

Test Report

For this tech test I decided to test the University API. You can find more information on the API here: <https://github.com/Hipo/university-domains-list-api>

In short, the API provides the ability to search for Universities across the world. You can retrieve them all or filter by name & country

Findings during testing the University API

- The API accepts any query params and by the looks of it just ignores them if they are not the supported ones (name, country). It might be better for the API to throw a 400 Bad Request if attempting to call the API using invalid query parameters i.e. <https://universities.hipolabs.com/search?random> returns all universities from all countries.
- Setting a limit value which is a non integer value throws a 500 Internal Server Error. I think a 400 Bad Request would be the better option
- Setting an offset value which is a non integer value throws a 500 Internal Server Error, I think a 400 Bad Request would be the better option
- Might be a good option to allow multiples of the same query parameters i.e. name=Sheffield&name=Aston in order to allow someone to search for multiple universities at the same time. This would be the same for the country parameter

Tech Test

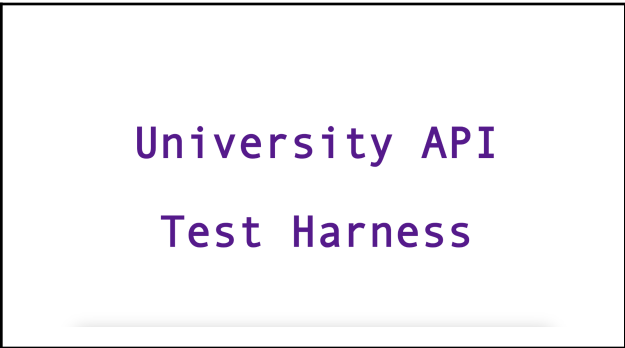
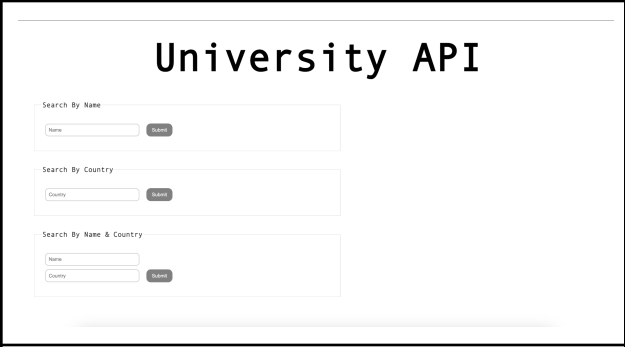
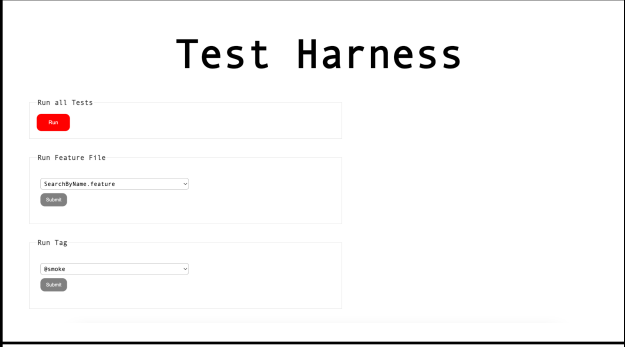
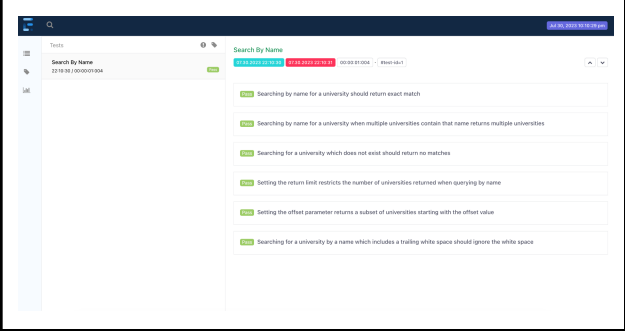
(<https://github.com/gjugpal/spring-boot-cucumber-tech-test>)

Spring Boot App

The Spring Boot app provides two key capabilities:

- Ability to interact with the University API
- Ability to Run the Cucumber tests

Screenshots

Landing page	
University API	
Test Harness	
Test Report which is generated when running tests via the Test Harness	

Reporting

After executing tests via the Test Harness, a test report is returned which gives information on the tests that were executed including Steps, Logs and any errors. The main aspect of the report is the logging of request/responses which help with troubleshooting issues

Given I search for a university by the name "Aston University"

When I send the request

REQUEST

METHOD: GET

URL: <http://universities.hipolabs.com/search?name=Aston+University>

HEADERS: {accept-encoding=[gzip], user-agent=[unirest-java/1.3.11]}

RESPONSE

STATUS_CODE: 200

STATUS_TEXT: OK

HEADERS: {Server=[nginx/1.14.0], Access-Control-Allow-Origin=[*], Connection=[keep-alive], Content-Length=[177], Date=[Sun, 30 Jul 2023 21:10:30 GMT], Content-Type=[application/json]}

BODY: [{"country":"United Kingdom","web_pages":["http://www.aston.ac.uk/"],"name":"Aston University","domains":["aston.ac.uk"],"alpha_two_code":"GB","state-province":null}]

Improvements to Test Harness

When running tests via the test harness, the report is appending execution runs to the previous report. This needs to be fixed.