String Operation Service - API specification

Mar/2025 Shmuel Gershon / Michael Stahl

Overview

T-Tweak is a web-based service that provides access to string manipulations through HTTP calls. The user can send tasks to the web-service and receive back a response in json format.

Before actual coding, we defined the interface to each API, using the OpenAPI standard to define a REST API framework. (Note: don't rush to Google and spend 3 hours learning about json format, REST and OpenAPI before proceeding to read; it's not needed for the exercise).

All the APIs are of type "GET". Meaning: you send something to the service and expect an answer. The answer can be actual result (if your input was relevant to the API you called) or can be an error message.

The general format for the calls is:

<the web address of the service>/<the called API>/<optional parameters>

Example:



The result in this case is the string "abcd" in reverse order, delivered in a json-formatted string:

{"res":"dcba"}

The exercise:

You can see the definition of all the APIs through http://t-tweak.gershon.info/docs .

NOTE: This UI is called "Swagger UI". Apart from review of the API definitions and descriptions, you can also call each of the APIs through this UI – but this is not specifically needed for this exercise.

The interface includes a description of each API, the parameters used and the expected output.

Your mission:

Review the specifications and submit comments where you think the specification needs to be changed or improved.

Look for:

- Ambiguities
- Inconsistencies
- Mistakes
- Incomplete specification
- Non-concise or over concise explanations
- Non-testable requirements

NOTE: Some issues appear exactly the same for most of the APIs. Report these only as one issue, with API name set to "general". If the same issue appears in less than 5 APIs, you can report it specifically for each API and each entry is counted.

How to submit:

Submit the results in a .csv file, with the following header in the first row:

API name	Type of issue (see	Description of the	Your ID (yes, repeat on every line)	
	list below)	issue		

Type of issues list (use exactly these issue names):

Ambiguous

Non-verifiable

Inconsistent

Incomplete

Not correct

Not concise

Infeasible

Not necessary

Other

Use "Other" sparingly. You should be able to associate the issues you find with the list we gave.

We loaded a template Excel to help you to collect the comments (the "Type of Issue" field already has the issues list) – but you MUST save the final file as a .csv before submitting. This will make our life much easier when checking the exercise.

Filename for submission: EX2_<your ID>.csv

Grading

The exercise weight in the final grade is 3 points. It is not a mandatory exercise.

We are aware of 29 specific issues, and 5 issues that are repeating in many of the APIs. You need to find at least 8 issues to get a 55% on this exercise. Any additional correct issue is worth 5%, so 17 issues will get you 100%. Since we may reject some of the issues you report, we recommend you report at least 20 issues.

The deadline for submission is 23/Apr 23:55.

Late submission penalty:

- One day: -1 point (out of the 3)
- Two days: -2 points (out of the 3)

You can't submit later than 2 days after the deadline.