Name: Rachana Naganagouda Patil
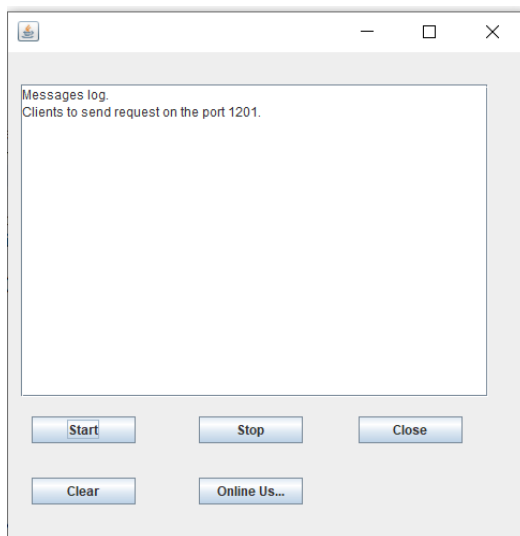
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CSE 5306

Distributed Systems

Lab 2- Asynchronous Message Server

Instructions:

MS_ServerGUI.java is executed and run.

MS_ClientGUI.java is executed and connected to the server.

For example: client1,client2,client3 is connected.

Window 1 (client1):

Username: client1 — Connect

Message Log

Connection has been accepted localhost/127.0.0.1:1201

Username is accepted

Refresh

Clients

client1

Enter Message

ListRefre...

Send | Check messages | Close

Window 2 (client2):

Username: client2 — Connect

Message Log

Connection has been accepted localhost/127.0.0.1:1201

Username is accepted

Refresh

Clients

client1

Enter Message

ListRefre...

Send | Check messages | Close

Window 3 (client3):

Username: client3 — Connect

Message Log

Connection has been accepted localhost/127.0.0.1:1201
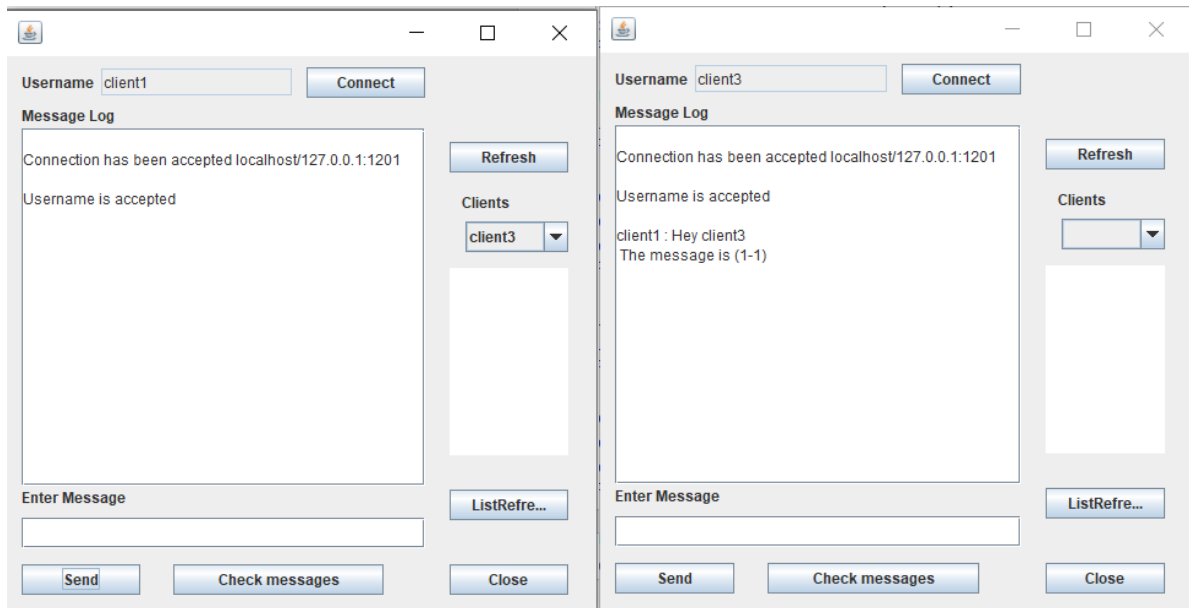
Username is accepted

Refresh

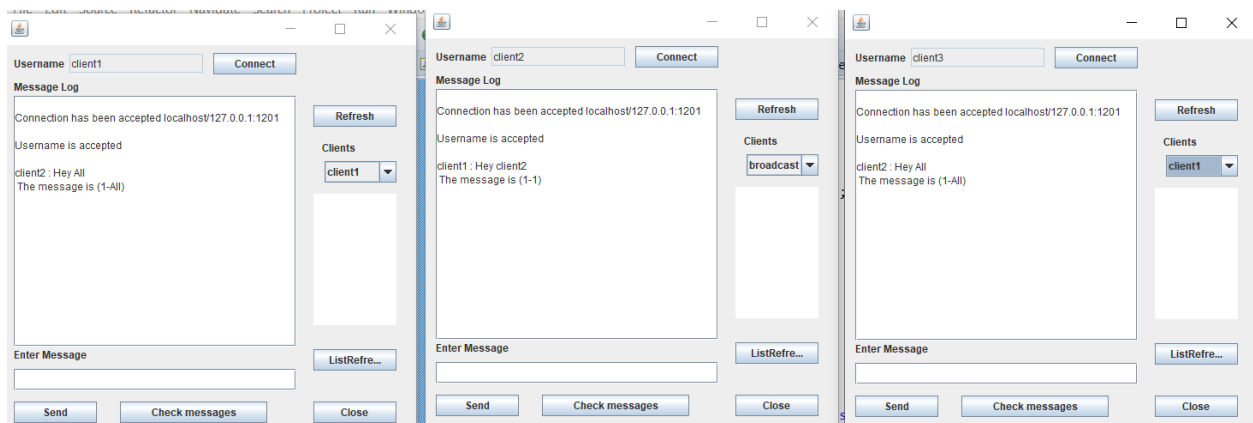Clients

Enter Message

ListRefre...

