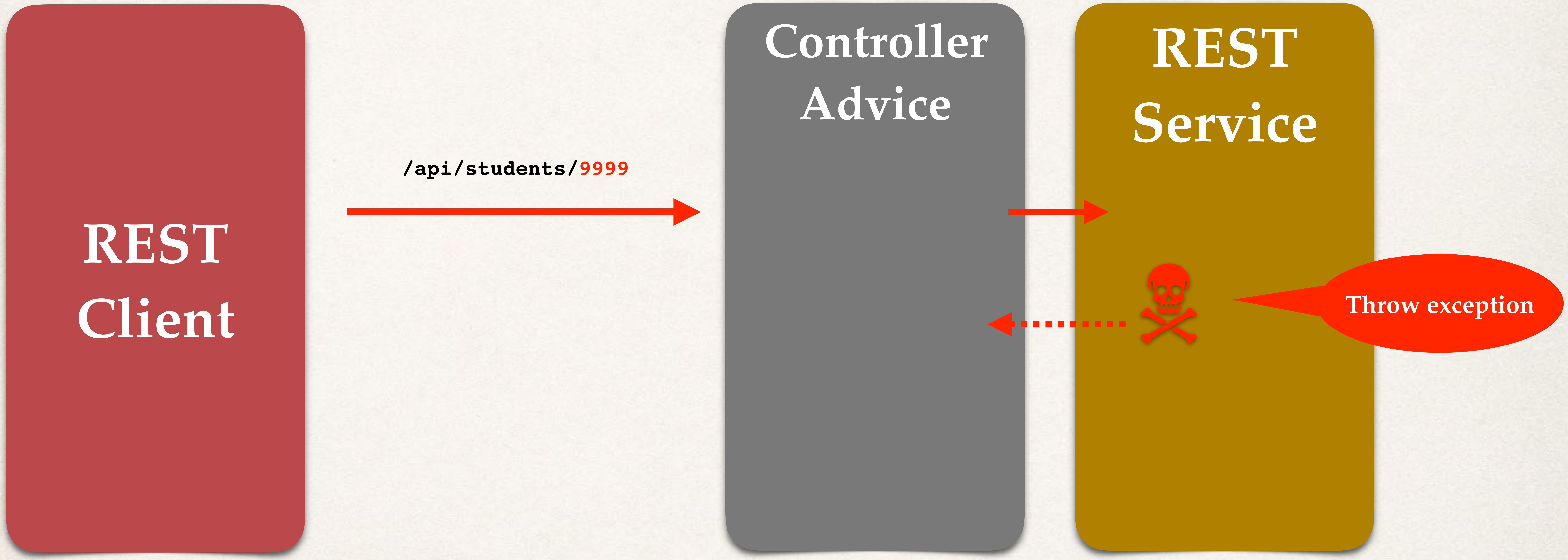

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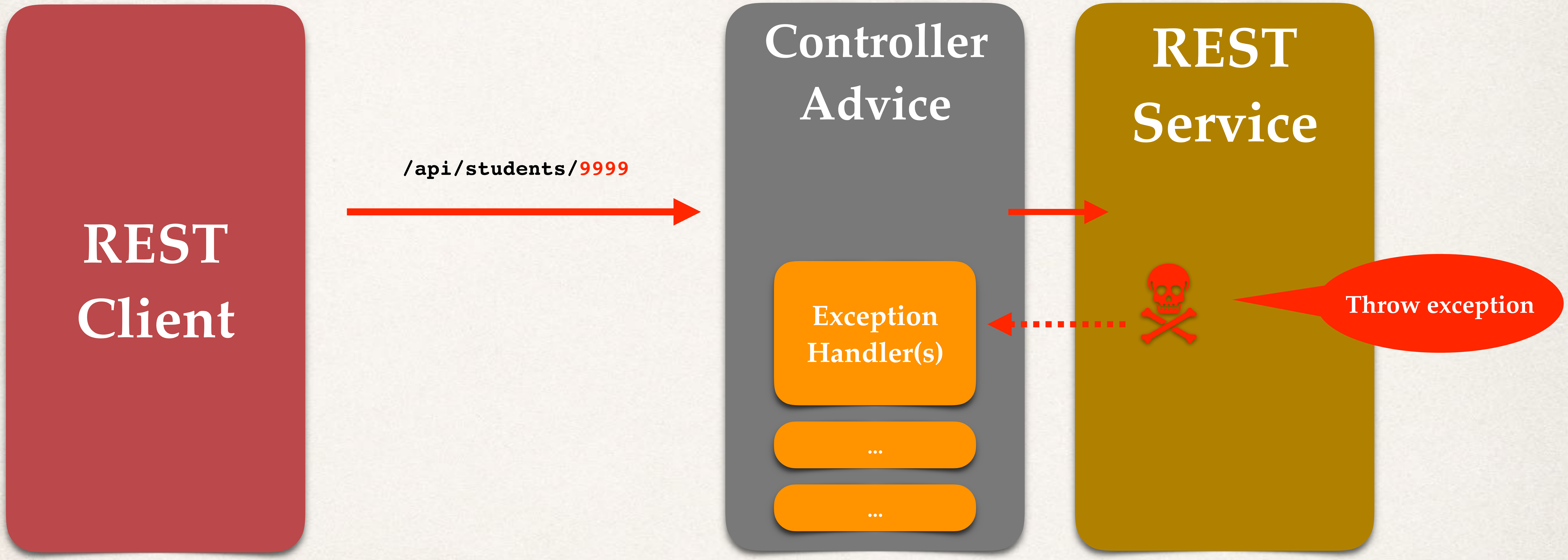

