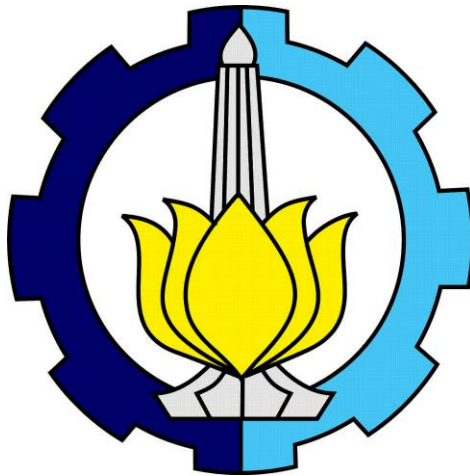


Dokumentasi
Tugas Menjalankan Program Chat di Simulator



Pemrograman Jaringan
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Instruksi tugas:

Menjalankan program chat di emulator

Jalankan program chat tersebut di EMULATOR. lakukan menggunakan konfigurasi

- 1 mesin berfungsi sebagai chat server
- 2 mesin berfungsi sebagai chat client

Buatlah interaksi antara 2 mesin client dengan server. lakukan aktifitas-aktifitas berikut ini

- authentication
- berkirim pesan antar user

dan capturelah ke dalam gambar, dan submitlah dalam bentuk 1 dokumen PDF. berikan PENJELASAN SINGKAT dari hasil capture anda

Hasil:

Langkah-langkah pengerjaan

- (1) Untuk menyiapkan 2 client dan 1 server maka perlu menggunakan 3 Alpine yaitu Alpine 1, Alpine 2, dan Alpine 3.
- (2) Alpine 1 akan berfungsi sebagai server, Alpine 2 berfungsi sebagai client, dan Alpine 3 berfungsi sebagai client
- (3) Setelah melakukan telnet pada terminal, selanjutnya membuat folder work di dalam folder home di semua alpine.
- (4) Kemudian pada Alpine 1 membuat program file bernama server_thread_chat.py dan chat.py
- (5) Pada Alpine 2 dan Alpine 3 membuat program file bernama chat-cli.py
- (6) Selanjutnya jalankan program server_thread_chat.py pada Alpine 1
- (7) Dan jalankan program chat-cli.py pada Alpine 2 dan Alpine 3
- (8) Kemudian melakukan authentication pada Alpine 2 dan Alpine 3 sebagai user yang di inginkan sesuai dengan user yang ada pada list.

```
collisions:0 txqueuelen:1000
RX bytes:13464 (13.1 KiB) TX bytes:3642 (3.5 KiB)

lo        Link encap:Local Loopback
          inet addr:127.0.0.1 Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING MTU:65536 Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:0 (0.0 B) TX bytes:0 (0.0 B)

/ # mkdir work
/ # cd work/
/work # nano chat-cli.py
/work # python3 chat-cli.py
Command :auth messi catalan
diterima dari server b'{"status": "OK", "tokenId": "183476f5-66b3-4ffa-a14c-6f4c6b556e54"}\n\n'
end of string
username messi logged in, token 183476f5-66b3-4ffa-a14c-6f4c6b556e54
Command 183476f5-66b3-4ffa-a14c-6f4c6b556e54:

collisions:0 txqueuelen:1000
RX bytes:14136 (13.8 KiB) TX bytes:4144 (4.0 KiB)

lo        Link encap:Local Loopback
          inet addr:127.0.0.1 Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING MTU:65536 Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:0 (0.0 B) TX bytes:0 (0.0 B)

/ # mkdir work
/ # cd work/
/work # nano chat-cli.py
/work # python3 chat-cli.py
Command :auth agero sidarjo
diterima dari server b'{"status": "OK", "tokenId": "a5d968ad-1b84-487d-9c96-8f147fec32d2"}\n\n'
end of string
username agero logged in, token a5d968ad-1b84-487d-9c96-8f147fec32d2
Command a5d968ad-1b84-487d-9c96-8f147fec32d2:
```

