Synechron Technologies Pvt Ltd
Skills Assessment – Automation Tester

Introduction

The purpose of this assessment is to gain an idea of a potential candidate's technical acumen in the context of the role they are applying for. No confidential information about the bank exists in this assessment. It is based on an external use case that broadly represent some types of services that are developed in the bank.

Instructions to the candidate

1. Please read the use case below carefully
2. Having read the use case, please create a space on a public code repository of your choice (e.g. github.com, Bitbucket etc.)
3. Implement the use case using Java and Cucumber
4. Check your code into the repository space you chose as part of Step 2 above
5. Notify the person who gave you this assessment that you have completed it and provide them with details of how the code can be accessed. Make sure that the checked-in code in the repository is readable by others, but can only be written to by yourself

The Use Case
Exchange Rates

The Rates API is a free service for current and historical foreign exchange rates. It gives historical and current exchange rates for different currencies against the Euro.

You must create automation testing framework for testing the API and data sources provided at https://ratesapi.io/documentation/ that fulfils the user story below. The test framework must:

- Be built using Cucumber
- The executable specifications should be written in Gherkin
- Demonstrate a Behavior Driven Development (BDD) approach
- Use Java for checking assertions

User Story
Narrative
As a User

I want to be able to have an automated testing framework available which covers different scenarios for the Rates API

So that I can make sure that the API's are fit for purpose in the use of the exchange rate for financial reasons

Guidelines to the tester

Create a series of manual test cases that cover the different API's plus the edge cases. Make sure you give detailed instructions for each test case (pre-conditions, steps, expected results). You can use any format you want.

Write scripts that would automate the manual test cases that you see fit to be included in a regression test set.

The code and design should meet the requirements and should consider future extensions or maintenance.

The code should be well-structured, commented, have error handling and logging.

The aim is to assess your problem solving approach, your ability to turn your solution into working code and the way in which you structure code.

Good coding practices needs to be followed and will be assessed based on SOLID (https://en.wikipedia.org/wiki/SOLID) principles.

Acceptance Criteria

S.No	Given	When	Then
1	Rates API for Latest Foreign Exchange rates	The API is available	An automated test suite should run which will assert the success status of the response
2	As above	As above	An automated test suite should run which will assert the response
3	As above	An incorrect or incomplete url is provided e.g: https://api.ratesapi.io/api/	Test case should assert the correct response supplied by the call
4	Rates API for Specific date Foreign Exchange rates	The API is available	An automated test suite should run which will assert the success status of the response
5	As above	As above	An automated test suite should run which will assert the response
6	As above	A future date is provided in the url	An automated test suite should run which will validate that the response matches for the current date