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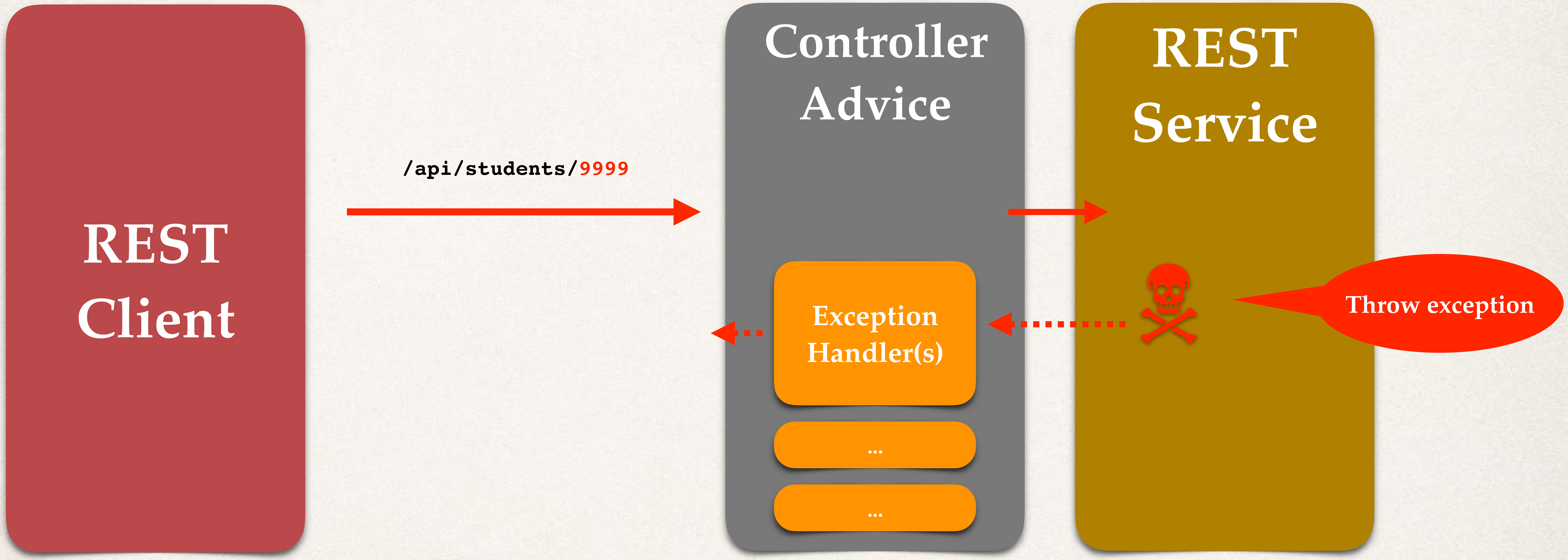

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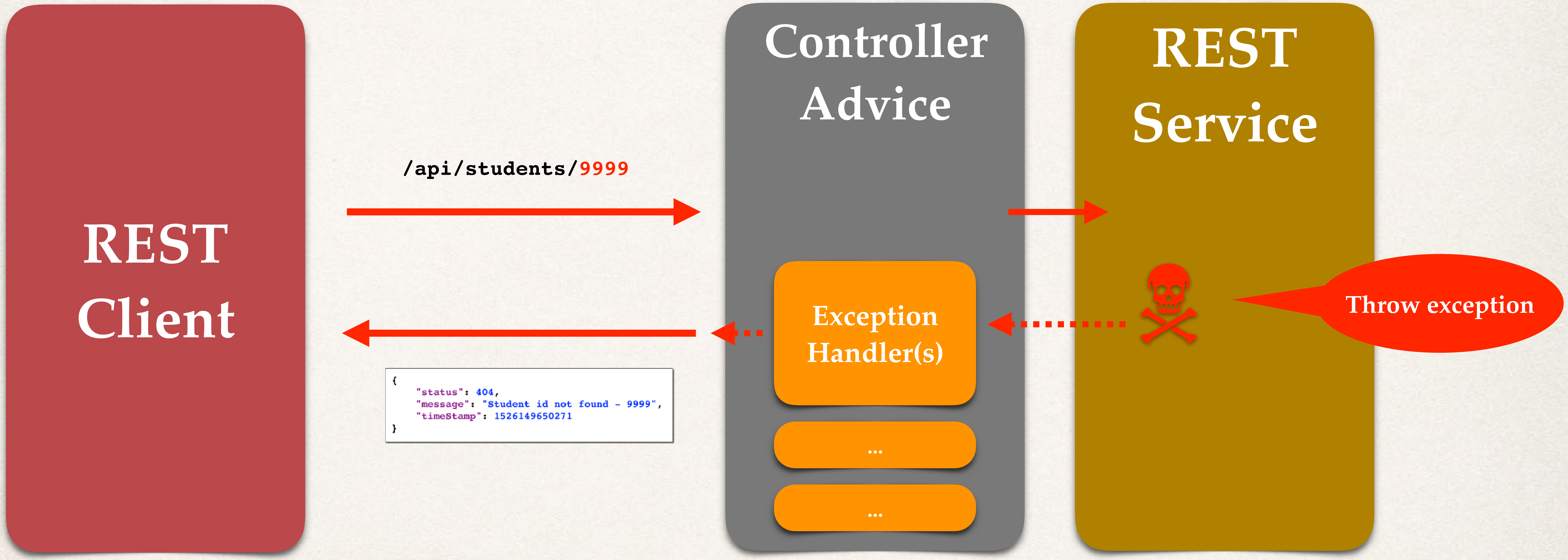

