

Goal

The goal of this assignment is to show your testing skills and what is your general approach to quality assurance. We value new ideas so next to the original requirement feel free to improve/add/extend.

We evaluate the assignment depending on your level of seniority in regards to coverage, strategy and presentation.

The assignment

- A running project is provided by cloning the below repository (instructions on how to run it are provided on the README):
`https://bitbucket.org/waesworks/differ-for-testers.git`
- Once running, the application provides the following:
 - 2 http endpoints that accepts JSON base64 encoded data
`<host>/v1/diff/<ID>/left` and `<host>/v1/diff/<ID>/right`
 - The data can then be diff-ed and the results will available on a third endpoint
`<host>/v1/diff/<ID>`
 - The results provide the following info in JSON format
 - EQUAL if both data have the same value
 - DIFFERENT_LENGTH if the data are of different sizes
 - DIFFERENT_CHARS if the data are of same size plus an insight on where the diffs are
 - The data sent to the endpoints should be in the request body.
 - The service expects the data to be already encoded in Base64 format.
 - Example scenario: Diff unequal lengths
Given a POST to `http://localhost:8081/diffassign/v1/diff/3/left` with "abcd1234"
And a POST to `http://localhost:8081/diffassign/v1/diff/3/right` with "abcd"
When sending a GET to `http://localhost:8081/diffassign/v1/diff/3/`
Then the response should contain "type": "DIFFERENT_LENGTH"
- Validate the efficiency and coverage of the unit tests within the provided project (only a short text report is enough - do not change the original application).
- Create a separate project to regression test the functionality of the running application. This must be a coded solution (**no** API testing tools like Postman or Katalon).
- Make assumptions in the implementation explicit, choices are good but need to be communicated.

Assignment for Testers



Must haves

- Full coverage of functional scenarios, including corner cases.
- A report with test results is automatically generated.
- Documentation in code.
- Clear README containing:
 - How to run the test suite (assume the reader does not know your coding language).
 - How to access the generated report.

Nice to haves

- Suggestions for improvements.

Please upload the assignment on your personal GitHub account once finished, and send the link to the responsible Tech Sourcer before deadline.