

Python Code:

import requests

from prettytable import PrettyTable

from time import sleep

from datetime import datetime

SUBDOMAINS = [

    'https://aqua.gsfc.nasa.gov',  # Real

    'https://api.nasa.gov', # Real

    'https://almighty.ndc.nasa.gov',  # Real

    'https://attic.gsfc.nasa.gov',    # Real

    'https://asdfl.ndc.nasa.gov',    # Fake

    'https://b27-r140-hpc1500.gsfc.nasa.gov',   # Fake

]

def check\_subdomains(subdomains):

    table = PrettyTable(['Time', 'Subdomain', 'Status Code', 'Status'])

    current\_time = datetime.now().strftime('%Y-%m-%d %H:%M:%S')

    for subdomain in subdomains:

        try:

            response = requests.get(subdomain, timeout=5)

            status\_code = response.status\_code

            if response.ok:

                status = 'Up'

            else:

                status = 'Down'

        except requests.ConnectionError:

            status\_code = 'N/A'

            status = 'Down'

        except requests.Timeout:

            status\_code = 'N/A'

            status = 'Timeout'

        except requests.RequestException as e:

            status\_code = 'N/A'

            status = 'Error'

        table.add\_row([current\_time, subdomain, status\_code, status])

    return table

def main():

    while True:

        table = check\_subdomains(SUBDOMAINS)

        print(table)

        sleep(60)  # Wait for 1 minute

if \_\_name\_\_ == "\_\_main\_\_":

    main()

Desired Output:

PS C:\Users\Lenovo\Desktop\Hero Vired Assignment\Graded-Assignment-On-Networking-and-Servers> python .\Monitor\_Subdomain.py

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| Time | Subdomain | Status Code | Status |

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| 2024-02-03 11:41:28 | https://aqua.gsfc.nasa.gov | 200 | Up |

| 2024-02-03 11:41:28 | https://api.nasa.gov | 200 | Up |

| 2024-02-03 11:41:28 | https://almighty.ndc.nasa.gov | N/A | Down |

| 2024-02-03 11:41:28 | https://attic.gsfc.nasa.gov | 200 | Up |

| 2024-02-03 11:41:28 | https://asdfl.ndc.nasa.gov | N/A | Down |

| 2024-02-03 11:41:28 | https://b27-r140-hpc1500.gsfc.nasa.gov | N/A | Down |

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