Send | Check messages | Close

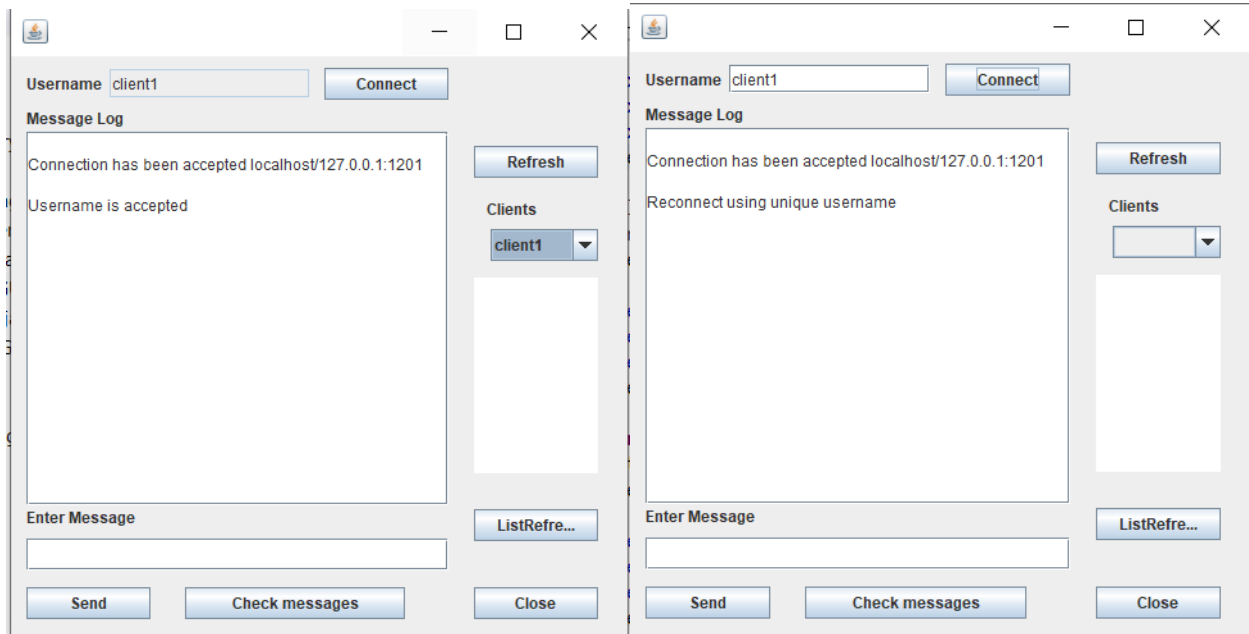Send Messages: Unicast – Sending message from client1 to client3

Window 1 (client1):

Username: client1 [Connect]

Message Log

Connection has been accepted localhost/127.0.0.1:1201

Username is accepted

[Refresh]

Clients

[client1 ▼] → client3

Enter Message

[Send] [Check messages] [ListRefre...] [Close]

Window 2 (client3):

Username: client3 [Connect]

Message Log

Connection has been accepted localhost/127.0.0.1:1201

Username is accepted

client1 : Hey client3
  The message is (1-1)

[Refresh]

Clients

[▼]

Enter Message

[Send] [Check messages] [ListRefre...] [Close]

Send Messages: Broadcast – Sending message from client2 to all recipients.

Window 1 (client1):

Username: client1 [Connect]

Message Log

Connection has been accepted localhost/127.0.0.1:1201

Username is accepted

client2 : Hey All
  The message is (1-All)

[Refresh]

Clients

[client1 ▼]

Enter Message

[Send] [Check messages] [ListRefre...] [Close]

Window 2 (client2):

Username: client2 [Connect]

Message Log

Connection has been accepted localhost/127.0.0.1:1201

Username is accepted

client1 : Hey client2
  The message is (1-1)

[Refresh]

Clients

[broadcast ▼]

Enter Message

[Send] [Check messages] [ListRefre...] [Close]

Window 3 (client3):

Username: client3 [Connect]

Message Log

Connection has been accepted localhost/127.0.0.1:1201

Username is accepted

client2 : Hey All
  The message is (1-All)

[Refresh]

Clients

[client1 ▼]

Enter Message

[Send] [Check messages] [ListRefre...] [Close]

Conflict of usernames:

When client1 is present, another client with name client2 is not accepted.

Left window:

Username client1   Connect

Message Log

Connection has been accepted localhost/127.0.0.1:1201

Username is accepted

Refresh

Clients

client1 ▼

Enter Message

ListRefre...

Send   Check messages   Close

Right window:

Username client1   Connect

Message Log

Connection has been accepted localhost/127.0.0.1:1201

Reconnect using unique username

Refresh

Clients

▼

Enter Message

ListRefre...

Send   Check messages   Close

Send message from client1 to client2 keeping client2 offline. Once client1 send message to client2 close the server and then again run it.

Left window:

Username client1   Connect

Message Log

Connection has been accepted localhost/127.0.0.1:1201

Username is accepted

Refresh

Clients

client2 ▼

Enter Message

ListRefre...

Send   Check messages   Close

Right window:

Username client2   Connect

Message Log

Connection has been accepted localhost/127.0.0.1:1201

Username is accepted

client1 : Hey client2
The message is (1-1)

Refresh

Clients

▼

Enter Message

ListRefre...

Send   Check messages   Close

References:

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