

# KARATE

## USING A MARTIAL ART TO DO TESTS

JPOINT 2023



ANDRES SACCO

 saccoandres

 andres-sacco

 sacco.andres@gmail.com

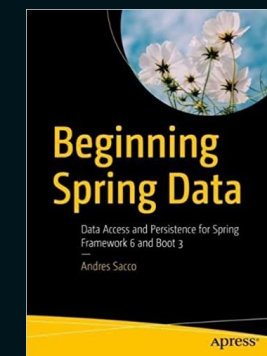
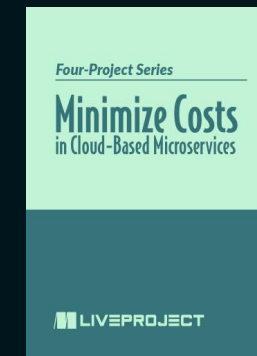
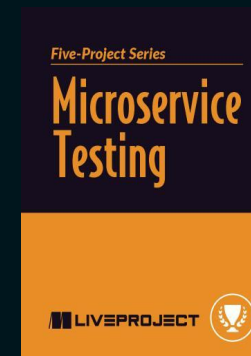
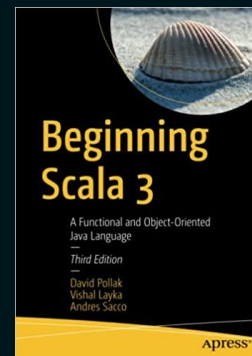
## ABOUT ME

I've worked as developer since 2007 using different languages like Java, Kotlin, Scala, PHP, and NodeJS.

I've participated as a Technical Reviewer of Packt, Apress, and Manning books.

I published books, courses, and different theoretical-practical projects.

I participated as speaker on different conferences on Latin-American.



# > CONTEXT

You need to find a way to do end-to-end and integration tests

NO RESTRICTIONS ON  
THE FRAMEWORK THAT  
YOU USE IT

THAT COULD BE USED  
FOR OTHER PURPOSES



HAVE A SIMPLE SYNTAX  
THAT ANYONE CAN  
UNDERSTAND

SIMPLE TO IMPLEMENT

# > WHAT IS BEHAVIOR DRIVEN DEVELOPMENT (BDD)?



BEHAVIOR ORIENTED  
STRATEGY

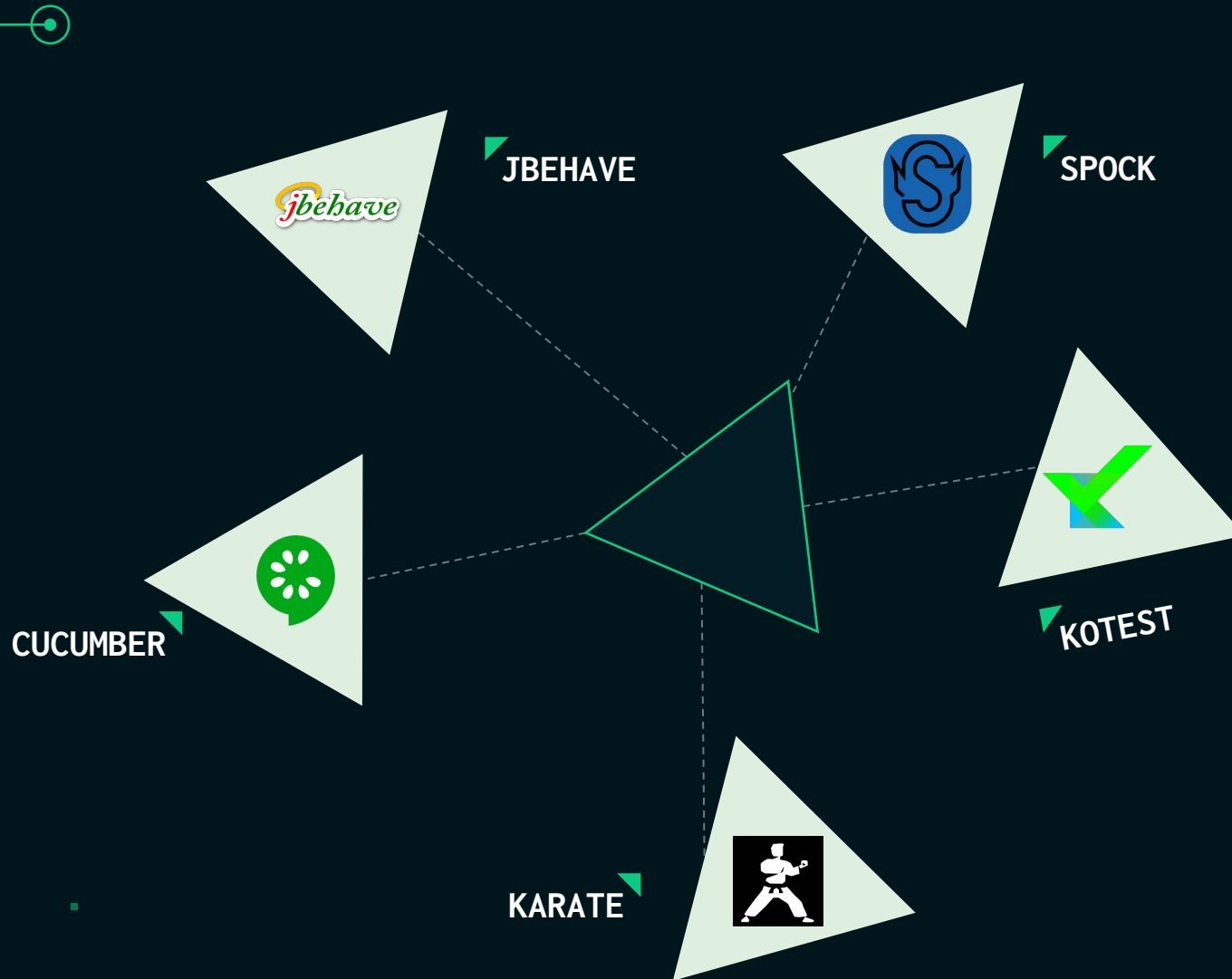
MORE INTERACTION  
BETWEEN DIFFERENT PEOPLE

