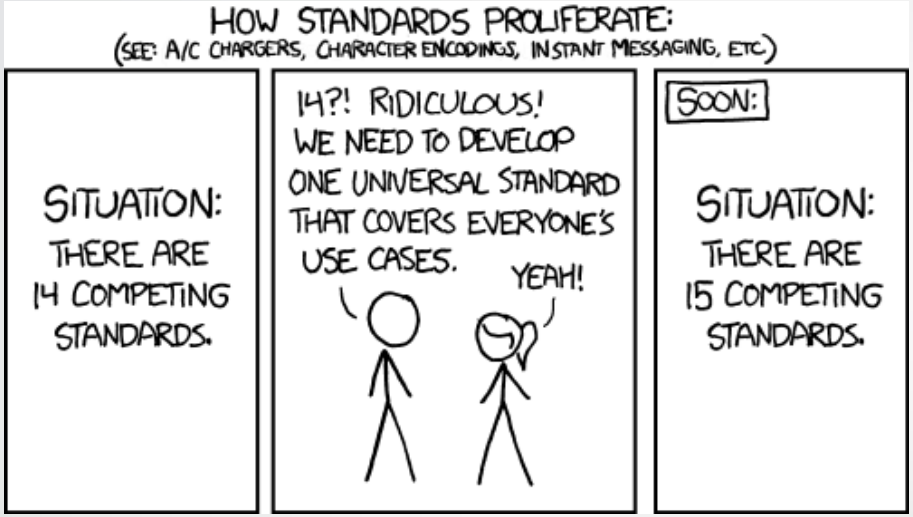


Spock

Data driven testing

RESTful API

What is a RESTful API ?

A **RESTful API** is an application program interface (**API**) that uses HTTP requests to GET, PUT, POST and DELETE data.

RESTful API stucture

- Endoint
- Method Type
- Payload

What is Spock?

Spock is a "**data driven**" test tool

- The idea is that the test complexity should be in the data itself, not the test cases
- Rather than needing to write a new test (or conditional statement) for every test case, you just need a new row in a table

Spock is written in **Groovy**

Why have we decided to use Spock?

Addressing the points brought up 2 slides ago…

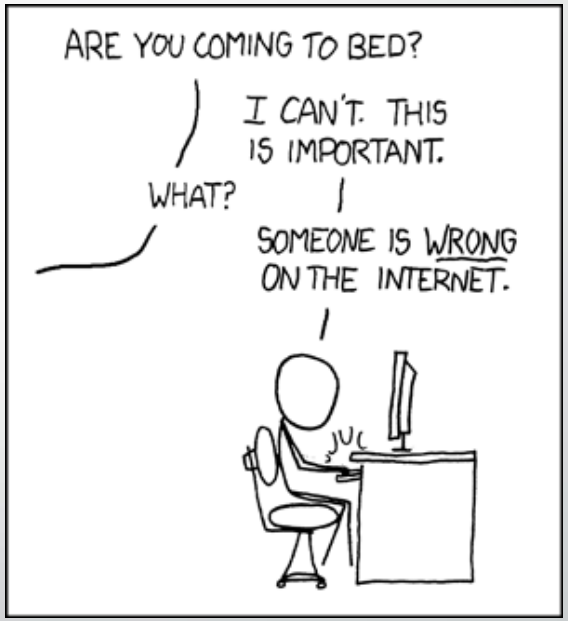
- The tests can be run from command line, meaning we can also integrate them into Bamboo or other automated deployments
- Because the tests are in Groovy with Gradle, many IDEs allow the programmer to run them without opening another window
- Because the tests are written in a programming language, they are much more version control friendly
- Because the tests are written in a JVM language, we can avoid boilerplate by taking advantage of our existing code and OO principles
- There is no UI to deal with

How do you use Spock?

- Make a Groovy class that extends the Spock "Specification" class
- Make a method with "given" "expect", and "where" blocks
  I. "given" blocks blocks are for setting up the test
  II. "expect" blocks contain your assertions
  III. "where" blocks contain your data table
- Run the test
  I. Some IDEs have good JVM integration allowing for running in them
  II. Otherwise you can use gradle: "./gradlew test"

General tips

- Use the config.properties file in the resources to change the endpoint URL
  - This will allow for quickly switching between the various environments
- Use conditional statement sparingly
  - If you are using a lot of conditional statements, there is a good chance that you can create another table column
- Create builders for the data objects
  - Although it can be tedious, it will make your tests much easier to read
- Declare long strings at the top of the class to cut down on table column size



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