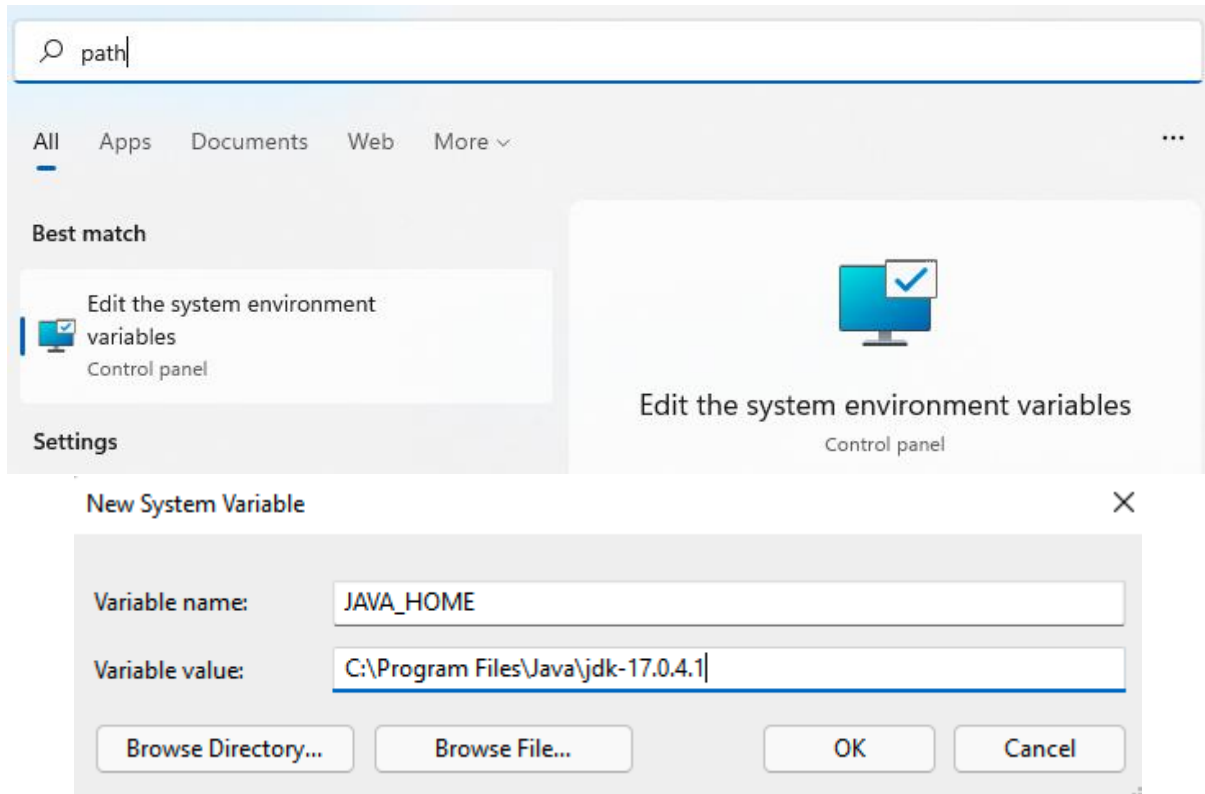


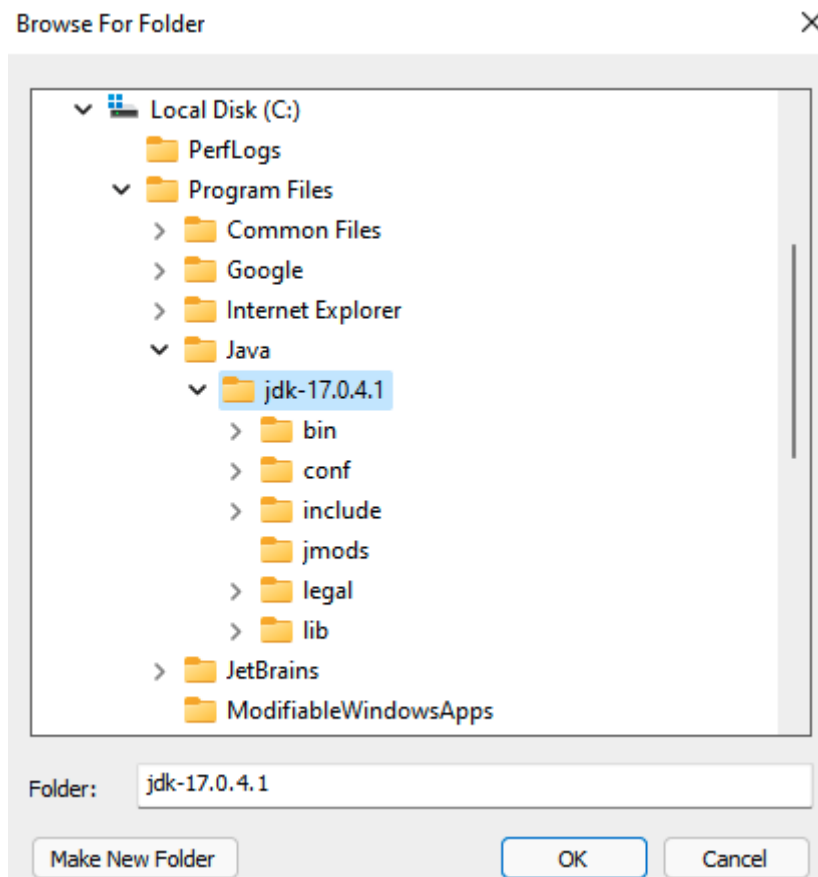
Chapter 1: Karate's core concepts

No images...

Chapter 2: Setting up your Karate project

Please set the `JAVA_HOME` variable in your environment to match the location of your Java installation.





Artifacts Released

- [Maven artifacts](#)
- [Standalone JAR](#) (download below)
- [ZIP Release](#) (download below)
- [Karate-Robot JAR](#) (download below)
- [Docker Image](#)

```

C:\Users\bischoff\Desktop\karate-1.2.1.RC1>karate

C:\Users\bischoff\Desktop\karate-1.2.1.RC1>java -cp karate.jar;. com.intuit.karate.Main
23:40:11.876 [main] INFO com.intuit.karate - Karate version: 1.2.1.RC1
Usage: <main class> [-CDhsSW] [-B[=<backupReportDir>]] [-d[=<debugPort>]]
    [--debug-keepalive[=<keepDebugServerAlive>]] [-c=<cert>]
    [-e=<env>] [-g=<configDir>] [-j=<jobServerUrl>] [-k=<key>]
    [-n=<name>] [-o=<output>] [-p=<port>] [-P=<prefix>]
    [-T=<threads>] [-w=<workingDir>] [-f=<formats>[,
    <formats>...]]... [-H=<hookFactoryClassNames>[,
    <hookFactoryClassNames>...]]... [-m=<mocks>[,
    <mocks>...]]... [-t=<tags>]... [<paths>[($|,)<paths>...]]...
    [<paths>[($|,)<paths>...]]...
    one or more tests (features) or search-paths to run
-B, --backup-reportdir[=<backupReportDir>]
    backup report directory before running tests
-c, --cert=<cert>
    ssl certificate (default: cert.pem)
-C, --clean
    clean output directory
-d, --debug[=<debugPort>]
    debug mode (optional port else dynamically chosen)
-D, --dryrun
    dry run, generate html reports only
    --debug-keepalive[=<keepDebugServerAlive>]
    keep debug server open for connections after
    disconnect
-e, --env=<env>
    value of 'karate.env'
-f, --format=<formats>[,<formats>...]
    comma separate report output formats. tilde
    excludes the output report. html report is
    included by default unless it's negated.e.g. '-f
    ~html,cucumber:json,junit:xml' - possible values

```

Windows Security Alert



Windows Defender Firewall has blocked some features of this app

Windows Defender Firewall has blocked some features of Java(TM) Platform SE binary on all public and private networks.



Name: Java(TM) Platform SE binary
 Publisher: Oracle Corporation
 Path: C:\program files\java\jdk-17.0.4.1\bin\java.exe

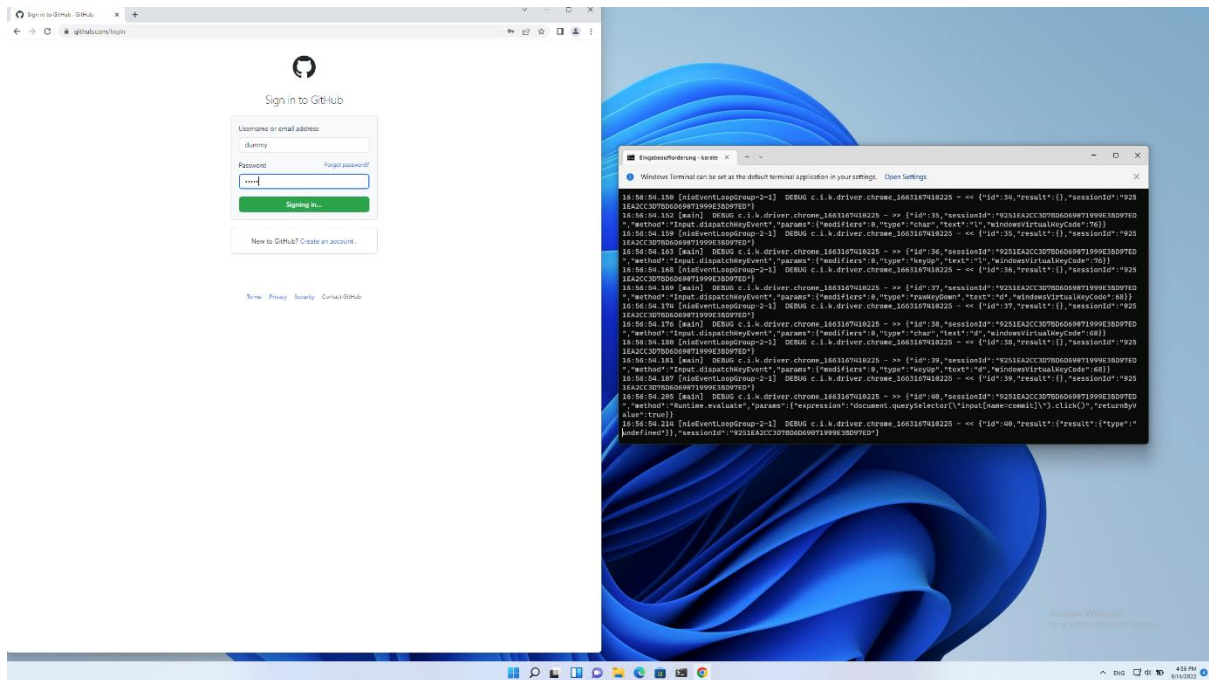
Allow Java(TM) Platform SE binary to communicate on these networks:

- ☐ Private networks, such as my home or work network
- ☒ Public networks, such as those in airports and coffee shops (not recommended because these networks often have little or no security)

[What are the risks of allowing an app through a firewall?](#)