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Development Process

Step-By-Step

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1. Create new @ControllerAdvice

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3. Add exception handling code to @ControllerAdvice

Step 1: Create new @ControllerAdvice

File: StudentRestExceptionHandler.java

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```
@ControllerAdvice
public class StudentRestExceptionHandler {


  …


}
```

Step 2: Refactor - remove exception handling

File: StudentRestController.java

```
@RestController
@RequestMapping("/api")
public class StudentRestController {
  …

  @ExceptionHandler
  public ResponseEntity<StudentErrorResponse> handleException(StudentNotFoundException exc) {

    StudentErrorResponse error = new StudentErrorResponse();

    error.setStatus(HttpStatus.NOT_FOUND.value());
    error.setMessage(exc.getMessage());
    error.setTimeStamp(System.currentTimeMillis());

    return new ResponseEntity<>(error, HttpStatus.NOT_FOUND);
  }

}
```

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Step 2: Refactor - remove exception handling

File: StudentRestController.java

Remove this code

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public class StudentRestController {
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Step 3: Add exception handler to @ControllerAdvice

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Step 3: Add exception handler to @ControllerAdvice

File: StudentRestExceptionHandler.java

Same code as before

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public class StudentRestExceptionHandler {

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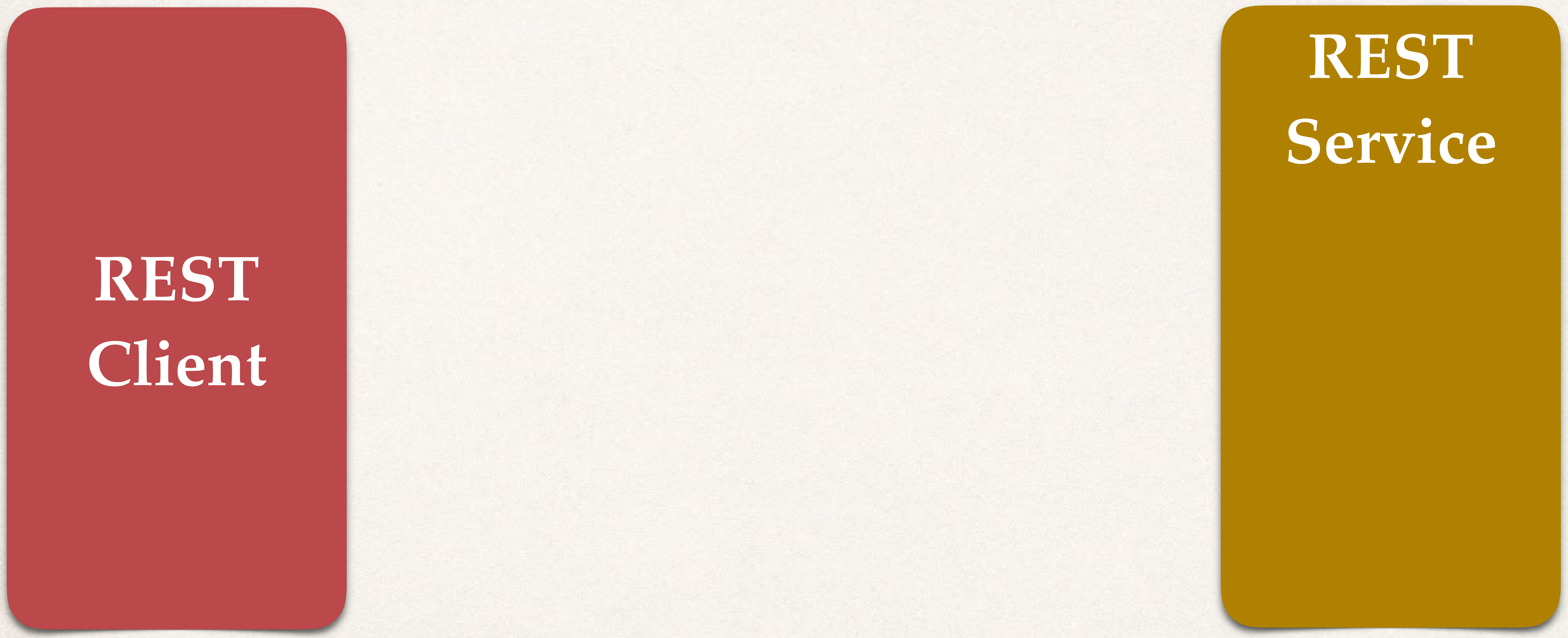

