GET Requests: Validating Headers



Andrejs Doronins

Overview



Typical headers overview
Use .peek() and .print()
Assert and validate various headers
Add syntactic sugar methods
Leverage the Hamcrest library
Maps of headers

Common and Custom Headers

status: 200 OK

content-type: application/json; charset=utf-8

date: Mon, 05 Apr 2021 16:11:35 GMT

etag: "8ccd6372bcf27b234e53e90d8e0ae9c12efd55c887b556b"

server: GitHub.com

x-frame-options: deny

x-ratelimit-limit: 60

[...]

"X" prefix is used for custom headers

Header Groups

1

2

3

Standard and ubiquitous

e.g. "content-type"

Standard
e.g. "date" or "etag"

Custom prefixed with "x-"

Debugging Methods

```
.peek()
.prettyPeek()
.print()
.prettyPrint()
```

Getting the Headers

```
.getStatusCode()
.getContentType()
.getHeader(String header)
.getHeaders()
```

Conversions from finer to coarser granularities truncate, so lose precision.

For example, converting 999 milliseconds to seconds results in 0.



Agree on a convention, and then code consistently

Response

assertEquals

(r.getStatusCode(), 200);

ValidatableResponse

.assertThat()
.statusCode(200)

Further Checks



Numbers and dates

String contains X

Collection contains Y

Is empty or is null

- .assertTrue()
- .assertFalse()
- .assertNotNull()

```
.assertTrue(r.getThis() > 199)
.assertFalse(r.getThat().contains("x"))
.assertNotNull(r.getOther())
```



.statusCode(int code)
.header("x", "y")
.header("x", "y", Matcher m)

REST Assured

Batteries included

Hamcrest

```
import static org.hamcrest.MatcherAssert.assertThat;
import static org.hamcrest.Matchers.*;
@Test
public void hamcrestExample() {
   assertThat(10, lessThan(11));
```

```
import static org.hamcrest.Matchers.*;
RestAssured.get(url)
   .then()
   .statusCode(200)
   .statusCode(equalTo(200))
   .statusCode(lessThan(300))
   .header("x", containsStringIgnoringCase("y"))
```

```
import static org.hamcrest.Matchers.*;
RestAssured.get(url)
   .then()
   .header("etag", notNullValue())
   .header("etag", not(emptyString()))
   .statusCode(anyOf(equalTo(200), equalTo(202)))
```

```
// simple
.header(String header, String v)
.header(String header, Matcher m)
// advanced
.header(String header, Function f, Matcher m)
.header(String header, ResponseAwareMatcher m)
```

"60", "200"

.header(String header, String v)

"60" String int equalTo(60)

.header(String header, Function f, Matcher m)



.header("rate-limit", Integer::parseInt, lessThan(100))

Demo



Converting Header Values with Functions

```
/**
 * [...] allows comparing a header in the response to
 * something else available in the response
 */
.header(String header, ResponseAwareMatcher m)
```

```
// Headers
x-ratelimit-limit: 60
x-ratelimit-remaining: 58

//Body
SomeField: "someValue"
```

```
/**
 * [...] allows comparing a header in the response to
 * something else available in the response
 */
.header(String header, ResponseAwareMatcher m)
```

```
.headers(String h1, Object v1, Object... headers)
.headers(Map<String, ?> headers)
```

Summary



Simple Response ValidatableResponse

Use then()

Convenience methods

- StatusCode()
- ContentType()

header()

headers()

Up Next: Validating the Body