

LAPORAN TUGAS INDIVIDU

Implementasi Program Server



Mata Kuliah:

Pemrograman Jaringan

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1. Deskripsi Tugas

- Jalankan program server seperti dalam pembahasan
- buatlah program client yang dapat melakukan 100 request get pada dalam satu saat untuk operasi get file "pokijan.jpg"
- capture dan submitlah poin 1 dan 2 dalam satu dokumen pdf. berikan DESKRIPSI dan PENJELASAN

2. Hasil Pengerjaan

Pembuatan Program Client 100 request

- a. Mengganti path pada file_interface.py

```
class FileInterface:
    def __init__(self):
        os.chdir('/Users/chintyadewi/Pemrograman_Jaringan_D/progjar4a/tugas_individu')
```

- b. Pembuatan multithread untuk client program 100 request get

- Program diminta untuk iterasi sebanyak 100 kali untuk request get dengan menggunakan fungsi remote_get yang berfungsi untuk mengirim command dan mengecek apakah command yang dikirim berhasil atau tidak, fungsi ini berada pada file_interface (import).

```
def kirim_semua():
    texec = dict()
    daftar = 'pokijan.jpg'

    catat_awal = datetime.datetime.now()
    for k in range(100):
        print(f"mengirim {k}")
        texec[k] = threading.Thread(target=remote_get, args=(daftar,))
        texec[k].start()
    for k in range(100):
        texec[k].join()

    catat_akhir = datetime.datetime.now()
    selesai = catat_akhir - catat_awal
    print(f"Waktu TOTAL yang dibutuhkan {selesai} detik {catat_awal} s/d {catat_akhir}")
```

- c. Hasil Eksekusi

- File_server.py

```
tugas_individu — python file_server.py — 121x54
Last login: Fri Jun 18 01:47:08 on ttys001
(base) chintyadewi@chintya ~ % cd /Users/chintyadewi/Pemrograman_Jaringan_D/progjar4a/tugas_individu
(base) chintyadewi@chintya tugas_individu % python file_server.py
[WARNING:root:server berjalan di ip address ('127.0.0.1', 1234)]
[WARNING:root:connection from ('127.0.0.1', 63703)]
[WARNING:root:string diproses: GET pokijan.jpg]
[WARNING:root:memproses request: GET]
[WARNING:root:connection from ('127.0.0.1', 63704)]
[WARNING:root:string diproses: GET pokijan.jpg]
[WARNING:root:memproses request: GET]
[WARNING:root:connection from ('127.0.0.1', 63712)]
[WARNING:root:connection from ('127.0.0.1', 63715)]
[WARNING:root:string diproses: GET pokijan.jpg]
[WARNING:root:memproses request: GET]
[WARNING:root:string diproses: GET pokijan.jpg]
[WARNING:root:connection from ('127.0.0.1', 63716)]
[WARNING:root:memproses request: GET]
[WARNING:root:string diproses: GET pokijan.jpg]
[WARNING:root:memproses request: GET]
[WARNING:root:connection from ('127.0.0.1', 63720)]
[WARNING:root:string diproses: GET pokijan.jpg]
[WARNING:root:memproses request: GET]
[WARNING:root:connection from ('127.0.0.1', 63721)]
[WARNING:root:connection from ('127.0.0.1', 63725)]
[WARNING:root:string diproses: GET pokijan.jpg]
[WARNING:root:memproses request: GET]
[WARNING:root:connection from ('127.0.0.1', 63728)]
[WARNING:root:string diproses: GET pokijan.jpg]
[WARNING:root:string diproses: GET pokijan.jpg]
[WARNING:root:connection from ('127.0.0.1', 63730)]
[WARNING:root:memproses request: GET]
[WARNING:root:memproses request: GET]
[WARNING:root:connection from ('127.0.0.1', 63731)]
[WARNING:root:connection from ('127.0.0.1', 63732)]
[WARNING:root:string diproses: GET pokijan.jpg]
[WARNING:root:memproses request: GET]
[WARNING:root:connection from ('127.0.0.1', 63733)]
[WARNING:root:string diproses: GET pokijan.jpg]
[WARNING:root:memproses request: GET]
[WARNING:root:string diproses: GET pokijan.jpg]
[WARNING:root:memproses request: GET]
[WARNING:root:connection from ('127.0.0.1', 63734)]
[WARNING:root:connection from ('127.0.0.1', 63735)]
[WARNING:root:connection from ('127.0.0.1', 63736)]
[WARNING:root:connection from ('127.0.0.1', 63737)]
[WARNING:root:string diproses: GET pokijan.jpg]
[WARNING:root:memproses request: GET]
[WARNING:root:string diproses: GET pokijan.jpg]
[WARNING:root:memproses request: GET]
[WARNING:root:connection from ('127.0.0.1', 63738)]
[WARNING:root:connection from ('127.0.0.1', 63739)]
[WARNING:root:connection from ('127.0.0.1', 63740)]
[WARNING:root:connection from ('127.0.0.1', 63741)]
[WARNING:root:string diproses: GET pokijan.jpg]
```