IT'S A SIMPLE WAY TO  
DOCUMENT AND TESTS

IT'S NOT CONNECTED  
DIRECTLY WITH A LANGUAGE

USE THE KEYWORDS  
GIVEN-WHEN-THEN

# > WHICH LIBRARIES IMPLEMENT IT?



# > WHY USE KARATE?

IT IS AGNOSTIC TO THE  
FRAMEWORK AND THE  
LANGUAGE

ALLOWS TO CREATE BLACK  
BOX TEST

IT HAS A SIMPLE SYNTAX  
AND CAN BE USED FOR  
ANOTHER TYPE OF TEST

# > POSSIBLE USES OF KARATE



## INTEGRATION

TEST THE DIFFERENT  
ENDPOINTS

## FUNCTIONAL

TEST A CERTAIN FUNCTION OR  
USE IT TO DO A REGRESSION

## END-TO-END

TO TEST A ENTIRE FLOW FROM  
THE UI OR ENDPOINT

## > HOW IS THE SYNTAX?

*Feature:* Health of Spring Boot

*Background:*

\* url AppUrl

*Scenario:* Obtain information about if the application is healthy or not

*Given path* 'health'

*When method* GET

*Then status* 200

*And match response* = {"status": "UP"}



# > OTHER POSSIBLE USES OF KARATE

You can create **performance tests** using the scenarios defined in Karate



# > EXAMPLE

Let's see an example



<https://github.com/andres-sacco/martial-art-to-test>

# > BEST PRACTICES

## USE WILDCARDS

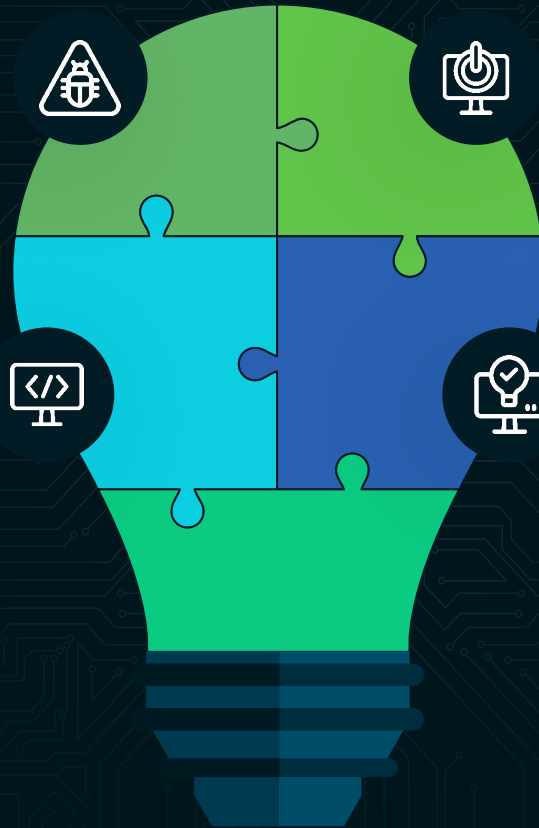
RANDOM VALUES MUST NOT BE CHECKED

## NOT INCLUDE JSON

CREATE EXTERNAL FILES TO SAVE THE JSON

## HAVE DIFFERENT PROFILES

HAVE A PROFILE FOR PERFORMANCE OR END-TO-END



## DEFINE A STRUCTURE

CREATE FILES FOR EACH TESTS

## REUSE SCENARIOS

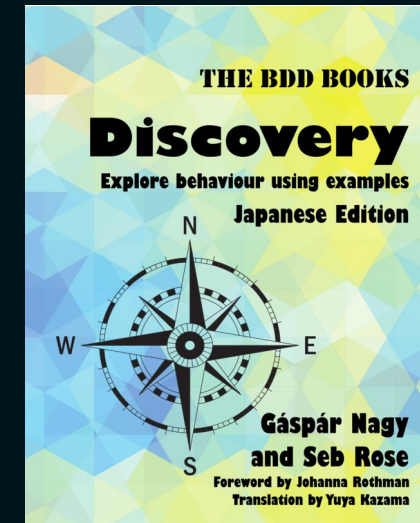
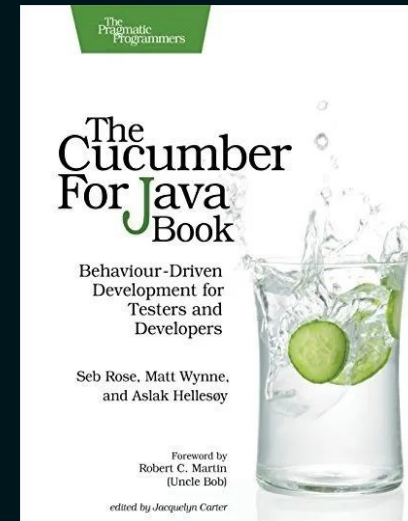
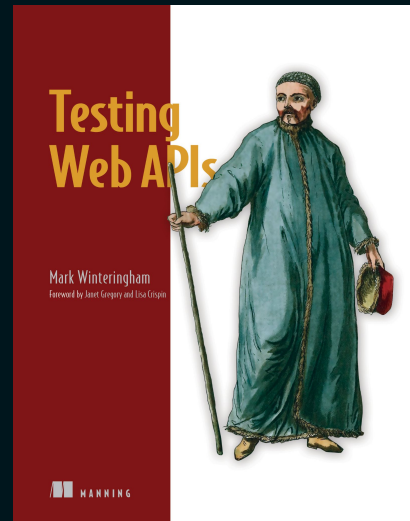
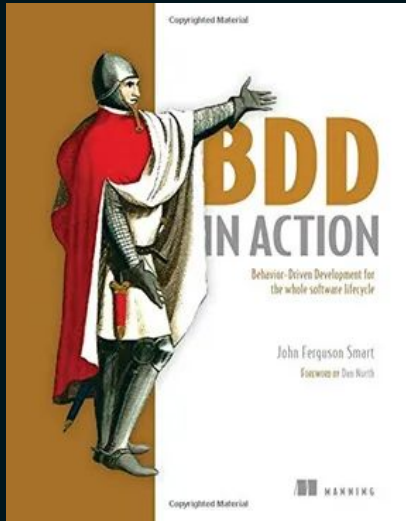
REUSE SCENARIOS TO NOT DUPLICATE CODE

