Testing & QA Assignments

Backend Testing Assignment

Goal

The goal of this assignment is to show your coding & testing skills and what you value in software engineering. We value new ideas so next to the original requirement feel free to improve/add/extend. We evaluate the assignment depending on your role (Developer/Tester) and your level of seniority.

The Assignment

- Provide 2 http endpoints that accepts JSON base64 encoded binary data on both endpoints
 - o <host>/v1/diff/<ID>/left and <host>/v1/diff/<ID>/right
- The provided data needs to be diff-ed and the results shall be available on a third end point
 - o <host>/v1/diff/<ID>
- The results shall provide the following info in JSON format
 - If equal return that
 - o If not of equal size just return that
 - o If of same size provide insight in where the diffs are, actual diffs are not needed.
- So mainly offsets + length in the data
- Make assumptions in the implementation explicit, choices are good but need to be communicated

Must haves

- Internal logic shall be under unit test & adequate coverage
- Functionality shall be under integration & API test
- Clear and to the point readme on usage

Nice to haves

- Solution preferably written in Java/Kotlin
- Code archive on GitHub or similar. Use GitHub actions to run tests and capture test results and coverage
- Documentation in code
- Suggestions for improvement