- File udp_multi_thread.py

```
tugas_individu — zsh — 121x54
Last login: Fri Jun 18 01:48:09 on ttys001
(base) chintyadewi@chintya ~ % cd /Users/chintyadewi/Pemrograman_Jaringan_D/progjar4a/tugas_individu
(base) chintyadewi@chintya tugas_individu % python udp_multi_thread.py
mengirim 0
mengirim 1
mengirim 2
mengirim 3
WARNING:root:connecting to ('127.0.0.1', 1234)
WARNING:root:sending message
WARNING:root:error during data receiving
WARNING:root:connecting to ('127.0.0.1', 1234)
mengirim 4
Exception in thread Thread-1:
Traceback (most recent call last):
  File "/Users/chintyadewi/opt/anaconda3/lib/python3.8/threading.py", line 932, in _bootstrap_inner
    WARNING:root:connecting to ('127.0.0.1', 1234)
mengirim 5
WARNING:root:sending message
mengirim 6
WARNING:root:sending message
mengirim 7
mengirim 8
mengirim 9
mengirim 10
mengirim 11
WARNING:root:connecting to ('127.0.0.1', 1234)
mengirim 12
    self.run()
mengirim 13
WARNING:root:sending message
    File "/Users/chintyadewi/opt/anaconda3/lib/python3.8/threading.py", line 870, in run
mengirim 14
WARNING:root:connecting to ('127.0.0.1', 1234)
mengirim 15
WARNING:root:connecting to ('127.0.0.1', 1234)
mengirim 16
    self._target(*self._args, **self._kwargs)
    File "/Users/chintyadewi/Pemrograman_Jaringan_D/progjar4a/tugas_individu/file_client_cli.py", line 53, in remote_get
WARNING:root:sending message
WARNING:root:sending message
mengirim 17
    if (hasil['status']=='OK'):
TypeError: 'bool' object is not subscriptable
mengirim 18
mengirim 19
WARNING:root:connecting to ('127.0.0.1', 1234)
mengirim 20
WARNING:root:sending message
mengirim 21
WARNING:root:connecting to ('127.0.0.1', 1234)
WARNING:root:sending message
mengirim 22
mengirim 23
mengirim 24
```

```
WARNING:root:data received from server
mengirim 93
WARNING:root:connecting to ('127.0.0.1', 1234)
WARNING:root:sending message
mengirim 94
WARNING:root:sending message
WARNING:root:sending message
mengirim 95
WARNING:root:connecting to ('127.0.0.1', 1234)
mengirim 96
WARNING:root:sending message
mengirim 97
WARNING:root:connecting to ('127.0.0.1', 1234)
mengirim 98
WARNING:root:connecting to ('127.0.0.1', 1234)
WARNING:root:sending message
mengirim 99
WARNING:root:sending message
WARNING:root:connecting to ('127.0.0.1', 1234)
```