Allow access




Cancel

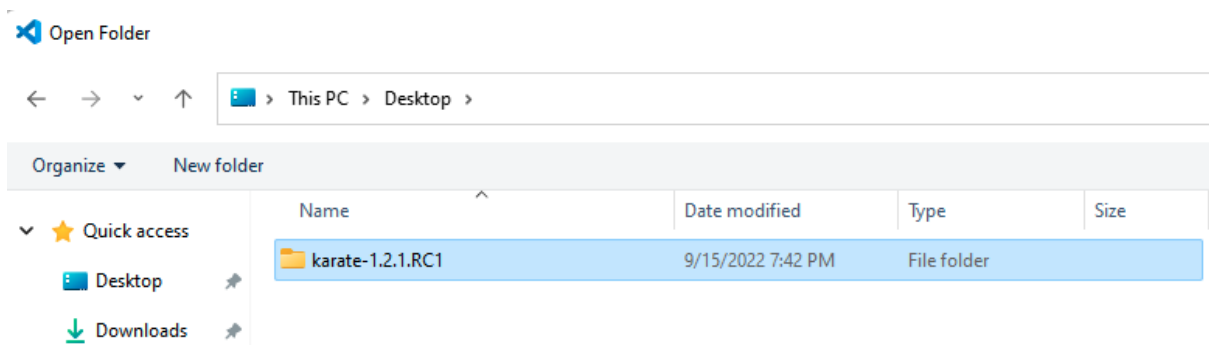


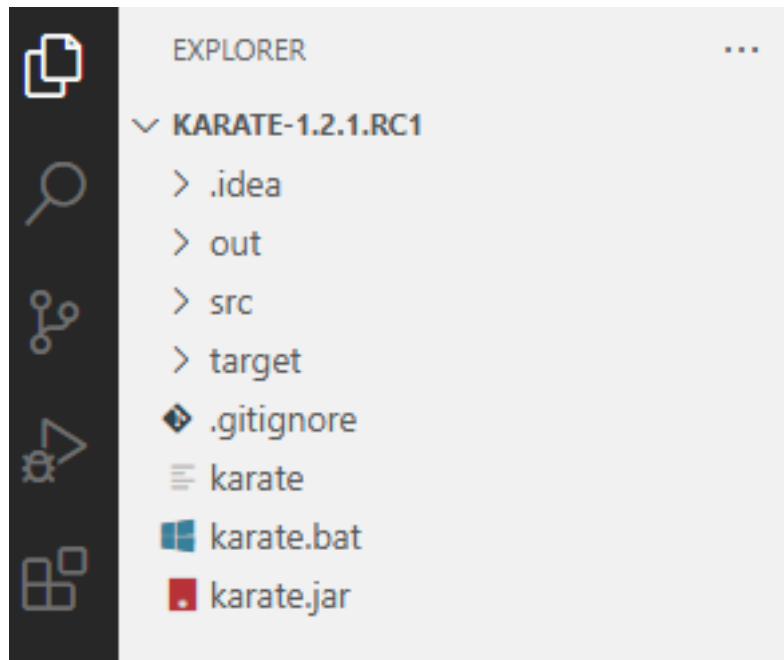
Visual Studio Code

Editing evolved



Start

-  New File...
-  Open File...
-  Open Folder...





```
16 Given driver 'https://google.com'  
17 And input("input[name=q]", 'karate dsl')  
18 When submit().click("input[name=btnI]")  
19 # this may fail depending on which part of the world you are in !  
20 Then waitUrl('https://github.com/karatelabs/karate')  
21
```


 The Marketplace has extensions that can help with '.feature' files 

[Search Marketplace](#)

[Don't Show Again for '.feature' files](#)

EXTENSIONS: MARKET...
ext:feature
Cucumber (G... 544K 4.5
VSCode Cucumber (Gherkin...
Alexander Krechik
Install
Snippets and ... 109K 5
Code snippets to write scen...
Euclidity
Install
Cypress Helper 52K 4
Extension for cypress.io testi...
Oleksandr Shevtsov
Install
Feature Syntax ... 49K 5
Syntax highlight and snippets
Roland Orosz
Install
Gherkin Indent 39K 2.5
Gherkin Indent sets the inde...
Aravind Kumar
Install
Karate Runner 22K 4.5
Open/Run/Debug Karate Te...
Kirk Slota
Install
Cucumber 18K 5
Cucumber for Visual Studio ...
Cucumber
Install
Specflow Tools 14K 4.5
A set of Specflow Tools for V...
Alistair John Millard
Install
BDD - Feature-... 13K 5
Autocompletion and syntax ...
iteratec
Install
Cucumber (Ghe... 11K 5
VSCode Cucumber (Gherkin...
marcosvfranco
Install
Cuke Step Defin... 8K 5

Extension: Karate Runner X



Karate Runner

v1.2.0

Kirk Slota | 22,906 | 5 | Sponsor

Open/Run/Debug Karate Tests and Reports by leveraging Co...

Install

Details | Feature Contributions | Changelog


Karate Runner

Repository | Issues | Milestones | Karate

version v1.2.0 | last updated june | issues 2 open

Open/Run/Debug Karate Tests and Reports by leveraging Codelens, Activity Bar, Debugger and much more.

Sponsors



This project is proudly sponsored by [Karate](#). The only open-source tool to combine API test-automation, mocks, performance-testing and even UI automation into a single, unified framework.

Categories

Programming Languages Debuggers Testing

Extension Resources

Marketplace Repository License Kirk Slota

More Info

Released 5/8/2019, on 00:49:53
Last updated 6/27/2022, 23:35:44
Identifier kirkslota.karate-runner

Open Recent

Add Folder to Workspace...

Save Workspace As...

Duplicate Workspace

Save Ctrl+S

Save As... Ctrl+Shift+S

Save All Ctrl+K S

Auto Save

Preferences

Extensions Ctrl+Shift+X

Keyboard Shortcuts Ctrl+K Ctrl+S

Migrate Keyboard Shortcuts from...

Configure User Snippets

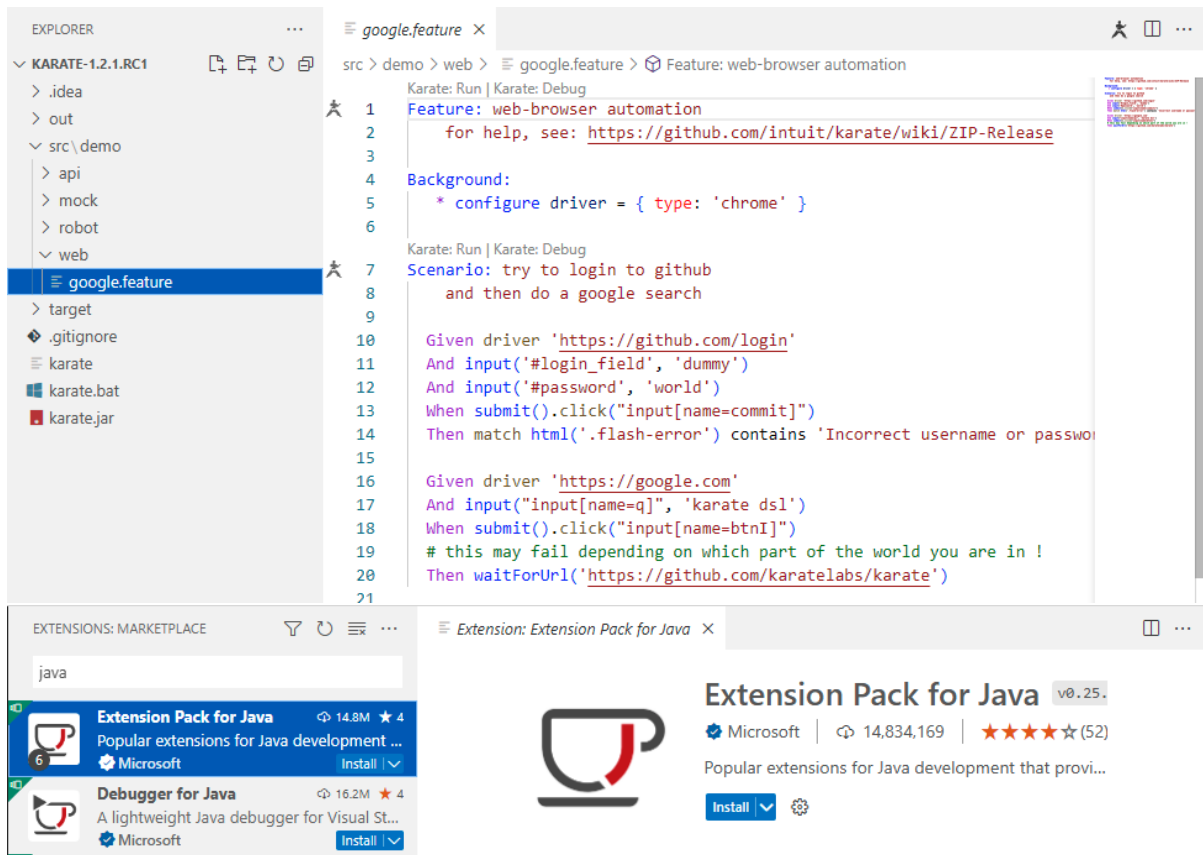
Color Theme Ctrl+K Ctrl+T

File Icon Theme

Product Icon Theme

Turn on Settings Sync...





Download IntelliJ IDEA

Windows

macOS

Linux

Ultimate

For web and enterprise development

Download

.exe ▼

Free 30-day trial available

Community

For JVM and Android development

Download

.exe ▼

Free, built on open source

Welcome to IntelliJ IDEA

IntelliJ IDEA 2022.2.2

Projects

Customize



Plugins


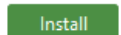
Learn IntelliJ IDEA

Marketplace Installed

Search: karate

Search Results (1) Sort By: Relevance

Karate  1.8K 4.44 


Karate   1.8K 4.44 Karate Labs Inc. Freemium Testing 1.5.0.196

Install a version with limited functionality for free

[Plugin homepage](#)

Official [Karate](#) support including embedded languages (JS, JSON, XML), run-configurations, and debug support.

Karate is the only open-source tool to combine API test-automation, mocks, performance-testing and even UI automation into a single, unified framework. Assertions and HTML reports are built-in, and you can run tests in parallel for speed.

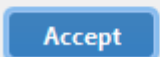
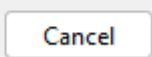
 **Third-Party Plugins Privacy Note**



The following plugins aren't coming from JetBrains:

Karate (Karate Labs Inc.)

Using third-party plugins may involve a plugin vendor processing your personal data.
Please check the plugin vendor's documentation for details concerning personal data processing.

JetBrains is not responsible for any processing of your personal data by any third-party plugin vendors.

