

THE DEVELOPER'S CONFERENCE

Trilha – Testes

Karatê DSL - Automatizando testes de API de forma simples

Samuel Lucas

Karate DSL - DSL para Testes de API

Open Source

Autor: Peter Thomas

Versão atual: 0.9.2

Lançamento: ~ 2 anos atrás

Popularidade: +1800 ★ Github

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Karate DSL - Simplicidade

*Classe para
executar os
testes*

Executor

Script de testes

Testes

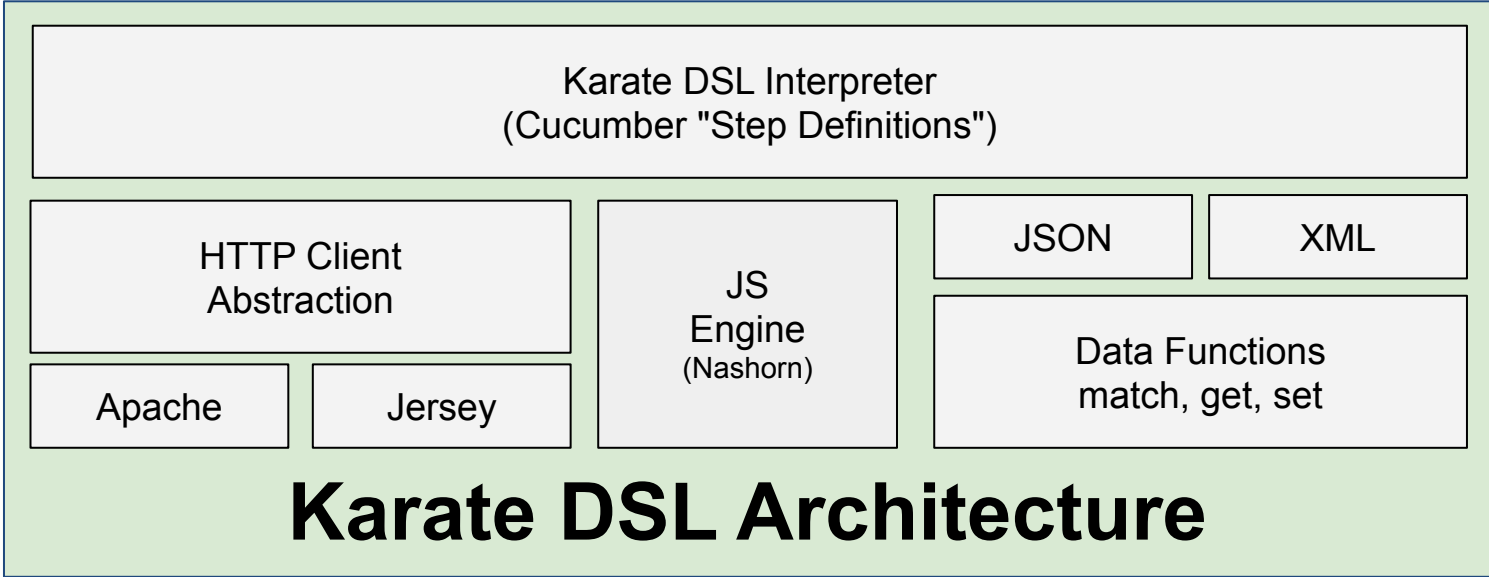
*Configurações
adicionais*

Configuração

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Karate Script

Runner
(JUnit,
TestNG)



Java 8 JRE

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Karate DSL - Sintaxe básica - REST

```
Scenario: Validar a API de Livros
  Given path 'Books'
  When method GET
  Then status 200
  And match header Content-Type == 'application/json;
  And match response != {}
  * print response
  And match response == '##[] bookStruct'
  * def bookTitle = $response[0].Title
  * print bookTitle
```

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Karate DSL - Sintaxe básica - SOAP

```
Given request
```

```
''''''
```

```
<?xml version="1.0" encoding="utf-8"?>
```

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-  
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap="ht  
soap/envelope/">
```

