**QA Automation Assignment**

Hi there!

Thanks for trying out for the QA automation role.

The following is a proficiency task, we're looking to learn how you approach and handle the problems. So please, write as detailed as you think is necessary to answer our questions and share all documents, DB’s, scripts, readme files needed.

You can use any online resource available.

We encourage you to ask questions, feel free to talk to us at any time.

Good luck!

Optival’s business unit is performing comparisons between sites (a kind of “Zap” for different industries). As part of Optival’s communication with the customer, we get reports in various ways (online platform, mail, etc.) and in various formats such as csv. Today we have a legacy system that is not performing well that is extracting a big amount of data from these several resources.

Currently, we are implementing a new scalable system that is more robust and reliable. In the implementation part, we need to validate the data accuracy.

1. In the following task, you will compare 2 tables, one of the legacy system and the other of the new system. We will call them “Legacy DB” and “Scalable DB”
   1. Use the fields mapping tab and prepare automated tests for comparing the two tables in the attached excel file “QA home assignment 2021”. **The combination of “Brand\_Action\_Date” + “User\_unique\_ID” are the unique keys for Legacy DB and “ACID” + “period” are the unique keys for Scalable DB.** The answers to the questions can be restored in Github repo or CSV file :
      1. Are the number of rows in Legacy DB the same as Scalable DB?
      2. What rows are in Legacy DB and not in Scalable DB?
      3. What rows are in Scalable DB and not in Legacy DB?
   2. Based on your previous test results, our engineering team would like to know if they need to adjust the data in one of the tables, please share your findings

As It appears that **unique keys (“User\_unique\_ID” & “ACID”) have matches value but in Scalable DB it contains noisy expressions for example: (, or \_), since there was a lot amount of these data so my suggestion will be to edit the data and remove the noisy expression on order to reach to a match format.**

* 1. Given the above, shortly, we will have hundreds of DB tables containing millions of records that will need to be compared/validated in an ongoing way. Describe the method you will use to scale this QA analytics process up
     1. To save singleton data format with insertion validation template in UI.
     2. To save the data in the same column headers.
     3. To analyze the data before we start any process of compression if it’s the same type (String / Integer / Date format / Time Format)
     4. In case we have noisy data, we need to decide if we will delete or adjust.
     5. Check what data structure is the idle for the compression

1. Launch the following URL- <https://techdemotbaseo.kinsta.cloud/>

Write a word/excel STD document that contains your top 3 use cases for this site.

Write a UI automation test based on the STD and share your code on Github.

( password = optivalqa )

# Tests descriptions

Since the URL that needs to be tested is <https://techdemotbaseo.kinsta.cloud/>

Only, and there is no clear flow or any functional test that I can execute, then I will test the navigation and the accessibility for the URL

TC1:  
Validate the URL is from different browsers (Firefox)

1. Navigate to <https://techdemotbaseo.kinsta.cloud/>
2. Validate no exceptions/errors occurred

TC2:

Validate the URL is from a different Device (Mobile)

1. Navigate to <https://techdemotbaseo.kinsta.cloud/>
2. Validate no exceptions/errors occurred

TC3:

Validate the URL is logged from a browser with VPN, this step requires to manually active a VPN Extention (Hoxx VPN, etc..) VPN of the foreign county (USA for example)

1. Navigate to <https://techdemotbaseo.kinsta.cloud/>
2. Validate no exceptions/errors occurred