 **Karate**  1.8K 4.44

Welcome to IntelliJ IDEA

IntelliJ IDEA 2022.2.2

Projects



Customize

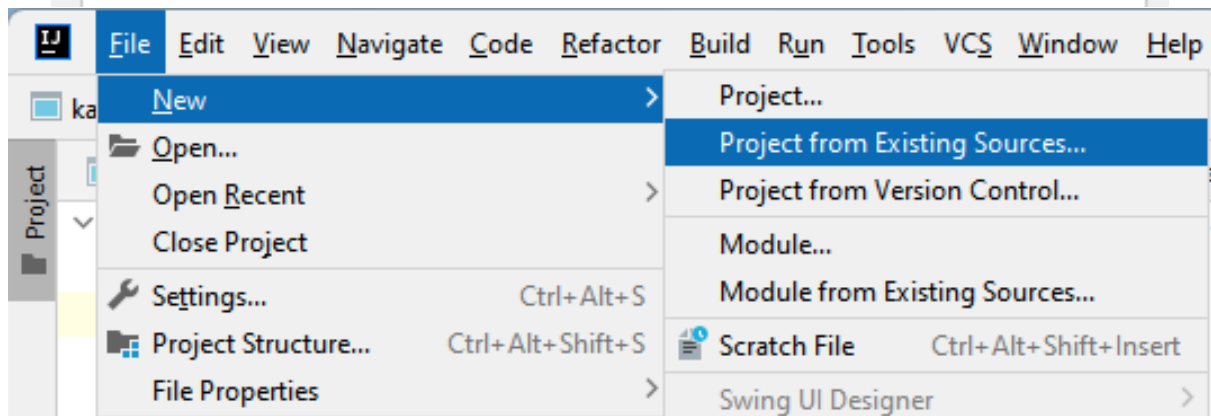
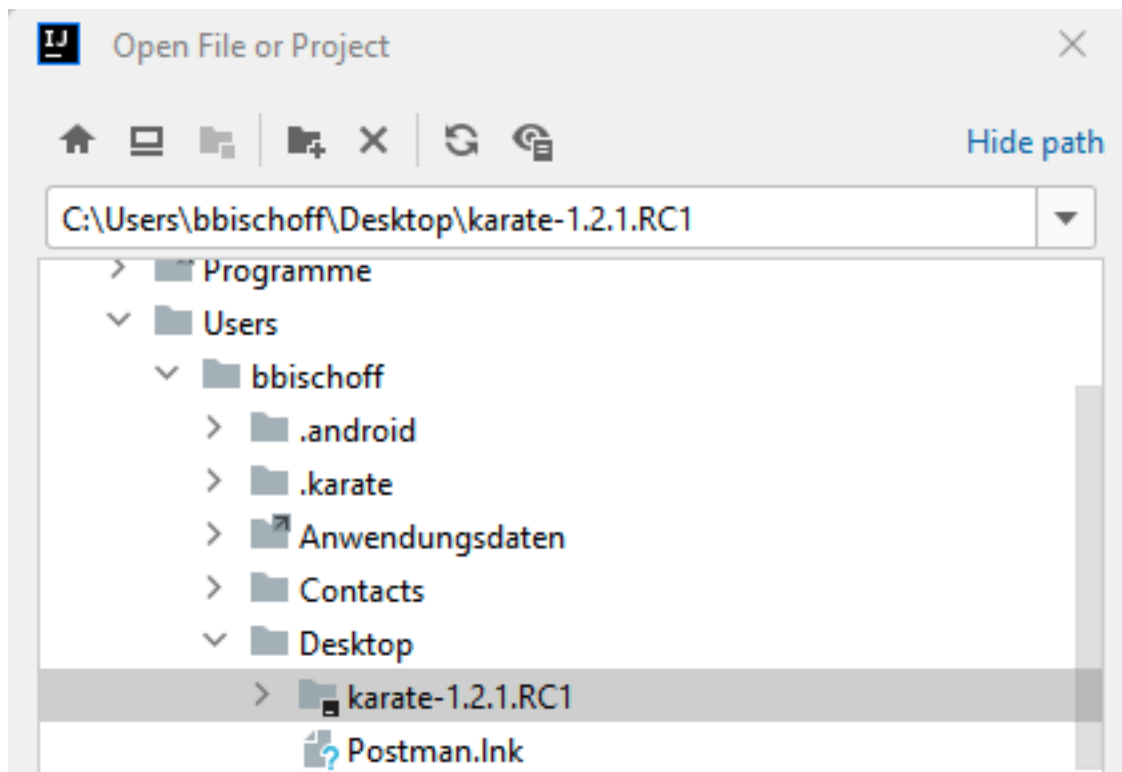
Plugins

Learn IntelliJ IDEA

Search projects

New Project Open Get from VCS

 **karate-1.2.1.RC1** 
~\Desktop\karate-1.2.1.RC1



Error running 'google.feature: try to login to github':
Project has no JDK configured.

Version Control Run TODO Problem

Project Structure

← →

Project Settings

Project

Modules

Libraries

Facets

Artifacts

Platform Settings

SDKs

Global Libraries

Problems 2

Project

Default settings for all modules. Configure these parameters for each module on the module page as needed.

Name: karate-1.2.1.RC1

SDK: <No SDK> Edit

Language level: 17 Oracle OpenJDK version 17.0.4

Compiler output: + Add SDK

Used for modules' subdirectories, Production and Test directories for the corresponding sources.

▼ karate-1.2.1.RC1 C:\Users\bbischoff\Desktop\karate-1.2

> .idea

> out

▼ src

▼ demo

▼ api

httpbin.feature

users.feature

▼ mock

cats.html

cats-mock.feature

cats-test.feature

▼ robot

calc.feature

calc-old.feature

▼ web

google.feature

Feature: web-browser automation

for help, see: <https://github.com/intuit/karate/wiki/ZIP-Release>

Background:

```
* configure driver = { type: 'chrome' }
```

Scenario: try to login to github
and then do a google search

```
Given driver 'https://github.com/login'
```

```
And input('#login_field', 'dummy')
```

```
And input('#password', 'world')
```

```
When submit().click("input[name=commit]")
```

```
Then match html('.flash-error') contains 'Incorrect username or password.'
```

```
Given driver 'https://google.com'
```

```
And input("input[name=q]", 'karate dsl')
```

```
When submit().click("input[name=btnI]")
```

```
# this may fail depending on which part of the world you are in !
```

```
Then waitUrl('https://github.com/karatelabs/karate')
```

Environment Variables

User variables for bbischoff

Variable	Value
Path	C:\Users\bbischoff\AppData\Local\Microsoft\WindowsApps;C:\Us...
TEMP	C:\Users\bbischoff\AppData\Local\Temp
TMP	C:\Users\bbischoff\AppData\Local\Temp

New...

Edit...

Delete

Edit environment variable

%USERPROFILE%\AppData\Local\Microsoft\WindowsApps
C:\Users\bbischoff\AppData\Local\Programs\Microsoft VS Code\bin
C:\Users\bbischoff\Desktop\apache-maven-3.8.6-bin\apache-maven-...

New

Edit

Browse...

- Commonly Used (1)
- ▼ Text Editor (4)
- Formatting (1)
- Suggestions (1)
- Files (2)
- ▼ Extensions (37)
- Java (10)
- Karate Runner (7)
- Markdown (4)
- Maven for Java (16)**

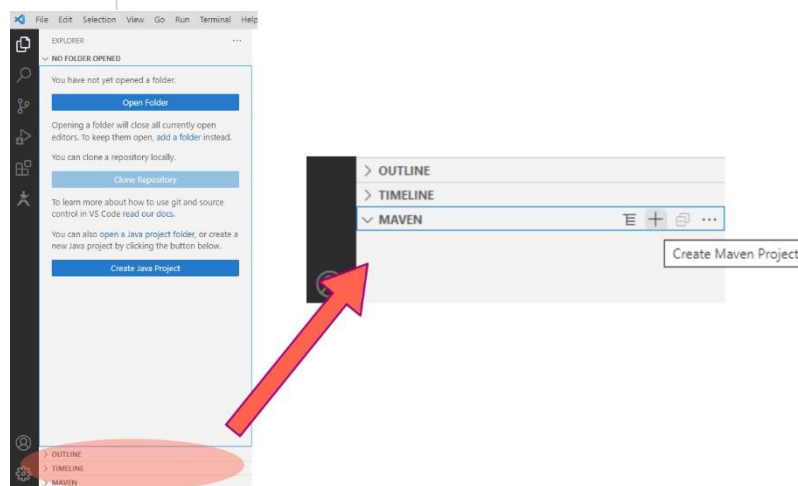


Maven > Executable: Path

Specifies absolute path of your 'mvn' executable. When this value is empty, it tries using 'mvn' or 'mvnw' according to the value of 'maven.executable.preferMavenWrapper'.

Maven > Executable: Prefer Maven Wrapper

☒ Specifies whether you prefer to use Maven wrapper. If true, it tries using 'mvnw' by walking up the parent folders. If false, or 'mvnw' is not found, it tries 'mvn' in PATH instead.



Create Maven Project

More...

Find more archetypes available in remote catalog.

maven-archetype-quickstart org.apache.maven.archetypes

An archetype which contains a sample Maven project.

archetype-quickstart-jdk8 com.github.ngeor

A Maven archetype for a simple Java app, updated for Java 8

maven-reactjs-blank-archetype am.ik.archetype

Blank Project for React.js

maven-archetype-webapp org.apache.maven.archetypes

An archetype which contains a sample Maven Webapp project.

spring-boot-blank-archetype am.ik.archetype

Blank Project for Spring Boot

←

Create Maven Project

karate

karate-archetype

com.intuit.karate

←

Create Maven Project

1.3

1.3.0.RC1

1.3.0.RC2

0.1.3

←

Create Maven Project

blog.softwaretester

Input group Id of your project. (Press 'Enter' to confirm or 'Escape' to cancel)

←

Create Maven Project

karate-maven

Input artifact Id of your project. (Press 'Enter' to confirm or 'Escape' to cancel)

✖

Select Folder

←

→

▼

↑

📁

>

bbischoff

>

Desktop

>

karate_book

Organize ▼

New folder

- ▼ KARATE-MAVEN
 - > .vscode
 - ▼ src\test\java
 - ▼ examples
 - ▼ users
 - ★ users.feature
 - J UsersRunner.java
 - J ExamplesTest.java
 - JS karate-config.js
 - 🔥 logback-test.xml
 - > target
 - 🔥 pom.xml

▼ MAVEN ⌵ + ↺ 📄 ...

- ▼ **m** karate-maven blog.softwaretester:karate-maven
 - > ↺ Lifecycle
 - > 📄 Plugins
 - ▼ 📦 Dependencies
 - > 📦 com.intuit.karate:karate-junit5:1.1.0 (... C

Chapter 3: Writing Karate tests



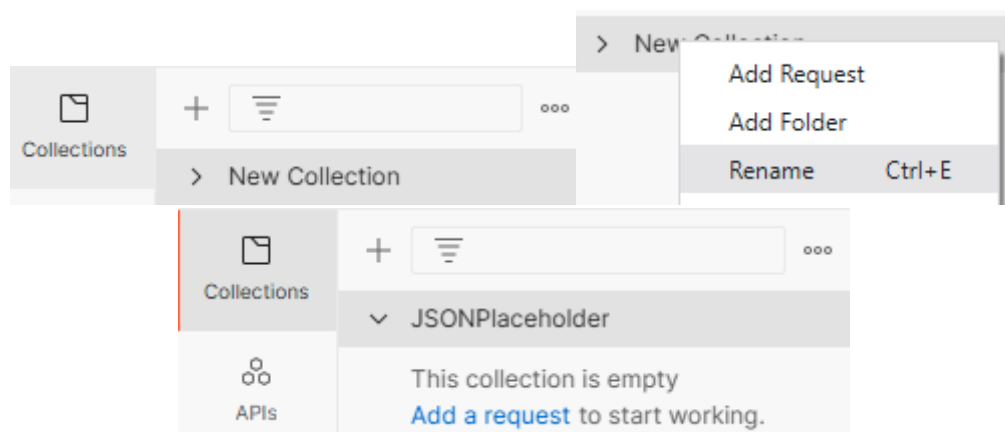
Create an account or sign in

Create Free Account

Sign in

Create your account or sign in later? [Skip and go to the app](#)

