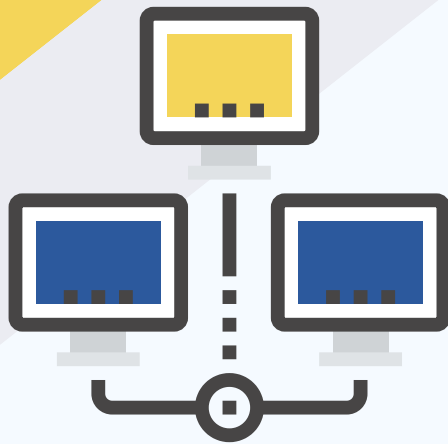


2023



TP 1 REPORT

YOUNESS ZYADI **MIAAD**



CHAT SERVER USING MULTITHREADS BLOCKING IO MODEL (JAVA.IO)

EXECUTION

SERVER LOGS:

```
C:\Windows\System32\cmd.exe - java blocking.MultiThreadChatServer


C:\Users\youne\Desktop\JavaEclipse\TP1\bin>java blocking.MultiThreadChatServer
The Server is Start in Port : 1234New Client Connecting => id : 1 IP : /[0:0:0:0:0:0:1]:5955
New Client Connecting => id : 2 IP : /127.0.0.1:59557New Client Connecting => id : 3 IP :
/127.0.0.1:59566 IP : /[0:0:0:0:0:0:1]:59554 Request : hello guysBroadcast message: hello gu
ys
Broadcast message: hello guys
IP : /127.0.0.1:59557 Request : hi broBroadcast message: hi bro
Broadcast message: hi bro
IP : /127.0.0.1:59566 Request : hi brothersBroadcast message: hi brothers
Broadcast message: hi brothers
IP : /[0:0:0:0:0:0:1]:59554 Request : I'm a Telnet ClientBroadcast message: I'm a Telnet Cl
ient
Broadcast message: I'm a Telnet Client
IP : /127.0.0.1:59557 Request : ooh Nice to meet you , I'm Python ClientBroadcast message: oo
h Nice to meet you , I'm Python Client
Broadcast message: ooh Nice to meet you , I'm Python Client
IP : /127.0.0.1:59566 Request : Nice !!! I'm a JFX ClientBroadcast message: Nice !!! I'm a JF
X Client
Broadcast message: Nice !!! I'm a JFX Client
IP : /[0:0:0:0:0:0:1]:59554 Request :Broadcast message: bye
```

TELNET CLIENT CONSOLE:

```
Telnet localhost

Welcome Your ID : 1
hello guys
hi bro
hi brothers
I'm a Telnet Client
ooh Nice to meet you , I'm Python Client
Nice !!! I'm a JFX Client
bye
gn
gn too
gn
```

JAVAFX CLIENT :

 Chat Client

HOST : Port :

Welcome Your ID : 3

hello guys

hi bro

I'm a Telnet Client

ooh Nice to meet you , I'm Python Client

bye [] [] [] []

gn

gn too

Message :

PYTHON CLIENT :

```
C:\Windows\System32\cmd.exe - python pycclient_mt.py
C:\Users\youne\Desktop\JavaEclipse>python pycclient_mt.py
Welcome Your ID : 2
hello guys
hi bro
hi brothers
I'm a Telnet Client
ooh Nice to meet you , I'm Python Client
Nice !!! I'm a JFX Client
bye
gn
gn too
gn
```



CHAT SERVER USING SINGLE THREAD NON BLOCKING IO MODEL (JAVA.NIO)

EXECUTION

SERVER LOGS:

```
C:\Windows\System32\cmd.exe - java nonblocking.SingleThreadChatServer

IP: /127.0.0.1:59276 Request: Nice To meet you Guys
IP: /127.0.0.1:59279 Request: Bye
IP: /127.0.0.1:59288 Request:
IP: /127.0.0.1:59276 Request: Gn
IP: /127.0.0.1:59288 Request: G
IP: /127.0.0.1:59288 Request: n
IP: /127.0.0.1:59288 Request:
```

TELNET CLIENT CONSOLE:

```
Telnet localhost

Welcome, your ID is 3
Hello I'm a Pythont Client
Hello
Hello I'm a JFX Client
I'm a Telnet Client
Nice To meet you Guys
Bye
Gn
Gn
```

JAVAFX CLIENT :

Chat Client

HOST : Port :

Welcome, your ID is 1

Hello I'm a Pythont Client

☐☐Hello

I'm a Telnet Client

Bye

Gn

Message :

PYTHON CLIENT :