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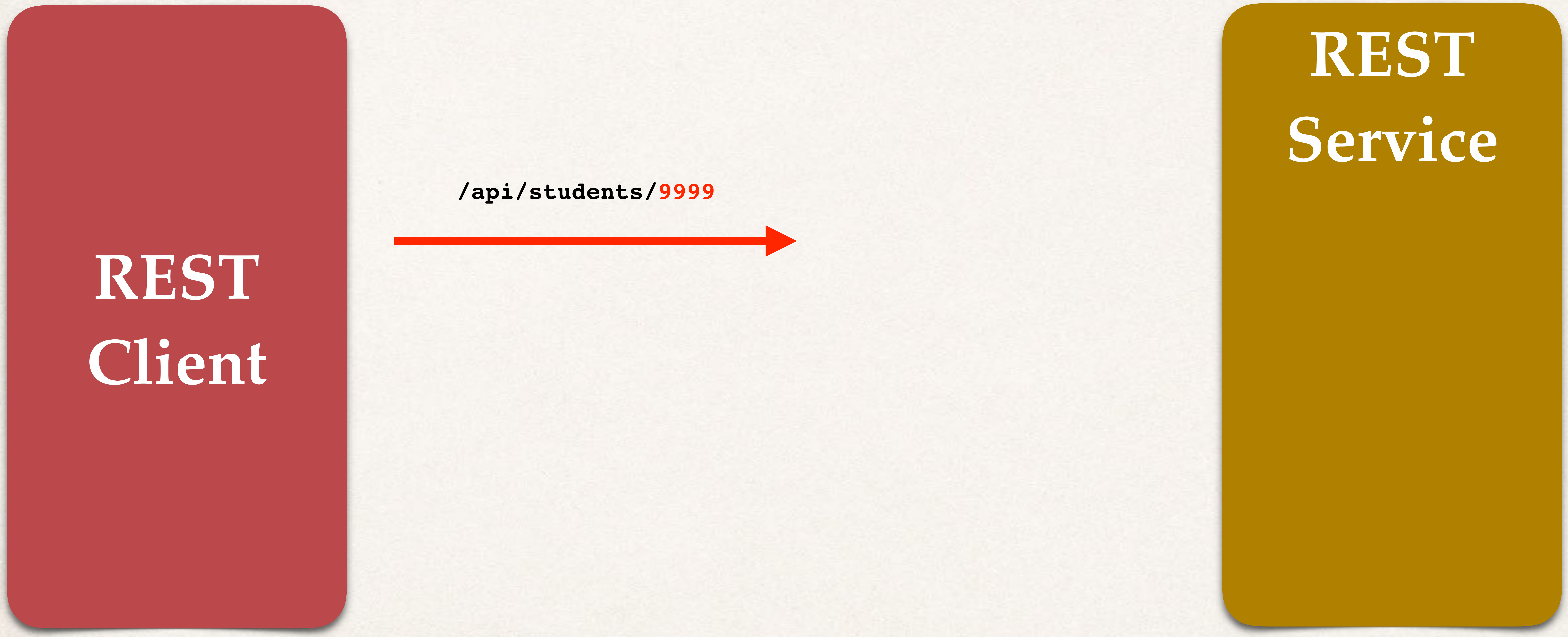

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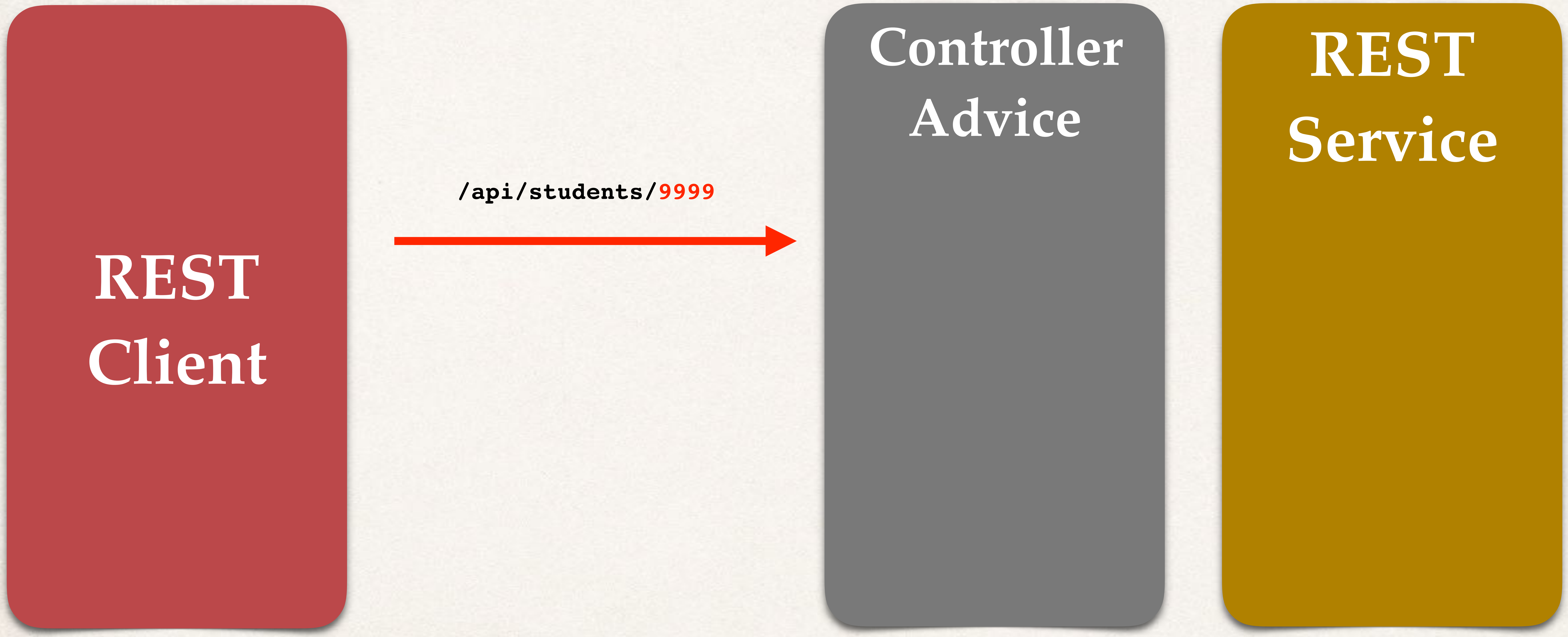

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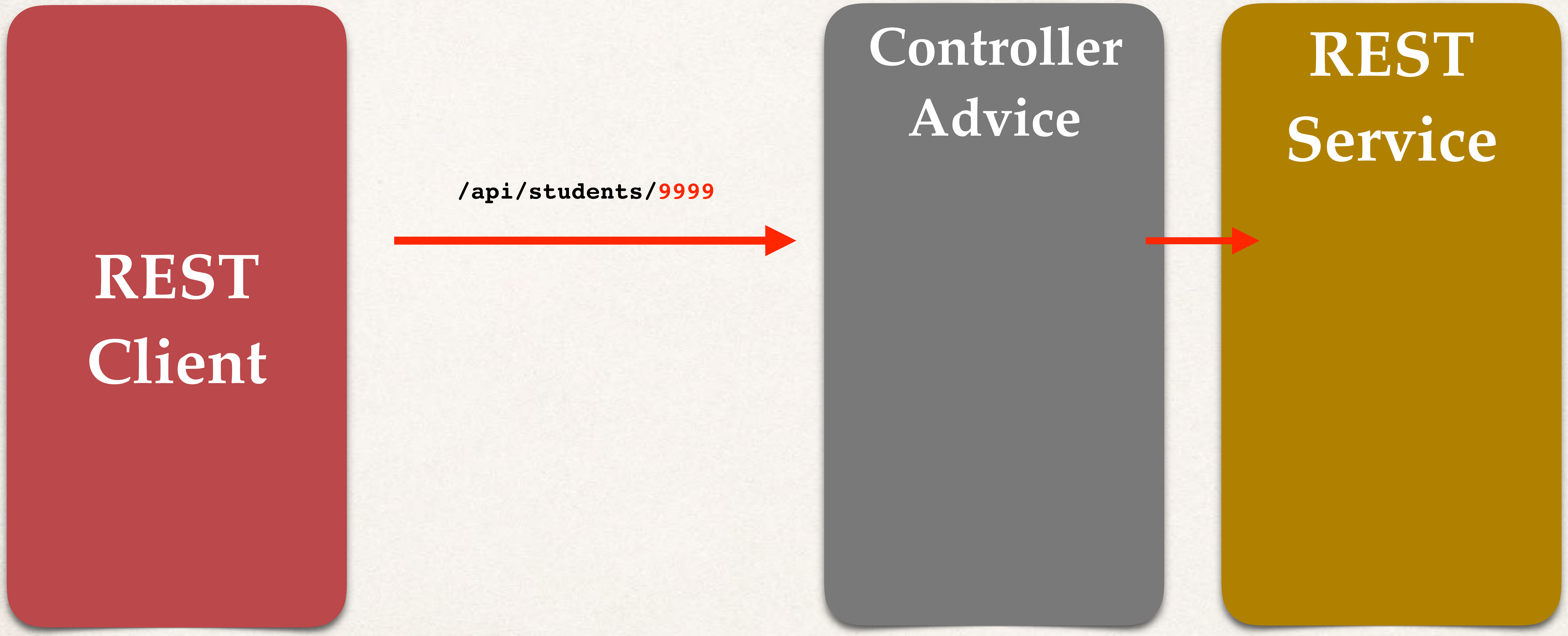

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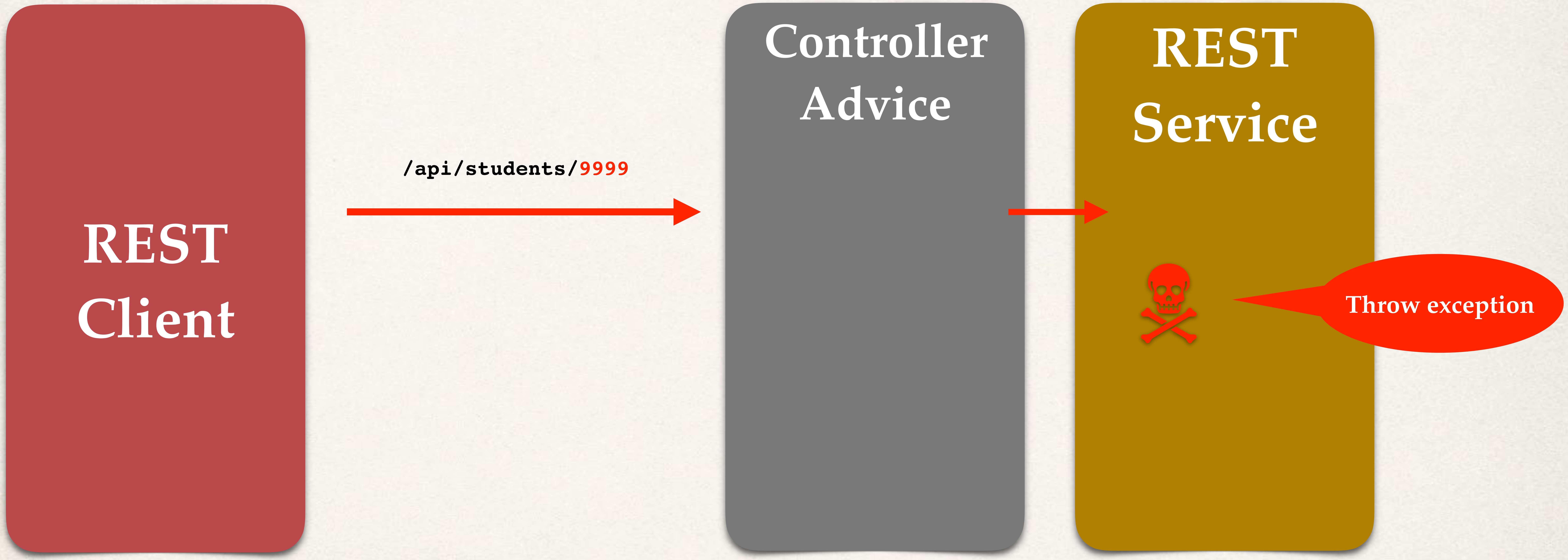