		GET	/posts
		GET	/posts/1
/posts	100 posts	GET	/posts/1/comments
/comments	500 comments	GET	/comments?postId=1
/albums	100 albums	POST	/posts
/photos	5000 photos	PUT	/posts/1
/todos	200 todos	PATCH	/posts/1
/users	10 users	DELETE	/posts/1



GET

<https://jsonplaceholder.typicode.com/posts>

Send

Pretty

Raw

Preview

Visualize

JSON



```
1 {  
2     
3   "userId": 1,  
4   "id": 1,  
5   "title": "sunt aut facere repellat provident occaecati excepturi optio  
        reprehenderit",  
6   "body": "quia et suscipit\nsuscipit recusandae consequuntur expedita et  
        cum\nreprehenderit molestiae ut ut quas totam\nnostrum rerum est autem sunt  
        rem eveniet architecto"  
7 },
```

JSONPlaceholder

GET Get all posts

Add Request

Add Folder

Rename Ctrl+E

JSONPlaceholder / Get all posts for a user

GET

<https://jsonplaceholder.typicode.com/posts?userId=1>

Params

Authorization

Headers (6)

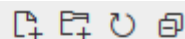
Body

Pre-request Script

Query Params

	KEY	VALUE
<input checked="" type="checkbox"/>	userId	1

KARATE-JSONPLACEHOLDER



src\test\java

> examples

JS karate-config.js

logback-test.xml

> target

pom.xml

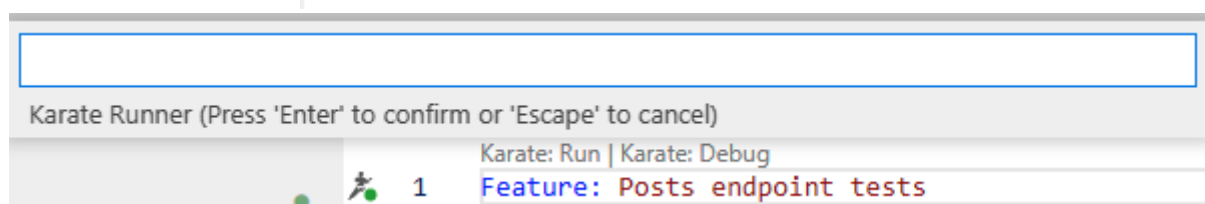
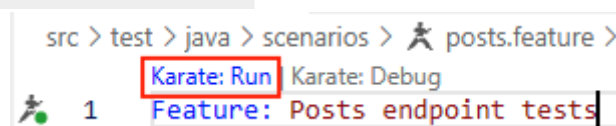
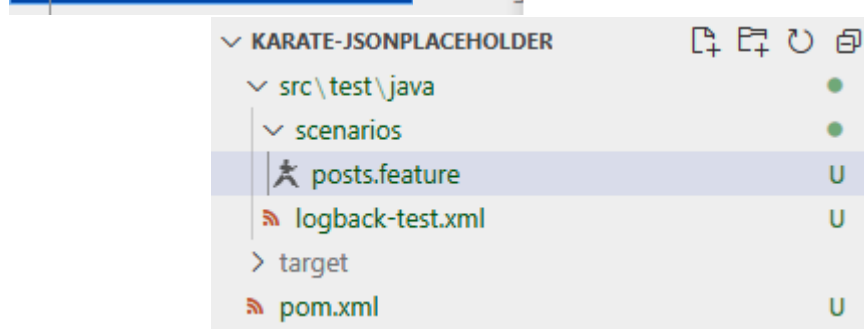
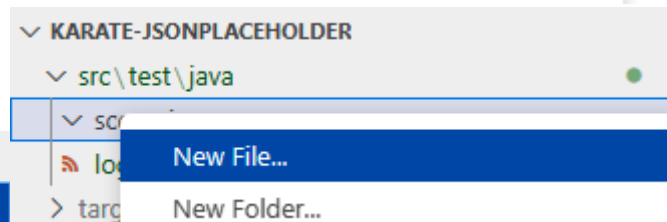
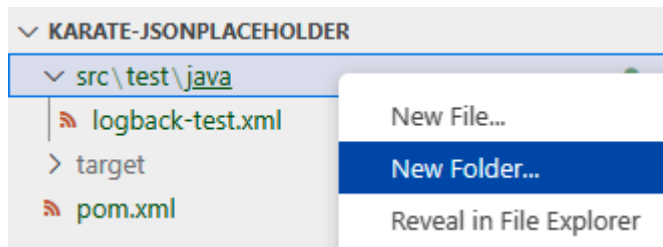
KARATE-JSONPLACEHOLDER

src\test\java

logback-test.xml

> target

pom.xml



Karate Runner

26 Settings Found



User Workspace

Turn on Settings Sync



Karate Runner > Karate Cli: Override Karate Runner



Override Karate Runner utilizing the new Karate Cli. See 'Karate Cli' section within Extension Details in the Marketplace for further information. Only applies when using Maven or Gradle.

⊗ 10/14/2022 14:48:51.526

c:\Users\bbischoff\Desktop\github...st\java\scenarios\posts.feature:2

Features: 1 | Scenarios: 1 | Passed: 0 | Failed: 1 | Elapsed: 4.33ms



Karate ✓ 0 ⊗ 1

⊗ 0 ⚠ 2

Karate ✓ 1 ⊗ 0

Chapter 4: Running Karate Tests

Karate Runner (Press 'Enter' to confirm or 'Escape' to cancel)

6

Karate: Run | Karate: Debug

7

Scenario: get all users and then get the first

Karate Runner

26 Settings Found

☰

🔍

User

Workspace

Turn on Settings Sync

⚙️

Karate Runner > Karate Cli: Override Karate Runner

☒ Override Karate Runner utilizing the new Karate Cli. See 'Karate Cli' section within Extension Details in the Marketplace for further information. Only applies when using Maven or Gradle.

users.feature U x

...

ypicod

Clear Results

Open Settings

Toggle Results In Gutter

⚙️

Karate Runner > Karate Jar: Command Line Args

Karate.jar command line. Karate Runner will handle setting the command line with the feature file being tested and suffixing the feature file with a 'number' when running individual Scenarios. Only applies when using Karate.jar.

java -cp C:\Users\bbischoff\Desktop\karate-1.2.1.RC1\karate.jar com.inti

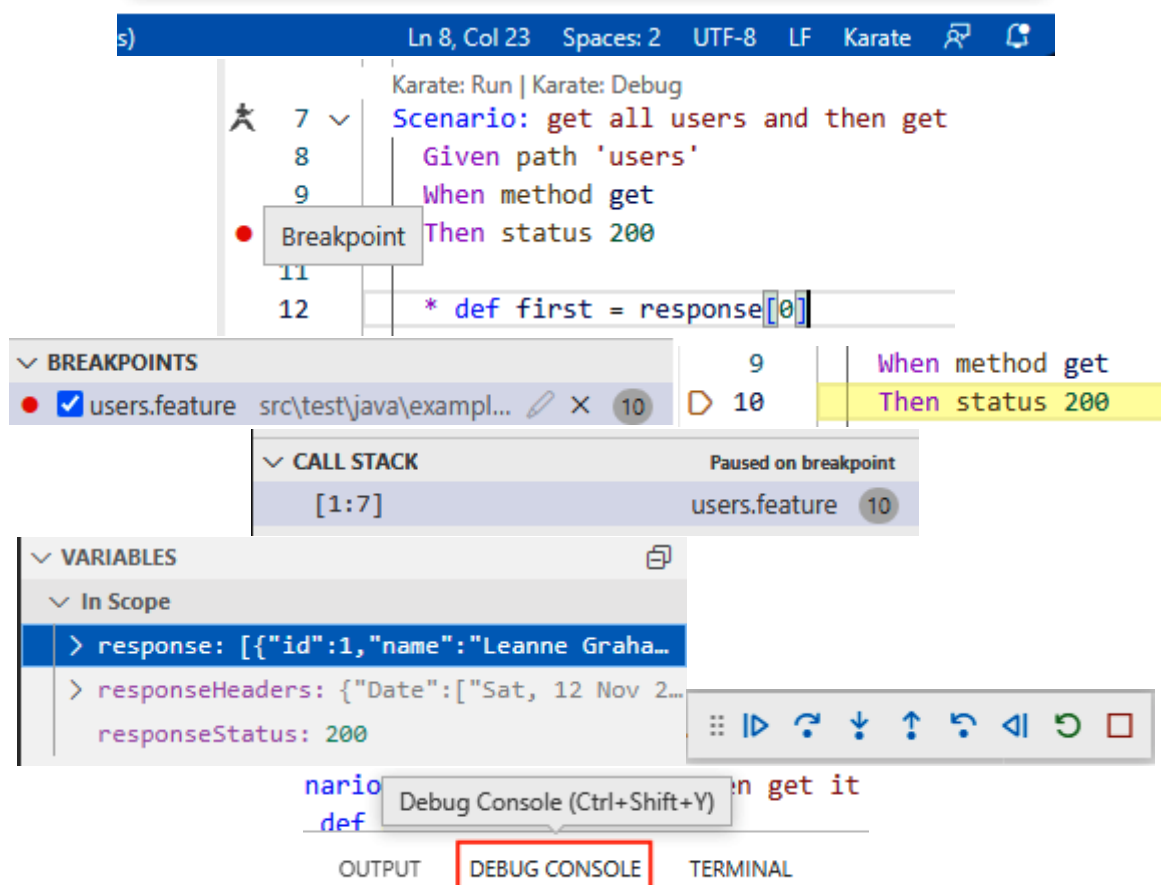
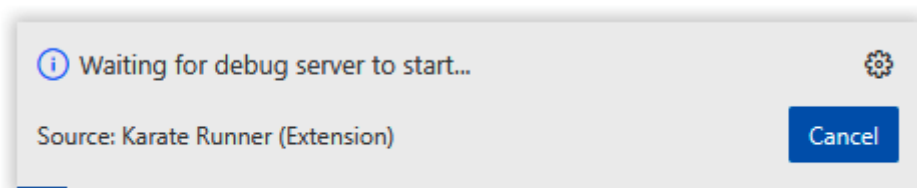
Select debugger

Java Suggested

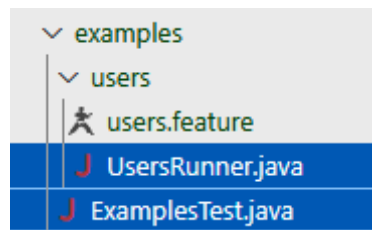
Karate (debug)

Node.js

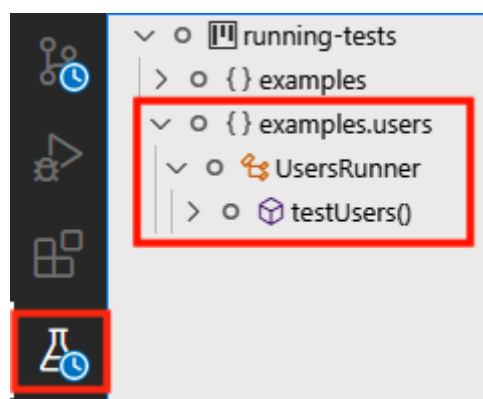
Web App (Chrome)



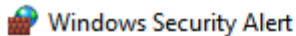
```
14 Given path 'users', first.id
15 When method get
16 Then status 200
17
Karate: Run | Karate: Debug
18 Scenario: create a user and then get it by id
19 * def user =
...
Filter (e.g. text, !exclude) Karate (debug): Standalone
},
"phone": "1-770-736-8031 x56442",
"website": "hildegard.org",
"company": {
  "name": "Romaguera-Crona",
  "catchPhrase": "Multi-layered client-server neural-net",
  "bs": "harness real-time e-markets"
}
}
> print first
```



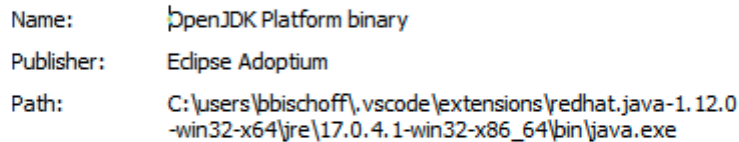
```
7 @Karate.Test
8 Karate testUsers() {
9   return Karate.run(...paths: "users").relativeTo(getClass());
10 }
```



```
Command Prompt - mvn test -Dtest=UsersRunner
C:\Users\bbischoff\Desktop\github\Writing-API-Tests-with-Karate\chapter04\running-tests mvn test -Dtest=UsersRunner
[INFO] Scanning for projects...
[INFO]
[INFO] -----< blog.softwaretester:running-tests >-----
[INFO] Building running-tests 1.0.0
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ running-tests ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory C:\Users\bbischoff\Desktop\github\Writing-API-Tests-with-Karate\chapter04\run
ning-tests\src\main\resources
```




Windows Defender Firewall has blocked some features of OpenJDK Platform binary on all public and private networks.



