

Engineering - Automation Engineer Task

General

This task aims to evaluate your hands on skills, your ability to adjust to unfamiliar flows and your strategy to deal with testing cases.

How will we score the task?

The submission will be evaluated based on the following criteria:

1. The task works as expected
2. Code is modular, readable and clean
3. Runtime performance

The task

Selenium:

1. Create 2 selenium scripts (written in Python) that will execute a set of commands:
 - a. Content scraping:
 - i. Navigate to the main page of PerimeterX (<http://www.perimeterx.com>)
 - ii. **Without supplying the sub-pages links to the script upfront**, navigate to all pages on site and print to log the first 3 sentences in each page
 - b. Auto purchase:
 1. Navigate to any e-commerce site (can be amazone, but it can also be something else)
 2. Automatically add products to the cart
 3. When the price reach 500\$ go to checkout
 4. Fill your details in the payment form

API Test

The following API allow you to query PerimeterX servers by IP and retrieve the following information: how many impression, bad impressions, sessions, bad session etc this IP has performed.

The API receive several parameters with restrictions:

1. type - value must be "socket_ip" or "forward_ip"
2. value - should be a valid ip address
3. start_time and end_time - should be valid 13 digits timestamp, in the range of the past two weeks
4. threshold - number in the range of 0-100

(see examples for curl based queries next page)

The API request should be sent in the following form:

```
curl -X POST -H "Authorization:Bearer <Token Key>" -H "Content-Type: application/json" -d '{
  "report": {
    "type": "<IP_TYPE (forward_ip or socket_ip)>",
    "value": "<IP_ADDRESS>",
    "time": {
      "type": "range",
      "start_time": 1461269087000, "end_time": 1461569087000
    },
    "threshold": 60
  }
}' 'http://portal-stg.perimeterx.com/report/v1/ip'
```

A working call will look like this (you can use this token in your code):

```
curl -X POST -H "Authorization:Bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJzY29wZXMiOlsicmlza19zY29yZSI6InJlc3RfYXBpIl0sImIhd
CI6MTQ2MzQxNDY2NSwic3ViOiJFgyMDAzIiwianRpIjoieYjdjNTMwYzAtOWQwMy00YTJhLTZlZGEtOTVh
Y2U1NDliNmVhIn0.6EwE-m7eOJAaPbGYz2zR_1-7lvrtFR0rKLykwonZZjo" -H "Content-Type:
application/json" -d '{
  "report": {
    "type": "socket_ip",
    "value": "81.82.81.82",
    "time": {
      "type": "range",
      "start_time": 1481718521000, "end_time": 1481736521000
    },
    "threshold": 60
  }
}' 'http://portal-stg.perimeterx.com/report/v1/ip'
```

As part of your task, please convert this API call into a python code, and run tests 3 tests:

1. valid requests that receive a valid response
2. Invalid request for timestamps out of range
3. Invalid request for threshold out of range

Submission:

1. The task should not take longer than 4 hours, if it is, submit what you have achieved.
2. The code should be zipped and mailed to: ben@perimeterx.com with the title of "Engineering - Automation Engineer task submission - Full Name"
3. The submission should include command line instructions, to run the tests locally.
4. Feel free to contact by phone - 0525691869 (Ben) - or email (ben@perimeterx.com) regarding any questions.

Good Luck!