TOR IP List RESTful API

.Introduction

This is a minimal implementation of a RESTful API using Flask and SQLite that fetches TOR IP addresses from two third-party APIs (https://onionoo.torproject.org/ and https://www.dan.me.uk/) and sends it back to the user in a compiled list.

.Interface

APPLICATION/JSON

Endpoints:

- .GET /fullList
- -> returns a list containing all TOR IPs gathered
- .POST /ban_ip
- -> lets the user send an IP address to a blacklisted IPs database following the format {'ip_address' : '<ip address'}
- -> returns the total amount of blacklisted addresses
- .GET /validList
- -> returns the same list as /fullList minus the blacklisted IPs

Exemple with Python:

```
import json
import requests

BASE = "http://localhost:5000/"

resp1 = (requests.get(BASE + "fullList")).json()
resp2 = (requests.post(BASE + "ban_ip", json = {'ip_address ': resp1[0]} )).json()
resp3 = (requests.get(BASE + "validList")).json()
```

```
print("\nFULL LIST: ", len(resp1),"\n")
print(*resp1[0:6], sep = '\n')
print("....\n\nBanned 1 more ip address... (", resp2['data'],") total")
print("\n\nVALID ONLY LIST: ", len(resp3),"\n")
print(*resp3[0:6], sep = '\n')
print("....\n\n")
```

API PROVIDED VIEW

You can interact with the html interface rendered with Flask to test its functionality. With the server running, type $\frac{\text{http://localhost:}5000}{\text{it.}}$ on your address bar to use it.