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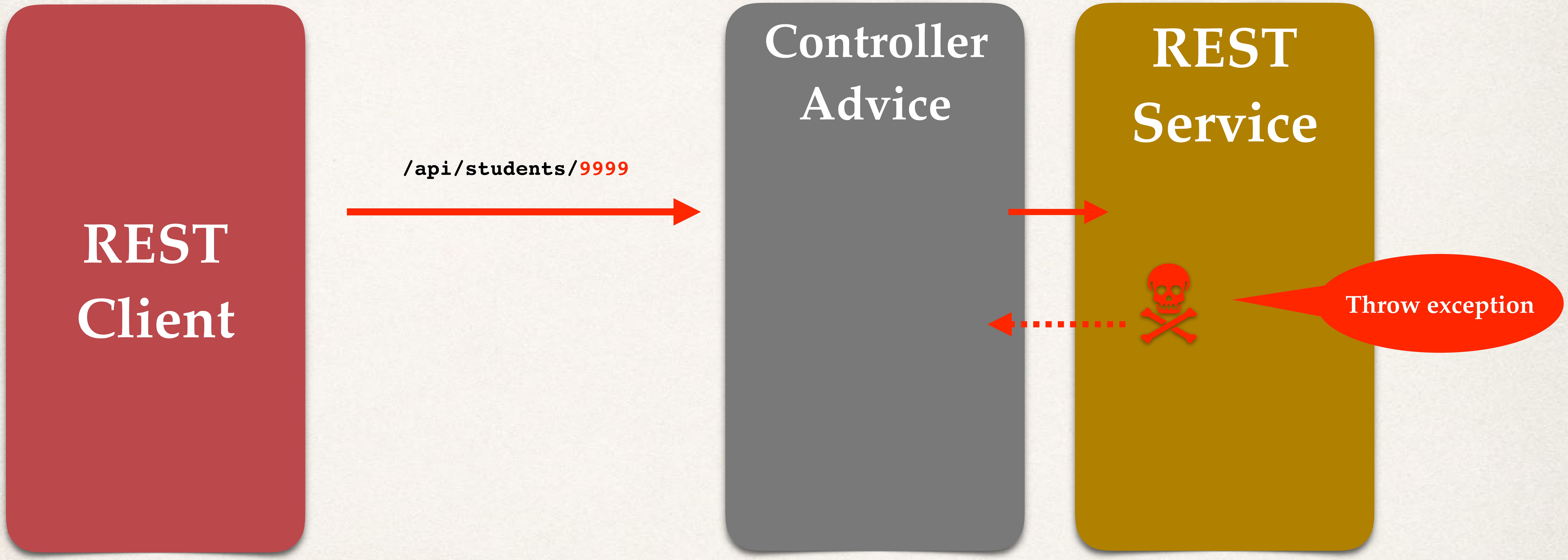

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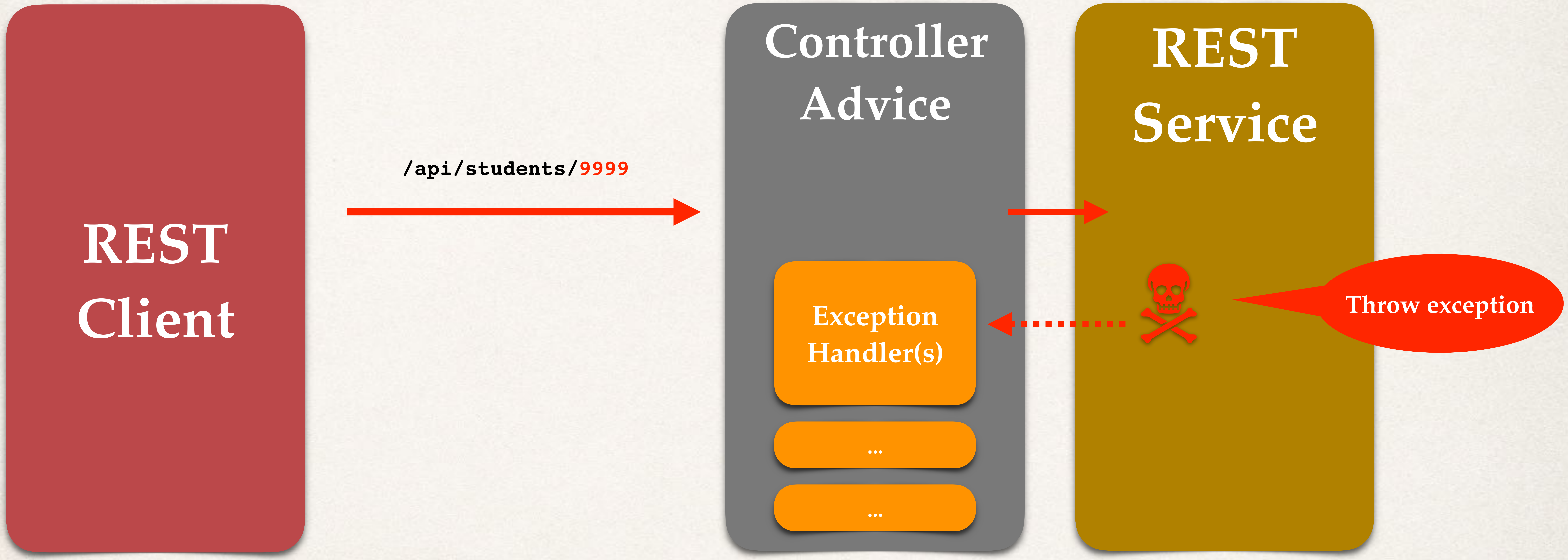

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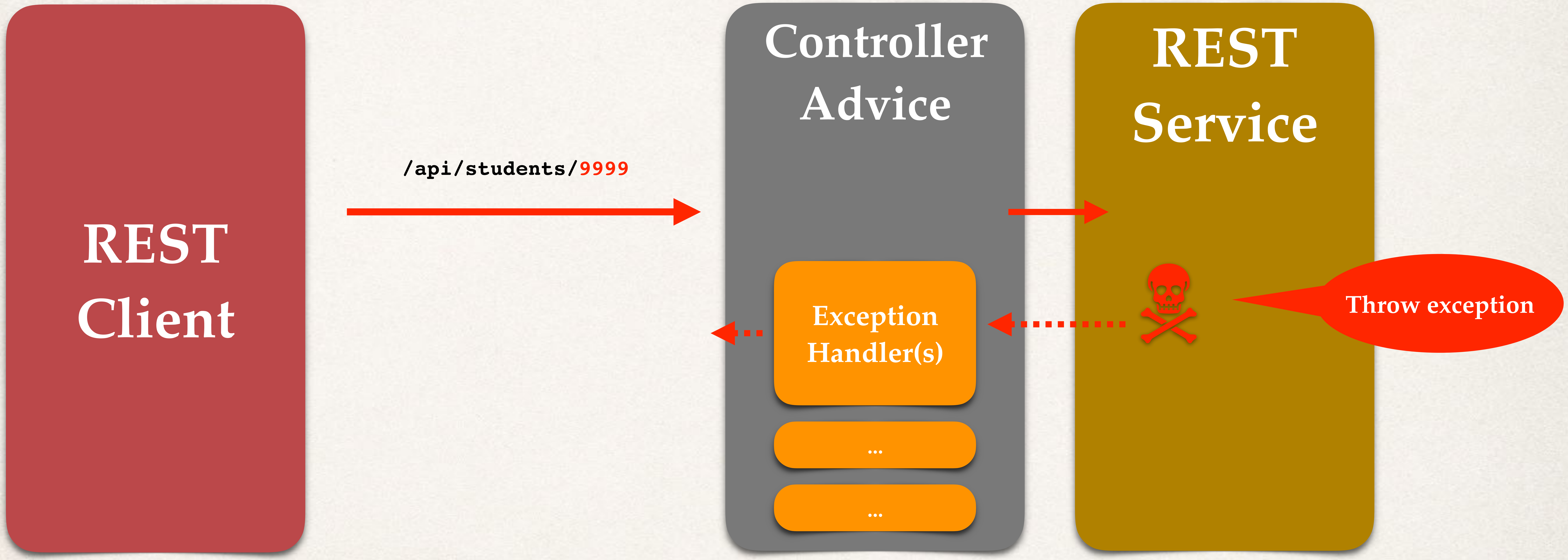

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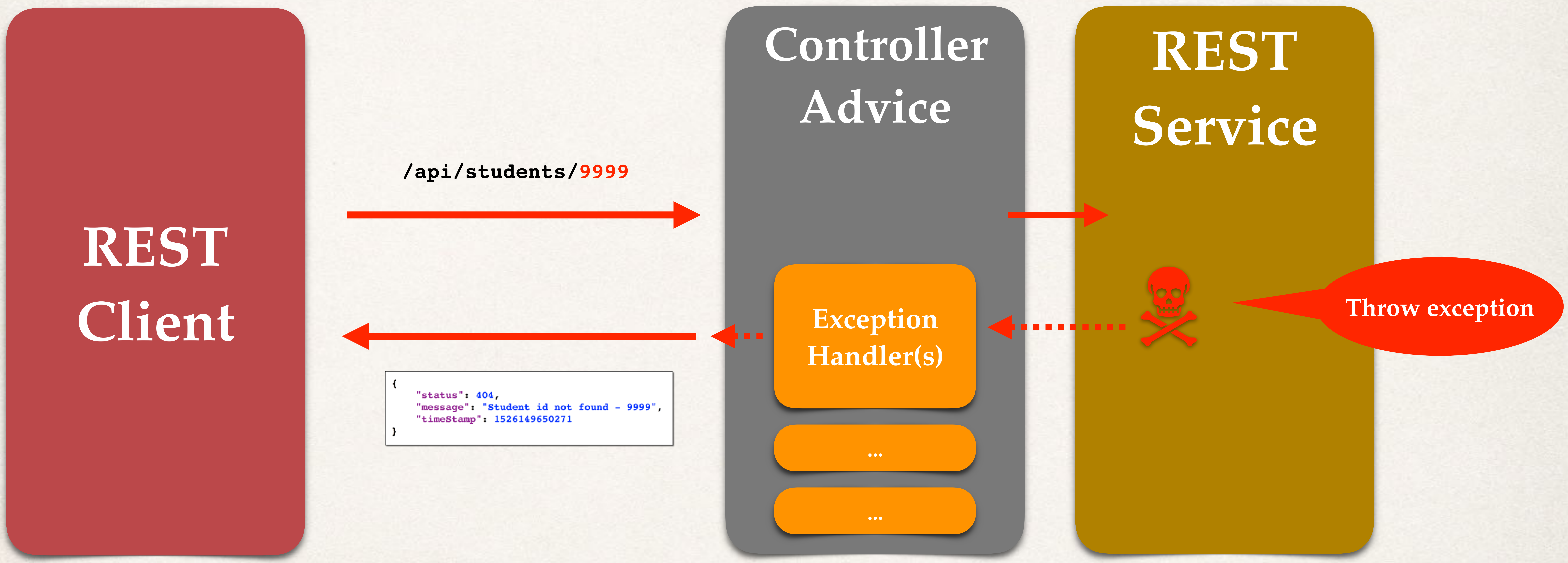

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