## CREATE FUNCTIONS

USE FUNCTIONS TO CALCULATE CERTAIN VALUES

# > ADDITIONAL RESOURCES

## BOOKS



## BLOGS

<https://www.ministryoftesting.com/>

<https://martinfowler.com/>

## > SUMMARY

KARATE IS A LIBRARY TO WRITE DIFFERENT TYPES OF TESTS

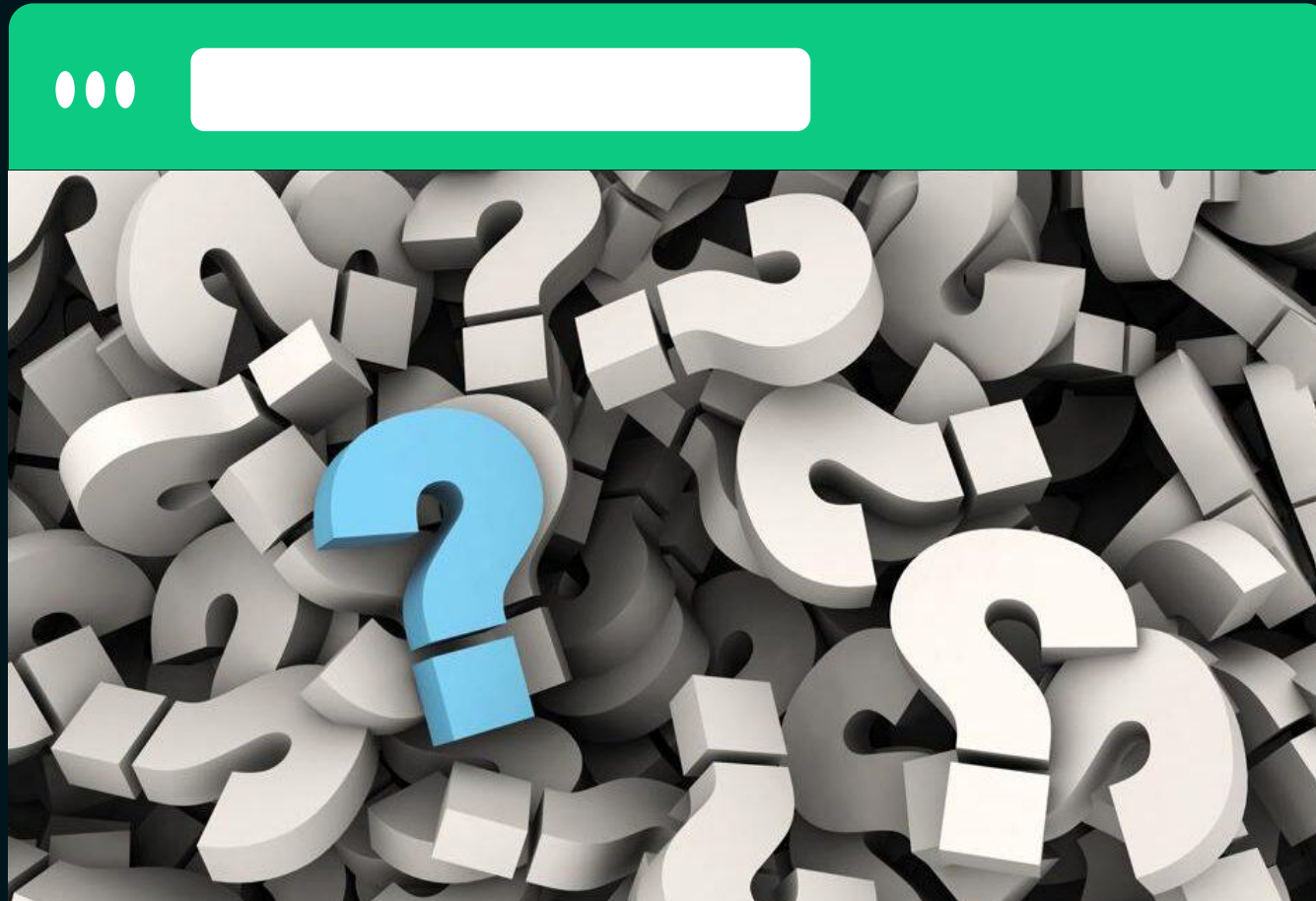
KARATE IS AGNOSTIC TO THE FRAMEWORK THAT YOU USE ON YOUR APPLICATION

IT'S POSSIBLE TO CREATE A FLOW WHICH INTERACTS WITH MULTIPLE ENDPOINTS

YOU CAN REUSE THE TESTS TO CREATE PERFORMANCE TESTS

SOURCE CODE - <https://github.com/andres-sacco/martial-art-to-test>

# > QUESTIONS





# THANKS

JPOINT 2023