KIN+CARTA

Backend Automation Engineer Challenge

Overview:

This assignment can be done over the course of 2 days. Please make commits as often as possible so we can see the time you spent and please do not make all your changes in one big commit. We will evaluate the code and time spent along with how your commits are split up. Email a link to your solution as soon as you have completed the challenge or the time is up

Context:

The Chicago Park District maintains weather sensors at beaches along Chicago's Lake Michigan lakefront. These sensors generally capture the indicated measurements hourly while the sensors are in operation during the summer

Information about the API: https://data.cityofchicago.org/id/k7hf-8y75

Key Goals:

As a user of the API I want to list all measurements taken by the station on *Oak Street* in json format.

- GIVEN beach weather station sensor “Oak Street”
- WHEN the user requests station data
- THEN all data measurements correspond to only that station

As a user of the API I want to be able to page through json data sets of 2019 taken by the sensor on 63rd Street.

- GIVEN the beach weather station on 63rd Street’s sensor data of 2019
- WHEN the user requests data for the first 10 measurements
- AND the second page of 10 measurements
- THEN the returned measurements of both pages should not repeat

As a user of the API I expect a SoQL query to fail with an error message if I search using a

malformed query. *Note: This is a negative test. We want to make sure that the API throws an error when expected.*

- GIVEN all beach weather station sensor data of the station on 63rd Street
- WHEN the user requests sensor data by querying `battery_life` values that are less than the text “full” (`$where=battery_life < full`)
- THEN an error code “malformed compiler” with message “Could not parse SoQL query” is returned

Notes:

- *Don't use API SDKs like SODA.NET, soda-py, etc, we expect you to develop your own solution using the REST API directly.* ***We would prefer that you use RestAssured or RestSharp.***
- *Please place your code in a private Github repository and be prepared to give one of our reviewers access. Commit each step of your process so we can follow your thought process.*
- *The project should be able to be run on Windows or OSX with no manual dependency fetching required. Please make good use of build tools for example: gradle, maven or a .NET equivalent.*
- *Write a readme with instructions on how to launch and a short explanation of your approach.*