- (9) Pada server yaitu Alpine 1 akan muncul notifikasi dari user yang melakukan authentication.

```
gns3      mnt      sbin      usr
gns3volumes opt      srv      var

/ # mkdir work
/ # cd work/
/work # nano server_thread_chat.py
/work # nano chat.py
/work # python3 server_thread_chat.py
WARNING:root:connection from ('192.168.122.148', 50038)
WARNING:root:connection from ('192.168.122.89', 48050)
WARNING:root:data dari client: auth messi catalan

WARNING:root:AUTH: auth messi catalan
WARNING:root:balas ke client: {"status": "OK", "tokenid": "183476f5-66b3-4ff4-a14c-6f4c6b556e54"}

WARNING:root:data dari client: auth aguero sidoarjo

WARNING:root:AUTH: auth aguero sidoarjo
WARNING:root:balas ke client: {"status": "OK", "tokenid": "a5d968ad-1b84-487d-9c96-8f147fec32d2"}
```

- (10) Alpine 2 dapat melakukan send message ke Alpine 3.

```
TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:0 (0.0 B) TX bytes:0 (0.0 B)

/ # mkdir work
/ # cd work/
/work # nano chat-cli.py
/work # python3 chat-cli.py
Command :auth messi catalan
diterima dari server b'{"status": "OK", "tokenid": "183476f5-66b3-4ff4-a14c-6f4c6b556e54"}\n\n'
diterima dari server b'4"\n\n'
end of string
username messi logged in, token 183476f5-66b3-4ff4-a14c-6f4c6b556e54
Command 183476f5-66b3-4ff4-a14c-6f4c6b556e54:send aguero you are city legend brooo
send 183476f5-66b3-4ff4-a14c-6f4c6b556e54 aguero you are city legend brooo

diterima dari server b'{"status": "OK", "message": "Message Sent"}\n\n'
end of string
message sent to aguero
Command 183476f5-66b3-4ff4-a14c-6f4c6b556e54:[]
```

- (11) Dan juga Alpine 3 melakukan send message ke Alpine 2.

```

TX packets:0 errors:0 dropped:0 overruns:0 carrier:
0 collisions:0 txqueuelen:1000
RX bytes:0 (0.0 B) TX bytes:0 (0.0 B)

/ # mkdir work
/ # cd work/
/work # nano chat-cli.py
/work # python3 chat-cli.py
Command :auth aguero sidoarjo
diterima dari server b'{"status": "OK", "tokenid": "a5d968ad-1b84-487d-9c96-8f147fec32d2"}\n\n'
end of string
username aguero logged in, token a5d968ad-1b84-487d-9c96-8f147fec32d2
Command a5d968ad-1b84-487d-9c96-8f147fec32d2:send messi you are barca legend broo
send a5d968ad-1b84-487d-9c96-8f147fec32d2 messi you are barca legend broo

diterima dari server b'{"status": "OK", "message": "Message Sent"}\n\n'
end of string
message sent to messi
Command a5d968ad-1b84-487d-9c96-8f147fec32d2:

```

- (12) Alpine 1 yang berfungsi sebagai server akan menerima notifikasi adanya pesan yang dikirim oleh Alpine 2 ke Alpine 3 dan pesan yang dikirim oleh Alpine 3 ke Alpine 2.

```

WARNING:root:AUTH: auth messi catalan
WARNING:root:balas ke client: {"status": "OK", "tokenid": "183476f5-66b3-4ff4-a14c-6f4c6b556e54"}

WARNING:root:data dari client: auth aguero sidoarjo

WARNING:root:AUTH: auth aguero sidoarjo
WARNING:root:balas ke client: {"status": "OK", "tokenid": "a5d968ad-1b84-487d-9c96-8f147fec32d2"}

WARNING:root:data dari client: send 183476f5-66b3-4ff4-a14c-6f4c6b556e54 aguero you are city legend brooo

WARNING:root:SEND: session 183476f5-66b3-4ff4-a14c-6f4c6b556e54 send message from messi to aguero
WARNING:root:balas ke client: {"status": "OK", "message": "Message Sent"}

WARNING:root:data dari client: send a5d968ad-1b84-487d-9c96-8f147fec32d2 messi you are barca legend broo

WARNING:root:SEND: session a5d968ad-1b84-487d-9c96-8f147fec32d2 send message from aguero to messi
WARNING:root:balas ke client: {"status": "OK", "message": "Message Sent"}