☐ Private networks, such as my home or work network

☒ Public networks, such as those in airports and coffee shops (not recommended because these networks often have little or no security)

 Allow access

 **Karate Runner > Karate Cli: Override Karate Runner**

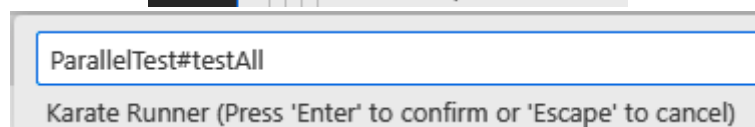
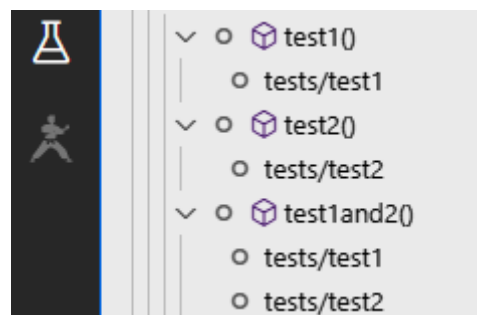
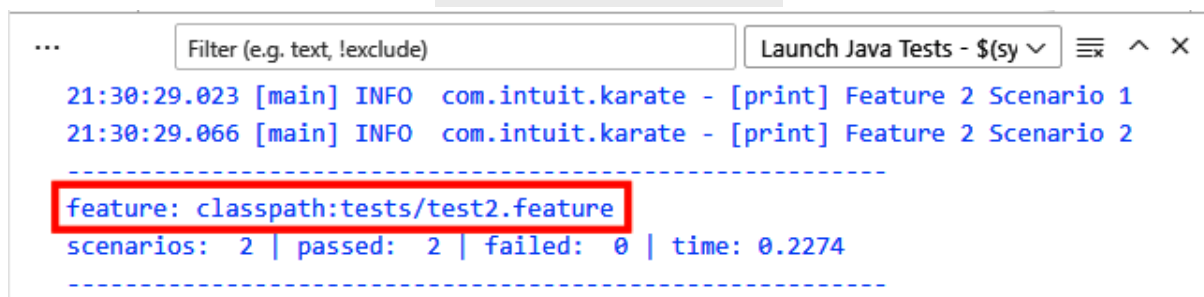
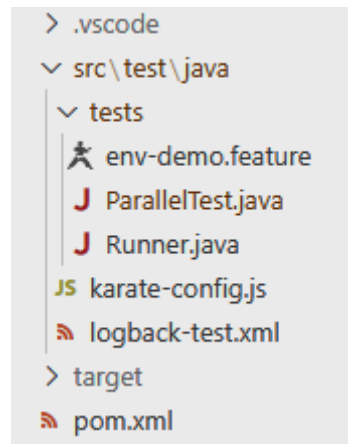
☐ Override Karate Runner utilizing the new Karate Cli. See 'Karate Cli' section within Extension Details in the Marketplace for further information. Only applies when using Maven or Gradle.

Karate Runner (Press 'Enter' to confirm or 'Escape' to cancel)

Default Karate Runner to use for running Karate tests. Only applies when using Maven or Gradle.

Karate Runner > Karate Runner: Prompt To Specify

☒ Prompt to specify Karate Runner before running Karate tests. Only applies when using Maven or Gradle.



Karate: Run | Karate: Debug

Feature: Feature 1

Karate: Run | Karate: Debug

@smoke @important

Scenario: Feature 1 Scenario 1

* print "Feature 1 Scenario 1"

@ignore

Scenario: Feature 1 Scenario 2

* print "Feature 1 Scenario 2"

Karate: Run | Karate: Debug

Feature: Feature 2

Karate: Run | Karate: Debug

Scenario: Feature 2 Scenario 1

* print "Feature 2 Scenario 1"

Karate: Run | Karate: Debug

@smoke

Scenario: Feature 2 Scenario 2

* print "Feature 2 Scenario 2"

Chapter 5: Reporting and logging



```
target > karate.log
1 18:26:24.468 [main] INFO com.intuit.karate.Runner - using system property 'karate.options':
2 18:26:25.463 [main] DEBUG com.intuit.karate.Suite - [config] classpath:karate-config.js
3 18:26:27.966 [pool-1-thread-2] DEBUG com.intuit.karate - request:
4 1 > GET https://jsonplaceholder.typicode.com/posts?userId=1
5 1 > Host: jsonplaceholder.typicode.com
6 1 > Connection: Keep-Alive
7 1 > User-Agent: Apache-HttpClient/4.5.13 (Java/17.0.4.1)
8 1 > Accept-Encoding: gzip,deflate
9
10
11 18:26:27.966 [pool-1-thread-1] DEBUG com.intuit.karate - request:
12 1 > GET https://jsonplaceholder.typicode.com/users
13 1 > Host: jsonplaceholder.typicode.com
14 1 > Connection: Keep-Alive
15 1 > User-Agent: Apache-HttpClient/4.5.13 (Java/17.0.4.1)
16 1 > Accept-Encoding: gzip,deflate
17
18
19 18:26:28.452 [pool-1-thread-2] DEBUG com.intuit.karate - response time in milliseconds: 477
20 1 < 200
```

[INFO] Results:

[INFO]

[ERROR] Failures:

[ERROR] Run.testParallel:14 status code was: 404, expected: 200,

21:11:56.304 [pool-1-thread-1] **DEBUG** com.intuit.karate - response time in milliseconds: 316

1 < 404

1 < Date: Tue, 29 Nov 2022 21:12:33 GMT

1 < Content-Type: application/json; charset=utf-8

1 < Content-Length: 2

1 < Connection: keep-alive

1 < X-Powered-By: Express

1 < X-Ratelimit-Limit: 1000

22:18:57.820 [main] **INFO** com.intuit.karate.Suite - backed up existing 'target\karate-reports' dir to: target\karate-reports_1669756737815

22:19:01.109 [pool-1-thread-2] **ERROR** com.intuit.karate - classpath:reporting/demo/Reporting.feature:23

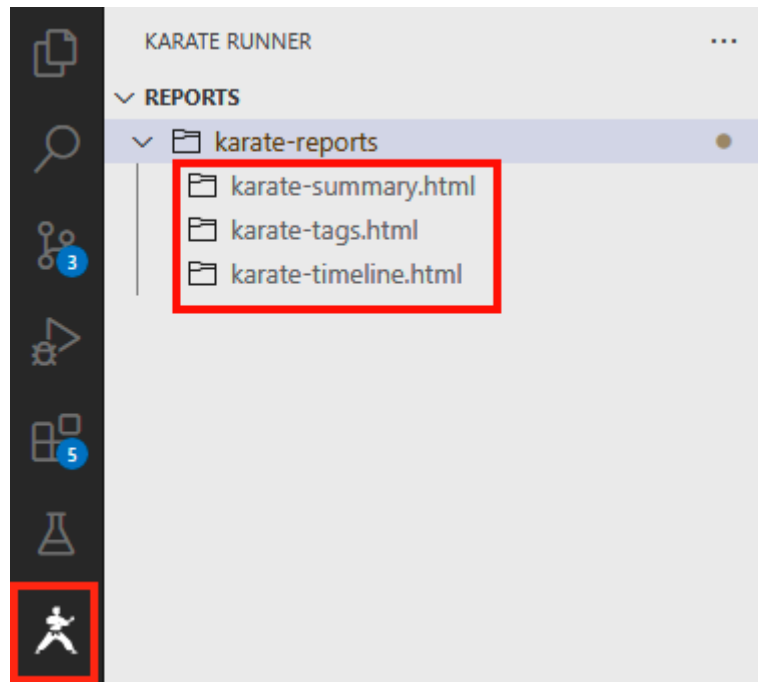
Then status 200


status code was: 404, expected: 200, response time in milliseconds: 277, url:

https://jsonplaceholder.typicode.com/this_is_wrong, response:

{}

classpath:reporting/demo/Reporting.feature:23





Karate Labs


1

1

Features

2022-12-01 08:46:20 PM

Tags Timeline					
Feature	Title	Passed	Failed	Scenarios	Time (ms)
reporting/demo/Reporting2.feature	Reporting demo 2	2	0	2	212
reporting/demo/Reporting.feature	Reporting demo	2	1	3	2261



Karate Labs

2

0

Scenarios

2022-12-06 11:05:00 PM

[1:4] get all users 2

[2:11] get a post 2

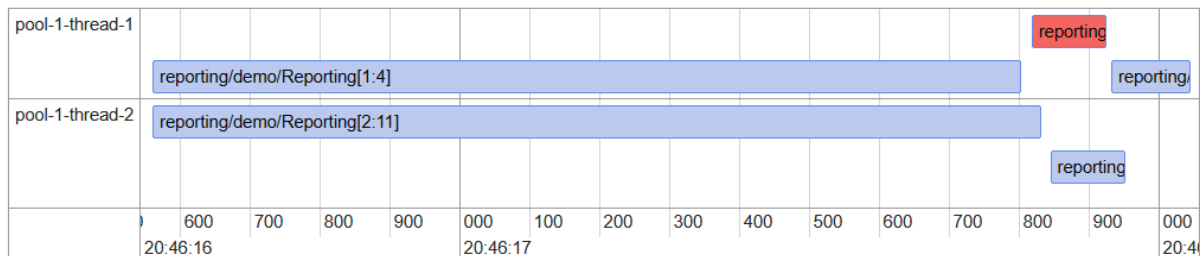
failing		ms: 106
Scenario: [3:19] wrong path		
20	Given url 'https://jsonplaceholder.typicode.com'	0
21	And path 'this_is_wrong'	4
22	When method get	101
23	Then status 200	0
20:46:17.924 classpath:reporting/demo/Reporting.feature:23 Then status 200 status code was: 404, expected: 200, response time in milliseconds: 97, url: https://jsonplaceholder.typicode.com/this_is_wrong, response: {} classpath:reporting/demo/Reporting.feature:23		