ChatClient_Python.py - Visual Studio Code

ChatClient_Python.py 1 ✕

C: > Users > youne > Desktop > JavaEclipse > ChatClient_Python.py > ...

```
32
33 while True:
34     req = input('')
35     client.send_request(req)
36
37     if req == 'quit':
38         client.stop()
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL Python ⚠ + ▾ 🗑 ... ^ ✕

Nice To meet you Guys

Bye

🌱 0 ⚠ 1 Spaces: 4 UTF-8 CRLF Python 3.10.7 64-bit Go Live Prettier

JMETER PERFORMANCE TESTING

SINGLE THREAD NON BLOCKING IO MODEL TEST:

The screenshot displays the Apache JMeter 5.5 interface. At the top, a code editor shows a Java file named `nonblocking_ChatServer - ChatServer.java` with the following code:

```
clientChannel.register(selector, SelectionKey.OP_READ);
CLIENT_COUNT++;
clientMap.put(clientChannel, CLIENT_COUNT);
clientChannels.add(clientChannel);

System.out.println("New Client Connecting => id: " + CLIENT_COUNT + " IP: " + clientChannel.getRemoteAddress());
```

Below the code editor, the 'View Results Tree' panel is visible. It shows a single test element, 'TCP Sampler', with the following details:

- Name: View Results Tree
- Comments:
- Write results to file / Read from file
- Filename:
- Search: (empty)
- Case sensitive: ☐ Regular exp.: ☐
- Search: [button] Reset: [button]
- Text: (selected)
- Sampler result: Thread Name: Users 1-1, Sample Start: 2023-03-18 00:56:31 WEST, Load time: 3, Connect Time: 1, Latency: 3, Size in bytes: 22, Sent bytes: 0, Headers size in bytes: 0, Body size in bytes: 22, Sample Count: 1, Error Count: 0, Data type ("text"|"bin"|""): text, Response code: 200, Response message: OK

The bottom of the interface shows a log window with the following output:

```
2023-03-18 00:56:31,078 INFO o.a.j.e.StandardJMeterEngine: All thread groups have been started
2023-03-18 00:56:31,082 INFO o.a.j.t.JMeterThread: Thread started: Users 1-1
2023-03-18 00:56:31,082 INFO o.a.j.p.s.TCPClientImpl: Using platform default charset: windows-1252
2023-03-18 00:56:31,086 INFO o.a.j.t.JMeterThread: Thread is done: Users 1-1
2023-03-18 00:56:31,086 INFO o.a.j.t.JMeterThread: Thread finished: Users 1-1
2023-03-18 00:56:31,086 INFO o.a.j.e.StandardJMeterEngine: Notifying test listeners of end of test
2023-03-18 00:56:31,087 INFO o.a.j.g.u.JMeterMenuBar: setRunning(false, *local*)
2023-03-18 00:58:19,290 INFO o.a.j.s.FileServer: Set new base="C:\Users\youne\Desktop\Master\S2\System Distributed\TPs"
```


MULTI THREADS BLOCKING IO MODEL TEST:

C:\Users\youne\Desktop\Master\S2\System Distributed\TPs\JmeterMultiThreadChatServer_Test.jmx) - Apache JMeter (5.5)

Help



View Results Tree

Name: View Results Tree

Comments:

Write results to file / Read from file

Filename

Search:

☐ Case sensitive

☐ Regular exp.

Search

Reset

Text

- TCP Sampler
- TCP Sampler
- TCP Sampler
- TCP Sampler
- TCP Sampler
- TCP Sampler
- TCP Sampler
- TCP Sampler
- TCP Sampler
- TCP Sampler
- TCP Sampler
- TCP Sampler

Sampler result

Request

Response data

Thread Name:Users 1-1
Sample Start:2023-03-18 00:40:08 WEST
Load time:0
Connect Time:0
Latency:0
Size in bytes:0
Sent bytes:0
Headers size in bytes:0
Body size in bytes:0
Sample Count:1
Error Count:0
Data type ("text"|"bin"|""):text
Response code:200
Response message:OK

```
71 2023-03-18 00:40:09,585 INFO o.a.j.t.JMeterThread: Thread is done: Users 1-7
72 2023-03-18 00:40:09,585 INFO o.a.j.t.JMeterThread: Thread finished: Users 1-7
73 2023-03-18 00:40:09,671 INFO o.a.j.t.JMeterThread: Thread started: Users 1-8
74 2023-03-18 00:40:09,671 INFO o.a.j.p.t.s.TCPClientImpl: Using platform default charset:windows-1252
75 2023-03-18 00:40:09,674 INFO o.a.j.v.J.JSR223 Listener: Connected
76 2023-03-18 00:40:09,676 INFO o.a.j.v.J.JSR223 Listener: Connected
77 2023-03-18 00:40:09,680 INFO o.a.j.v.J.JSR223 Listener: Connected
78 2023-03-18 00:40:09,682 INFO o.a.j.v.J.JSR223 Listener: Connected
79 2023-03-18 00:40:09,685 INFO o.a.j.v.J.JSR223 Listener: Connected
```