```

- (13) Pada Alpine 2 dapat mengecek inbox. Begitu pula pada Alpine 3.

```

/ # mkdir work
/ # cd work/
/work # nano chat-cli.py
/work # python3 chat-cli.py
Command :auth messi catalan
diterima dari server b'{"status": "OK", "tokenId": "183476f5-66b3-4ff4-a14c-6f4c6b556e54"}\r\n\r\n'
end of string
username messi logged in, token 183476f5-66b3-4ff4-a14c-6f4c6b556e54
Command 183476f5-66b3-4ff4-a14c-6f4c6b556e54:send aguero you are city legend brooo
send 183476f5-66b3-4ff4-a14c-6f4c6b556e54 aguero you are city legend brooo

diterima dari server b'{"status": "OK", "message": "Message Sent"}\r\n\r\n'
end of string
message sent to aguero
Command 183476f5-66b3-4ff4-a14c-6f4c6b556e54:inbox
diterima dari server b'{"status": "OK", "messages": {"aguero": [{"msg_from": "Sergio Ag", "msg_to": "Lionel Messi", "msg": " you are barca legend brooo \r\n"}]}}\r\n\r\n'
end of string
{"aguero": [{"msg_from": "Sergio Aguero", "msg_to": "Lionel Messi", "msg": " you are barca legend brooo \r\n"}]}
Command 183476f5-66b3-4ff4-a14c-6f4c6b556e54:

```

```

/ # mkdir work
/ # cd work/
/work # nano chat-cli.py
/work # python3 chat-cli.py
Command :auth aguero sidoarjo
diterima dari server b'{"status": "OK", "tokenId": "a5d968ad-1b84-487d-9c96-8f147fec32d2"}\r\n\r\n'
end of string
username aguero logged in, token a5d968ad-1b84-487d-9c96-8f147fec32d2
Command a5d968ad-1b84-487d-9c96-8f147fec32d2:send messi you are barca legend brooo
send a5d968ad-1b84-487d-9c96-8f147fec32d2 messi you are barca legend brooo

diterima dari server b'{"status": "OK", "message": "Message Sent"}\r\n\r\n'
end of string
message sent to messi
Command a5d968ad-1b84-487d-9c96-8f147fec32d2:inbox
diterima dari server b'{"status": "OK", "messages": {"messi": [{"msg_from": "Lionel Messi", "msg_to": "Sergio Aguero", "msg": " you are city legend brooo \r\n"}]}}\r\n\r\n'
end of string
{"messi": [{"msg_from": "Lionel Messi", "msg_to": "Sergio Aguero", "msg": " you are city legend brooo \r\n"}]}
Command a5d968ad-1b84-487d-9c96-8f147fec32d2:

```

- (14) Alpine 1 selaku server akan menerima notifikasi bahwa Alpine 2 dan Alpine 3 melakukan cek inbox.

```

WARNING:root:SEND: session 183476f5-66b3-4ff4-a14c-6f4c6b556e54
4 send message from messi to aguero
WARNING:root:balas ke client: {"status": "OK", "message": "Message Sent"}

WARNING:root:data dari client: inbox 183476f5-66b3-4ff4-a14c-6f4c6b556e54
4

WARNING:root:INBOX: 183476f5-66b3-4ff4-a14c-6f4c6b556e54
WARNING:root:balas ke client: {"status": "OK", "messages": {"aguero": [{"msg_from": "Sergio Aguero", "msg_to": "Lionel Messi", "msg": " you are barca legend brooo \r\n"}]}}

WARNING:root:data dari client: inbox a5d968ad-1b84-487d-9c96-8f147fec32d2
2

WARNING:root:INBOX: a5d968ad-1b84-487d-9c96-8f147fec32d2
WARNING:root:balas ke client: {"status": "OK", "messages": {"messi": [{"msg_from": "Lionel Messi", "msg_to": "Sergio Aguero", "msg": " you are city legend brooo \r\n"}]}}

```