22 When method get

20:46:17.825 request:

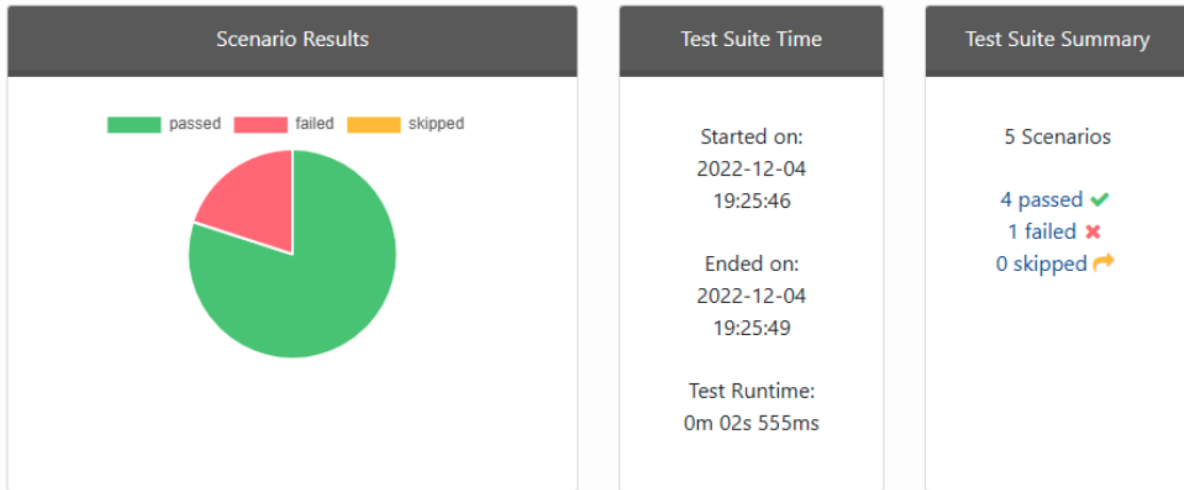
```
1 > GET https://jsonplaceholder.typicode.com/this_is_wrong
1 > Host: jsonplaceholder.typicode.com
1 > Connection: Keep-Alive
1 > User-Agent: Apache-HttpClient/4.5.13 (Java/17.0.4.1)
1 > Accept-Encoding: gzip,deflate
```

Feature	failing	passing
reporting/demo/Reporting2.feature		X
reporting/demo/Reporting.feature	X	X



- target
 - > classes
 - > karate-reports
 - > karate-reports_1669923974956
 - > test-classes
 - karate.log
 - pom.xml

All Scenarios



1 failed Scenario ✗

Show 25 entries

Search:

Feature	Scenario	Started	Duration
reporting/demo/Reporting.feature	wrong path status code was: 404, expected: 200, response time in milliseconds: 335, url: https://jsonplaceholder.typicode.com/this_is_wrong, response:	2022-12-04 19:25:49	0m 00s 345ms



Surefire Report

Summary

[\[Summary\]](#) [\[Package List\]](#) [\[Test Cases\]](#)

Tests	Errors	Failures	Skipped	Success Rate	Time
1	0	1	0	0%	5.835

Note: failures are anticipated and checked for with assertions while errors are unanticipated.



Surefire Report

Summary

[\[Summary\]](#) [\[Package List\]](#) [\[Test Cases\]](#)

Tests	Errors	Failures	Skipped	Success Rate	Time
1	0	1	0	0%	5.835

Note: failures are anticipated and checked for with assertions while errors are unanticipated.

Package List

[\[Summary\]](#) [\[Package List\]](#) [\[Test Cases\]](#)

Package	Tests	Errors	Failures	Skipped	Success Rate	Time
reporting	1	0	1	0	0%	5.835

Failure Details

[\[Summary\]](#) [\[Package List\]](#) [\[Test Cases\]](#)

	testParallel
	org.opentest4j.AssertionFailedError: status code was: 404, expected: 200, response time in milliseconds: 92, url: https://jsonplaceholder.typicode.com/this_is_wrong, response: {} classpath:reporting/demo/Reporting.feature:25 ==> expected: <0> but was: <1>
	reporting.Run:16

- reporting.demo.Reporting.karate-json.txt
- reporting.demo.Reporting.xml
- reporting.demo.Reporting2.html
- reporting.demo.Reporting2.karate-json.txt
- reporting.demo.Reporting2.xml

► HTML

- ▼ ✓ get all users reporting.demo.Reporting 1.161123

System-Out:

```
Given url 'https://jsonplaceholder.typicode.com' ..... passed
And path 'users' ..... passed
When method get ..... passed
* configure printEnabled = false ..... passed
* print "print" ..... passed
Then status 200 ..... passed
```

- ✓ get a post reporting.demo.Reporting 1.15998
- ✓ wrong path reporting.demo.Reporting 0.086566

Chapter 6: More advanced Karate features

POST <https://dev-457931.okta.com/oauth2/aushd4c95QtFHsfWt4x6/v1/token> **Send**

Params Authorization Headers (10) **Body** Pre-request Script Tests Settings Cookies

● none ● form-data ● **x-www-form-urlencoded** ● raw ● binary ● GraphQL

<input checked="" type="checkbox"/>	scope	offline_access
<input checked="" type="checkbox"/>	grant_type	password
<input checked="" type="checkbox"/>	username	api-user4@iwat.net
<input checked="" type="checkbox"/>	password	b3z0nV0cLO
<input checked="" type="checkbox"/>	client_id	0oahdhjkutaGclK2M4x6

GET <https://api.instantwebtools.net/v2/airlines/1> **Send**

Params **Authorization** Headers (7) Body Pre-request Script Tests Settings Cookies

Type **Bearer ...** Token eyJraWQiOiI5aXQ2NmgoZml6UVJCcHVjTy1...

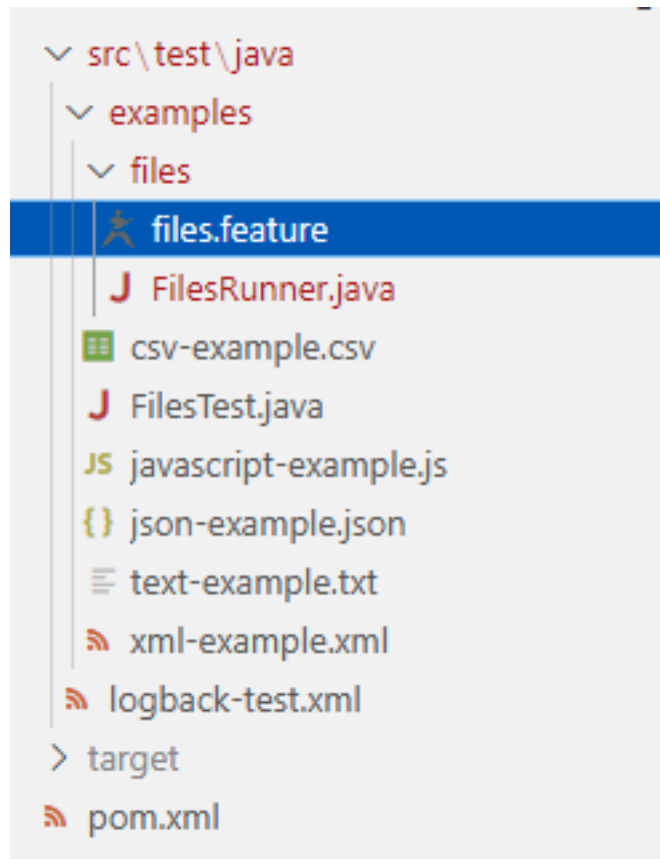
Scenario: [2:8] Run only on Windows

```

9 * print karate.os
10 * def isWindows = karate.os.type == "windows"
11 * if (isWindows) karate.fail("This is not windows!")

18:50:16.292 src/test/java/examples/karateobject/karateobject.feature:11
* if (isWindows) karate.fail("This is not windows!")
This is not windows!
src/test/java/examples/karateobject/karateobject.feature:11

12 * print "I am running on Windows!"
  
```

user x +

PRETTIFY HISTORY <https://graphqlzero.almansi.me/api>

1 {
2 user(id: 1) {
3 name,
4 posts {
5 data {
6 title
7 }
8 }
9 }
10 }
11 }

1 {
2 "data": {
3 "user": {
4 "name": "Leanne Graham",
5 "posts": {
6 "data": [
7 {
8 "title": "sunt aut facere
9 excepturi optio reprehenderit"
10 },
11 {
12 "title": "qui est esse"
13 },
14 {
15 "title": "ea molestias quasi
16 ipsa sit aut"17 }
18]
19 }
20 }
21 }

Search the docs ...

updatePost(
id: ID!
input: UpdatePostInput!
): Post

QUERIES

- Int
- albums(...): AlbumsPage
- album(...): Album
- comments(...): CommentsPage
- comment(...): Comment
- photos(...): PhotosPage
- photo(...): Photo
- posts(...): PostsPage

TYPE DETAILS

type Post {
id: ID
title: String
body: String
user: User
comments(...): CommentsPage
}

POST <https://graphqlzero.almansi.me/api> Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

● none ● form-data ● x-www-form-urlencoded ● raw ● binary ● GraphQL Auto-Fetch Fetching...

QUERY

```
1 query {  
2   post(id: 1) {  
3     id  
4     title  
5     body  
6   }  
7 }
```

GRAPHQL VARIABLES

```
1
```

Chapter 7: Extending Karate



```
public class KarateHooks implements com.intuit.karate.RuntimeHook {
```

```
    @Override
    public void afterBackground(ScenarioRuntime sr) ...
    public void afterFeature(FeatureRuntime fr) : void
    public void afterHttpRequest(HttpRequest request, Response response...)
    public void afterScenario(ScenarioRuntime sr) : void
    public void afterStep(StepResult result, ScenarioRuntime sr) : void
    public void afterSuite(Suite suite) : void
    public void beforeBackground(ScenarioRuntime sr) : void
    public boolean beforeFeature(FeatureRuntime fr) : boolean
    public void beforeHttpRequest(HttpRequest request, ScenarioRuntime sr)
    public boolean beforeScenario(ScenarioRuntime sr) : boolean
    public boolean beforeStep(Step step, ScenarioRuntime sr) : boolean
    public void beforeSuite(Suite suite) : void
```

MySQL Free

Free

Instant account activation

Number of databases 1

Database Space Starting from 5MB

phpMyAdmin

Multiple Server Locations

24 hour support

Sign Up

Server Location

Select where you would like your database located.

Europe (Mainland) Save Location

Database Details

Database Host	Database Name	Database Username	Database Password	Size	Status	Delete
sql7.freeseqdatabase.com	sql7587919	sql7587919	Please wait	0.00MB	Please wait	<input type="checkbox"/>

Delete database

Log In

Server: sql7.freeseqdatabase.com

Username: sql7587919

Password:

☒ I'm not a robot

Go



Importing into the database "sql7587919"

File to import:

File may be compressed (gzip) or uncompressed.