```
  <soap:Body>
```

```
    <Add xmlns="http://tempuri.org/">
```

```
      <intA>2</intA>
```

```
      <intB>3</intB>
```

```
    </Add>
```

```
  </soap:Body>
```

```
</soap:Envelope>
```

```
''''''
```

```
When soap action 'http://tempuri.org/Add'
```

```
Then status 200
```

```
And match /Envelope/Body/AddResponse/AddResult == 5
```

```
And print 'response: ', response
```

Karate DSL - Relatório de execução



Test Suite Navigation

of failed tests: 0/18
(0.00%)

of skipped tests: 0/18
(0.00%)

of passed tests: 18/18
(100.00%)

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18

Scenario Outline: Verificar se o endpoint 'Activities' retorna o status 200 (1)

Test 1 : * url baseUrl	0.001965
Test 2 : * def bookStruct =	0.000286
Test 3 : Given path 'Activities'	0.002811
Test 4 : When method GET	0.58319
Test 5 : Then status 200	0.000159
Test 6 : * print response	0.003304

Scenario Outline: Verificar se o endpoint 'Books' retorna o status 200 (2)

Test 7 : * url baseUrl	0.000119
Test 8 : * def bookStruct =	0.000246
Test 9 : Given path 'Books'	0.002701
Test 10 : When method GET	0.616606
Test 11 : Then status 200	0.000147
Test 12 : * print response	0.033579

Scenario Outline: Verificar se o endpoint 'Authors' retorna o status 200 (3)

Test 13 : * url baseUrl	0.000088
Test 14 : * def bookStruct =	0.000322
Test 15 : Given path 'Authors'	0.003227
Test 16 : When method GET	0.597134
Test 17 : Then status 200	0.000122
Test 18 : * print response	0.009491

Karate DSL - Relatório de execução

Cucumber Report

Features Tags Steps Failures

Feature Report

Feature	Steps						Scenarios			Features	
	Passed	Failed	Skipped	Pending	Undefined	Total	Passed	Failed	Total	Duration	Status
demo/callfeature/call-feature.feature	27	0	0	0	0	27	1	0	1	1s 366ms	Passed



Feature demo/callfeature/call-feature.feature

calling another feature file

Background ▾

654ms

Steps ▾

* url demoBaseUrl

654ms

Scenario create kittens and then create parent cat ▾

712ms

Steps ▾

* call create-two-cats.feature

000ms

* url demoBaseUrl

000ms

Given path 'cats'

000ms

And request { name: 'Bob' }

000ms

When method post

000ms

Doc string

```
08:10:05.182 DEBUG -
1 > POST http://127.0.0.1:58317/cats
1 > Accept-Encoding: gzip,deflate
1 > Connection: Keep-Alive
1 > Content-Length: 14
1 > Content-Type: application/json
1 > Host: 127.0.0.1:58317
1 > User-Agent: Apache-HttpClient/4.5.3 (Java/1.8.0_112)
{"name":"Bob"}
```


Karate DSL - Cobertura de código w/ Jacoco

karate-demo > com.intuit.karate.demo.controller

com.intuit.karate.demo.controller

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods	Missed	Classes
EchoController		42%		25%	6	11	6	16	2	7	0	1
WebSocketHandler		86%		100%	0	7	0	23	0	6	0	1
CatsController		86%		50%	1	9	1	19	0	8	0	1
SignInController		89%		50%	4	8	2	9	0	4	0	1
HeadersController		96%		66%	2	6	1	14	0	3	0	1
SearchController		97%		100%	1	10	1	25	1	5	0	1
RedirectController		96%		75%	1	5	1	12	0	3	0	1
UploadController		100%		n/a	0	9	0	46	0	9	0	1
DogsController		100%		n/a	0	6	0	9	0	6	0	1
WebSocketController		100%		n/a	0	3	0	8	0	3	0	1
GreetingController		100%		n/a	0	3	0	6	0	3	0	1
SoapController		100%		100%	0	3	0	5	0	2	0	1
GraphQLController		100%		100%	0	3	0	5	0	2	0	1
EncodingController		100%		n/a	0	3	0	3	0	3	0	1
Total	86 of 1,001	91%	14 of 44	68%	15	86	12	200	3	64	0	14

Karate DSL - Execução paralela

1 Thread

elapsed:	11.72		threads:	1
features:	59		ignored:	26
scenarios:	162		passed:	162

5 Threads

elapsed:	7.75		threads:	5
features:	59		ignored:	26
scenarios:	162		passed:	162

+ 66% ⚡

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Hands on

Lembre-se: o **contexto** importa



RestSharp

Simple REST and HTTP API Client for .NET



unirest
Lightweight HTTP Request Client Libraries



REST-assured

Obrigado!

#Partiu testar
APIs? →

Samuel Lucas,
@samlucax



<https://tinyurl.com/karate-tdc>