

Recommendations API Automation - Take Home Test

Timeline and contact details

Please return the test to our representatives within 5 working days after you receive it. If you experience any issues, require clarification, or require additional time to complete the exercise, please contact BBC Recruitment via alexander.rogers.ext@bbc.co.uk who will coordinate with you.

Please include installation instructions and further comments in a README file when you send your submission.

Introduction

The task is broken down into two parts

- Part 1 – Automation
- Part 2 – Functional Manual Testing

Part 1 of 2 Automation

Using the public API below we will like you to demonstrate your ability to write test automation code in Javascript, Python, Typescript or Java. The scenarios to automate are described in the API section below.

Instructions

1. Ideally, store your code on a public hosting repository like GitHub. You may also send it to us in a format that is easy to build.
2. As stated above, please use Javascript, Python, Typescript or Java for the task.
3. We would like you to write your tests in Gherkin format, ideally using Cucumber. You can use Cucumber with other frameworks e.g., Axios, Supertest, Jest, etc. But if you are keen to explore an alternative testing syntax, please feel free to do so.

4. The submitted code project should have the following:
 - Feature files
 - Step definitions
 - Any other supporting code
5. Please document your assumptions and any external dependencies for running the tests.
6. You may split the scenarios into as many feature files as you see fit.

The API

<https://testapi.io/api/RMSTest/iblttest>

The above endpoint returns a single day's schedule for a channel and metadata. There are 5 such scheduled programmes in the response. Each schedule item contains various data elements like id, duration etc.

Automate the following test scenarios for the given endpoint.

Scenario 1:

1. Make a GET request to : <https://testapi.io/api/RMSTest/iblttest>
2. Verify that the HTTP status code of the response is 200
3. Verify that the response time of the request is below 1000 milliseconds

Scenario 2:

1. Make a GET request to <https://testapi.io/api/RMSTest/iblttest>
2. Verify every elements:id field is never null or empty ("")
3. Verify that the "type" in "episode" for every item is always "episode"

Scenario 3:

1. Make a GET request to <https://testapi.io/api/RMSTest/iblttest>
2. Verify that the "title" field in "episode", is never null or empty ("") for any schedule item

Scenario 4:

1. Make a GET request to <https://testapi.io/api/RMSTest/iblttest>
2. Verify that only one episode in the list has "live" field in "episode" as true

Scenario 5:

1. Make a GET request to <https://testapi.io/api/RMSTest/iblttest>
2. Verify that the "transmission_start" date value is before the "transmission_end" date

Scenario 6:

1. Make a GET request to <https://testapi.io/api/RMSTest/iblttest>
2. In the response headers, verify the "Date" value

Scenario 7:

1. Make a GET request to <https://testapi.io/api/RMSTest/iblttest/2023-09-11>
2. Verify that the HTTP status code of the response is 404
3. Verify the error object had the properties 'details' and 'http_response_code'

Part 2 of 2 – Functional Manual Testing

Assess the data provided in the API and write three test cases (non-automated) for the endpoint above using Gherkin. You can write the tests in a different, comparable format to Gherkin if you wish.