A compressed file's name must end in **[format].[compression]**. Example: **.sql.zip**

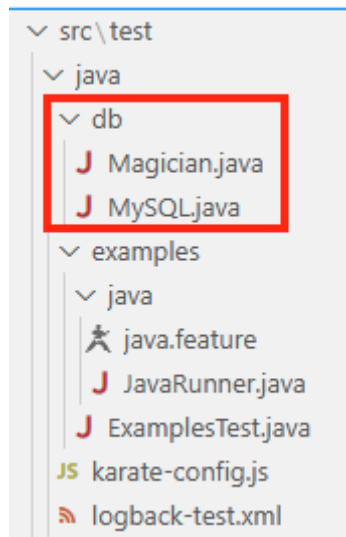
Browse your computer: **Choose file** magicians.sql

(Max: 2,048KiB)

You may also drag and drop a file on any page.

Character set of the file: utf-8

name	birthyear	specialties	id
Harry Houdini	1874	escapology, card tricks	1
David Copperfield	1956	illusions	2
Princess Tenko	1959	illusions	3
Beth Houdini	1876	illusions	4
Ricky Jay	1946	card tricks	5



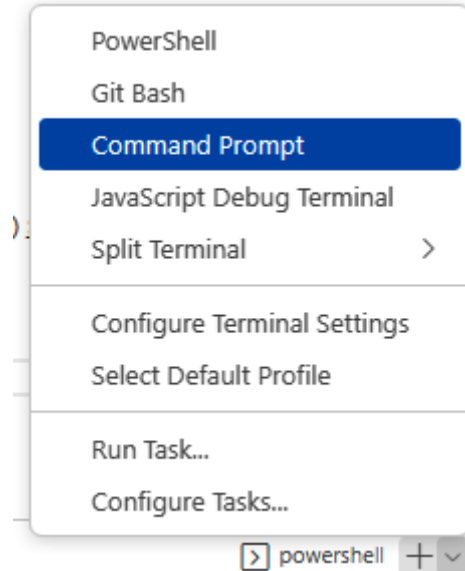
```
Command Prompt - java -jar c:\Users\bischoff\Desktop\karate-1.2.1.RC1\karate.jar -m src/test/java/examples/mockserver/mocks.feature...
C:\Users\bischoff\Desktop\github\Writing-API-Tests-with-Karate\chapter07\mock-server>java -jar c:\Users\bischoff\Desktop\karate-1.2.1.RC1\karate.jar -m src/test/java/examples/mockserver/mocks.feature
18:56:06.765 [main] INFO com.intuit.karate - Karate version: 1.2.1.RC1
18:56:09.057 [main] DEBUG c.intuit.karate.core.ScenarioEngine - over-writing existing variable 'magicians' with new value: magicians
18:56:09.104 [main] INFO com.intuit.karate - mock server initialized: src/test/java/examples/mockserver/mocks.feature
18:56:09.568 [main] DEBUG com.intuit.karate.http.HttpServer - server started: benjaminbis2bbe:8080
```

Chapter 8: Karate in Docker and CI/CD pipelines

PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL

cmd + v

C:\Users\bbischoff\Desktop\github\Writing-API-Tests-with-Karate\chapter08\cicd>run-tests.bat



PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL

bash

```
bbischoff@BENTAMTBIS2BBE MINGW64 ~/Desktop/github/Writing-API-Tests-with-Karate/chapter08/cicd (main)
$ ./run-tests.sh
[INFO] Scanning for projects...
[INFO] -----< blog.softwaretester:java >-----
[INFO] Building java 1.0-SNAPSHOT
[INFO] -----[ jar ]-----
```



Docker Desktop starting...

Running

```
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-junit-platform/2.22.2/surefire-junit-platform-2.22.2.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-junit-platform/2.22.2/surefire-junit-platform-2.22.2.pom (7.0 kB at 194 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-providers/2.22.2/surefire-providers-2.22.2.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-providers/2.22.2/surefire-providers-2.22.2.pom (2.5 kB at 71 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/junit/platform/junit-platform-launcher/1.3.1/junit-platform-launcher-1.3.1.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/junit/platform/junit-platform-launcher/1.3.1/junit-platform-launcher-1.3.1.pom (2.2 kB at 69 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apiguardian/apiguardian-api/1.0.0/apiguardian-api-1.0.0.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apiguardian/apiguardian-api/1.0.0/apiguardian-api-1.0.0.pom (1.2 kB at 32 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/junit/platform/junit-platform-engine/1.3.1/junit-platform-engine-1.3.1.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/junit/platform/junit-platform-engine/1.3.1/junit-platform-engine-1.3.1.pom (2.4 kB at 75 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/junit/platform/junit-platform-engine/1.3.1/junit-platform-engine-1.3.1.pom
```

Select End of Line Sequence

LF

Ln 11, Col 1 Spaces: 2 UTF-8 CRLF Karate

CRLF

Actions secrets and variables

New repository secret

Secrets and variables allow you to manage reusable configuration data. Secrets are **encrypted** and are used for sensitive data. [Learn more about encrypted secrets](#). Variables are shown as plain text and are used for **non-sensitive** data. [Learn more about variables](#).

Anyone with collaborator access to this repository can use these secrets and variables for actions. They are not passed to workflows that are triggered by a pull request from a fork.

Secrets

Variables



DB

Updated 2 days ago



HOST

Updated 2 days ago



PASS

Updated 2 days ago



bischoffdev	Update run-karate-maven.yml
..	
run-karate-docker.yml	Update run-karate-docker.yml
run-karate-maven.yml	Update run-karate-maven.yml

<> Code Pull requests Actions

Actions

New workflow

All workflows

Run Karate tests (Docker)

Run Karate tests (Maven)

Actions

New workflow

All workflows

Run Karate tests (Docker)

Run Karate tests (Maven)

Management

Caches

Run Karate tests (Docker)

run-karate-docker.yml

Filter workflow runs

19 workflow runs

Event Status Branch Actor

This workflow has a workflow_dispatch event trigger. Run workflow

Run Karate tests (Docker)
Run Karate tests (Docker) #19: Manually triggered now
run by bischoffdev

Use workflow from
Branch: main
Run workflow

Run Karate tests (Docker)

Manually triggered now

bischoffdev - 22fa479

Status

In progress

run-karate-docker.yml

on: workflow_dispatch

karate-tests

26s

← Run Karate tests (Docker)

✓ Run Karate tests (Docker) #19

Summary

Jobs

✓ karate-tests

Run details

Usage

Workflow file

Manually triggered 5 minutes ago

bischoffdev 3c20200

Status

Success

Total duration

41s

run-karate-docker.yml

on: workflow_dispatch

✓ karate-tests

30s

run-karate-docker.yml

on: workflow_dispatch

✓ karate-tests

28s

Artifacts

Produced during runtime

Name

Size



Karate Report

829 KB

run-karate-maven.yml

on: workflow_dispatch



karate-tests

37s

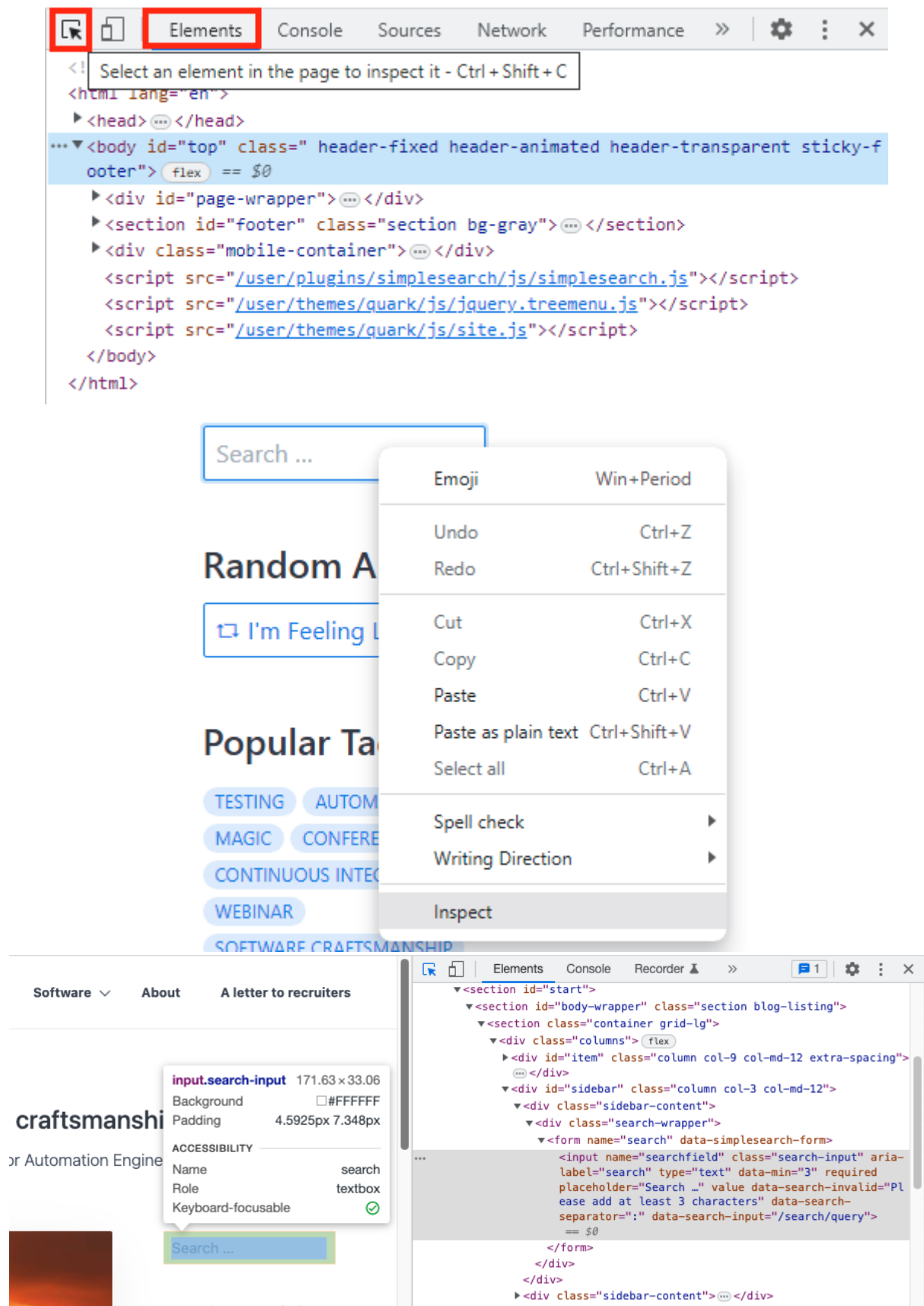
Artifacts

Produced during runtime

Name	Size
 Karate Report	829 KB



Chapter 9: Karate UI for browser testing

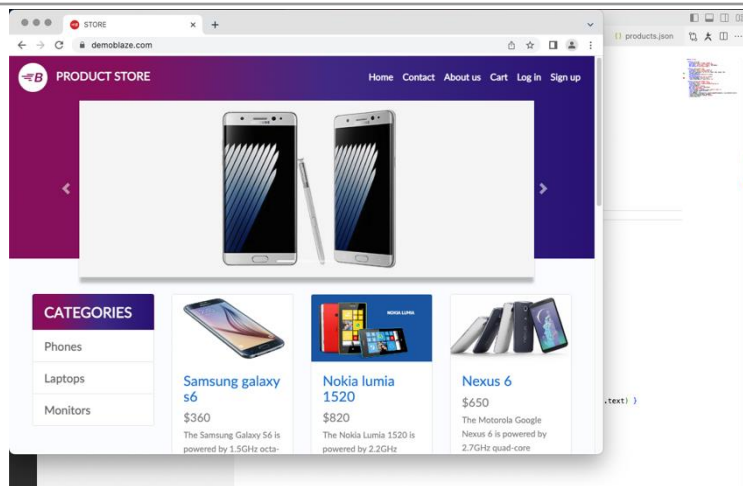


Scenario: [1:3] **First test**

- 4 * configure driver = { type: 'chrome' }
- 5 Given driver 'https://softwaretester.blog'
- 6 When input('.search-input', ['Magic', Key.ENTER])
- 7 And waitForUrl('search/query:Magic')

Scenario: [1:3] **First test**

- 4 * configure driver = { type: 'chrome' }
- 5 Given driver 'https://softwaretester.blog'
- 6 When input('.search-input', ['Magic', Key.ENTER])
- 7 And waitForUrl('search/query:Wrong')



CATEGORIES

Phones

Laptops

Monitors



Apple monitor 24

\$400

LED Cinema Display features a 27-inch glossy LED-backlit TFT active-matrix LCD display with



ASUS Full HD

\$230

ASUS VS247H-P 23.6- Inch Full HD



card-title

288 x 26.39

Apple monitor 24

\$400



ASUS Full HD

\$230

```

<div class="card-block">
  <h4 class="card-title"> == $0
  <a href="prod.html?idp=10">
    monitor 24</a>
  </h4>
  <h5>$400</h5>
  <p id="article" class="card-te:
</div>

```

Computer database

574 computers found

Computer name	Introduced	Discontinued	Company
ACE	-	-	-
ANFSQ-32	01 Jan 1960	-	IBM
ANFSQ-7	01 Jan 1958	-	IBM
APEXC	-	-	-
ARRA	-	-	-
ASCI Blue Mountain	-	-	-
ASCI Blue Pacific	01 Jan 1998	-	IBM
ASCI Purple	01 Jan 2005	-	IBM
ASCI Red	-	-	-
ASCI Thors Hammer	-	-	-

Displaying 1 to 10 of 574

```

<form action="/computers" method="GET">
  <input type="search" id="searchbox" name="f" value placeholder="Filter by computer nam
e..." required="required"> == $0
  <input type="submit" id="searchsubmit" value="Filter by name" class="btn primary">
  <a class="btn success" id="add" href="/computers/new">Add a new computer</a>
</form>

```

10 computers found

Computer name	Introduced	Discontinued	Company
MacBook	16 May 2006	-	Apple Inc.
MacBook 13-inch Core 2 Duo 2.13GHz (MC240LL/A) DDR2 Model	-	-	Apple Inc.

```

▼ <table class="computers zebra-striped"> == $0
  ▶ <thead> (3) </thead>
  ▼ <tbody>
    ▼ <tr>
      ▼ <td>
        <a href="/computers/89">MacBook</a>
      </td>
      <td>16 May 2006</td>
      <td>-</td>
      <td>Apple Inc.</td>
    </tr>


```


Scenarios

2023-02-24 06:54:07 pm

[2:16] Check product name

24	* print 'Product', productName	3
25	* match productName == 'Apple monitor 242'	8


PRODUCT STORE
[Home](#)
[Contact](#)
[About us](#)
[Cart](#)
[Log in](#)
[Sign up](#)



Apple monitor 24


\$400 *includes tax

Product description
LED Cinema Display features a 27-inch glossy LED-backlit TFT active-matrix LCD display with IPS technology and an optimum resolution of 2560x1440. It has a 178 degree horizontal and vertical viewing angle, a "typical" brightness of 375 cd/m2, contrast ratio of 1000:1, and a 12 ms response time.

[Add to cart](#)

About Us
We believe performance needs to be

Get in Touch
Address: 2390 El Camino Real



PRODUCT STORE

```

18:53:47.962 src/test/java/examples/ui/ui.feature:25
* match productName == 'Apple monitor 242'
match failed: EQUALS
$ | not equal (STRING:STRING)
'Apple monitor 24'
'Apple monitor 242'



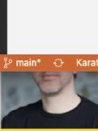

src/test/java/examples/ui/ui.feature:25

```


Benjamin Bischoff, Test Autom...
softwaretester.blog

[Blog](#)
[Events](#)
[Latest T...](#)


Test automation and softw...

Benjamin Bischoff, Test Automation Engineer at [Irtvago N.V.](#) (e...

CATEGORIES


- Phones
- Laptops
- Monitors



Samsung galaxy s6

\$360


The Samsung Galaxy S6 is powered by 1.5GHz octa-core Samsung Exynos 7420 processor



Nokia lumia 1520

\$820







The Nokia Lumia 1520 is powered by 2.2GHz quad-core Qualcomm Snapdragon 800



Nexus 6

\$650

The Motorola Google Nexus 6 is powered by 2.7GHz quad-core Qualcomm Snapdragon 805

Elements Console Network						
<input type="checkbox"/> Preserve log <input type="checkbox"/> Disable cache No throttling						
Filter <input type="checkbox"/> Invert <input type="checkbox"/> Hide data URLs All Fetch/XHR JS CSS Img Media Font Doc WS Wasm Manifest Other <input type="checkbox"/> Has blocked cookies <input type="checkbox"/> Blocked Requests <input type="checkbox"/> 3rd-party requests						
						
Name	Sta...	Type	Initiator	Size	Time	Waterfall
<input type="checkbox"/> config.json	304	xhr	jquery...	39 B	15...	
<input type="checkbox"/> entries	200	xhr	jquery...	1.2...	20...	
<input type="checkbox"/> index.m3u8	200	xhr	video.m...	(di...	12 ...	
<input type="checkbox"/> about_demo_hl...	200	xhr	video.m...	(di...	1 ms	
<input type="checkbox"/> about_demo_hl...	200	xhr	video.m...	(di...	10 ...	

Name

☐ config.json

☐ entries

☐ index.m3u8

☐ about_demo_hls_600k.m3u8

☐ about_demo_hls_600k00000.ts

× Headers Preview Response Initiator Timing

▼ General

Request URL: https://api.demoblaze.com/entries

Request Method: GET

Status Code: 200

Remote Address: [2a00:1450:4001:82a::2013]:443

Referrer Policy: strict-origin-when-cross-origin

Name

☐ config.json

☐ entries

☐ index.m3u8

☐ about_demo_hls_600k.m3u8

☐ about_demo_hls_600k00000.ts

× Headers Preview Response Initiator Timing

▼ Items: [{cat: "phone",...}, {cat: "phone",...}, {cat: "phone",...}]

▼ Items: [{cat: "phone",...}, {cat: "phone",...}, {cat: "phone",...}]

▼ 0: {cat: "phone",...}

cat: "phone"

desc: "The Samsung Galaxy S6 is powered by 1.5GHz

id: 1

img: "imgs/galaxy_s6.jpg"

price: 360

title: "Samsung galaxy s6"

▶ 1: {cat: "phone",...}

▶ 2: {cat: "phone",...}

▶ 3: {cat: "phone",...}

▶ 4: {cat: "phone",...}

▶ 5: {cat: "phone",...}

▶ 6: {cat: "phone",...}

▶ 7: {cat: "notebook",...}

▶ 8: {cat: "notebook",...}

▶ LastEvaluatedKey: {id: "9"}

Copy value

Copy object

Store object as global variable

Expand recursively

Collapse children

CATEGORIES

Phones

Laptops

Monitors


Karate

Test1

\$123

This is a test product

Chapter 10: Performance testing with Karate Gatling



Recorder mode
HTTP Proxy

Network

Listening port*: localhost HTTP/HTTPS 8000 HTTPS mode: Self-signed Certificate

Outgoing proxy: host: HTTP HTTPS Username Password

Simulation Information

Package: Class Name*: RecordedSimulation Format*: Java 8

☒ Follow Redirects? ☒ Infer HTML resources? ☒ Automatic Referers? ☒ Remove cache headers?

☐ Use Class Name as request prefix? ☐ Use HTTP method and URI as request postfix? ☐ Save & check response bodies?

Output

Simulations folder*: /Users/bbischoff/Desktop/gatling-charts-highcharts-bundle-3.9.2/user-files/simulations Browse

Encoding: Unicode (UTF-8)

Filters

Java regular expressions that match the entire URI


AllowList

DenyList


+ - Clear + - Clear No static resources

Save preferences Start !


scala




Scala Syntax (official) 616K ★ 4
Official Scala Syntax
scala-lang [Install](#)




Scala (Metals) 326K ★ 4.5
Scala language server with rich IDE feat...
Scalameta [Install](#)



Scala (sbt) 112K ★ 5
Scala language support using sbt
Lightbend [Install](#)



Scala Syntax (official) v0.5.6
scala-lang 616,700 ★★★★★ (4)
Official Scala Syntax
[Install](#) 

DETAILS FEATURE CONTRIBUTIONS CHANGELOG

Scala Syntax (official) Rate Limiting

Scenario: [1:3] Performance		Duration	Requests
4	* url 'https://api.jikan.moe/v4/'	Monthly	Unlimited
5	* path 'anime/1'	Per Minute	60 requests
6	When method get	Per Second	3 requests
7	Then status 200		

KARATE RUNNER ...

REPORTS ↺ ≡ 🔍 📄

performance

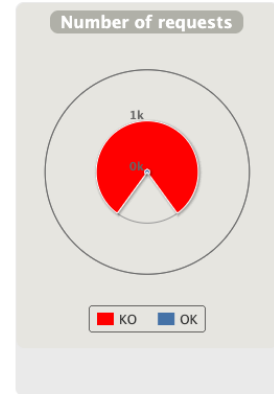
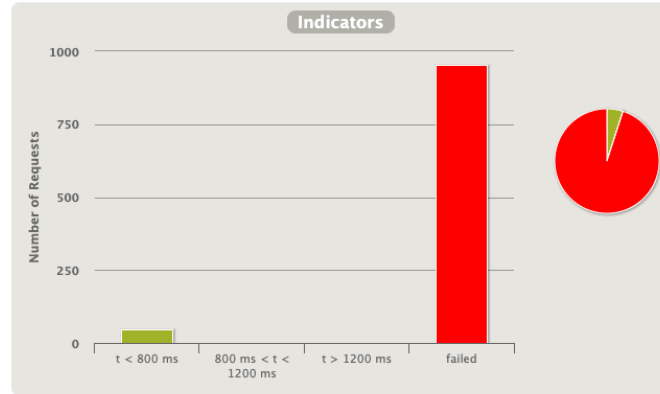
index.html

Active Users

Requests / sec

Responses / sec

> Global Information



STATISTICS

Expand all groups | Collapse all groups

Requests ^	🔄 Executions					🕒 Response Time (ms)							
	Total ↕	OK ↕	KO ↕	% KO ↕	Cnt/s ↕	Min ↕	50th pct ↕	75th pct ↕	95th pct ↕	99th pct ↕	Max ↕	Mean ↕	Std Dev ↕
Global Information	1000	48	952	95%	90.909	71	77	79	83	103	113	78	5
GET /v4/anime/1	1000	48	952	95%	90.909	71	77	79	83	103	113	78	5

ERRORS

Error	Count	Percentage
examples/performance/performance.feature:9 status 200	952	100 %

