

Submission Worksheet

CLICK TO GRADE

<https://learn.ethereallab.app/assignment/IT114-002-S2024/it114-chatroom-milestone-3-2024/grade/jeo29>

IT114-002-S2024 - [IT114] Chatroom Milestone 3 2024

Submissions:

Submission Selection

1 Submission [active] 4/14/2024 11:30:56 PM

Instructions

[^ COLLAPSE ^](#)

1. Implement the Milestone 3 features from the project's proposal document: <https://docs.google.com/document/d/1ONmvEvel97GTFPGfVwwQC96xSsobbSbk56145X>
2. Make sure you add your ucid/date as code comments where code changes are done
3. All code changes should reach the Milestone3 branch
4. Create a pull request from Milestone3 to main and keep it open until you get the output PDF from this assignment.
5. Gather the evidence of feature completion based on the below tasks.
6. Once finished, get the output PDF and copy/move it to your repository folder on your local machine.
7. Run the necessary git add, commit, and push steps to move it to GitHub
8. Complete the pull request that was opened earlier
9. Upload the same output PDF to Canvas

Branch name: Milestone3

Tasks: 14 Points: 10.00

 Basic UI (2 pts.)

[^ COLLAPSE ^](#)

 Task #1 - Points: 1

Text: Screenshots of the following

Checklist

*The checkboxes are for your own tracking

#	Points	Details
---	--------	---------

#1	1	Connection Panel
#2	1	User Details Panel
#3	1	Chat Panel
#4	1	Clearly caption screenshots

Task Screenshots:

Gallery Style: Large View

Small Medium Large

Client

Rooms

Host:

127.0.0.1

Port:

3000

Next



Connection Panel

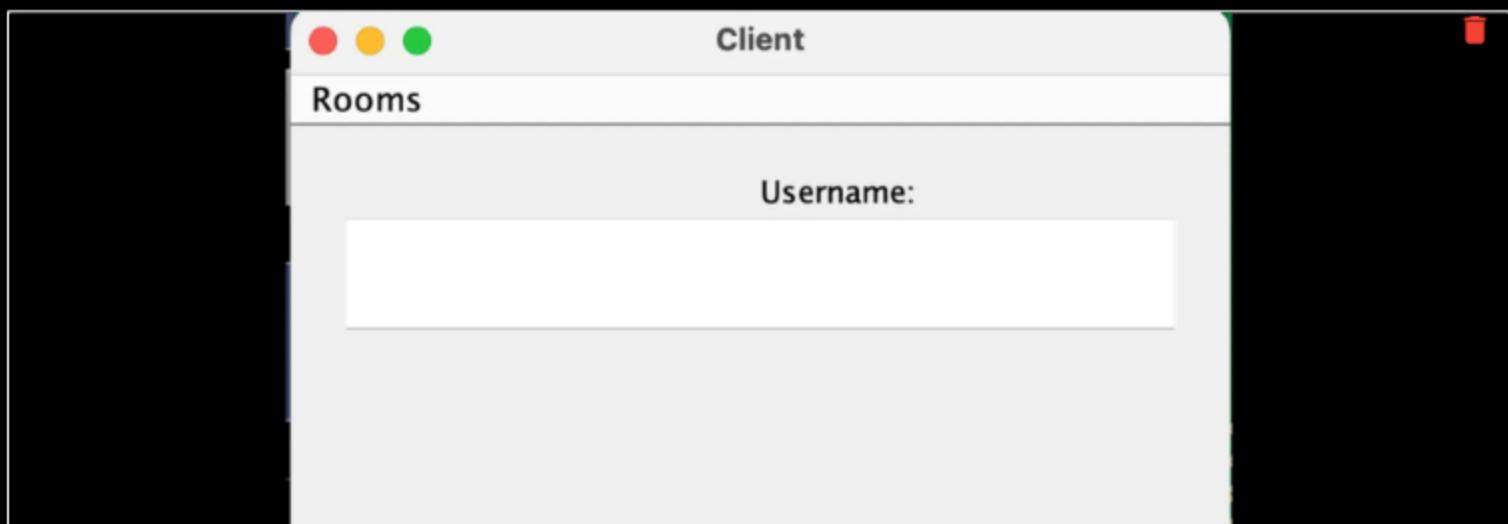
Checklist Items (1)

#1 Connection Panel

Client

Rooms

Username:



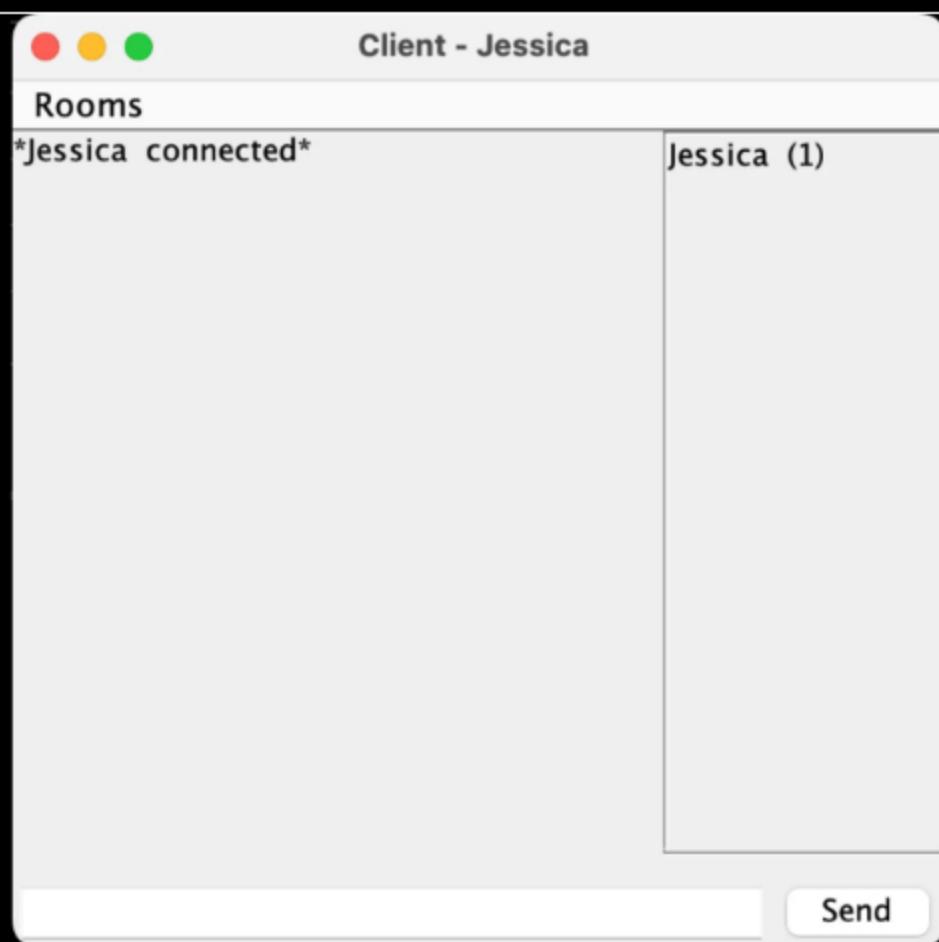
Previous

Connect

User Details Panel

Checklist Items (1)

#2 User Details Panel



Chat Panel

Checklist Items (1)

#3 Chat Panel

Formatting (2 pts.)

[^COLLAPSE ^](#)

Task #1 - Points: 1

[^COLLAPSE ^](#)

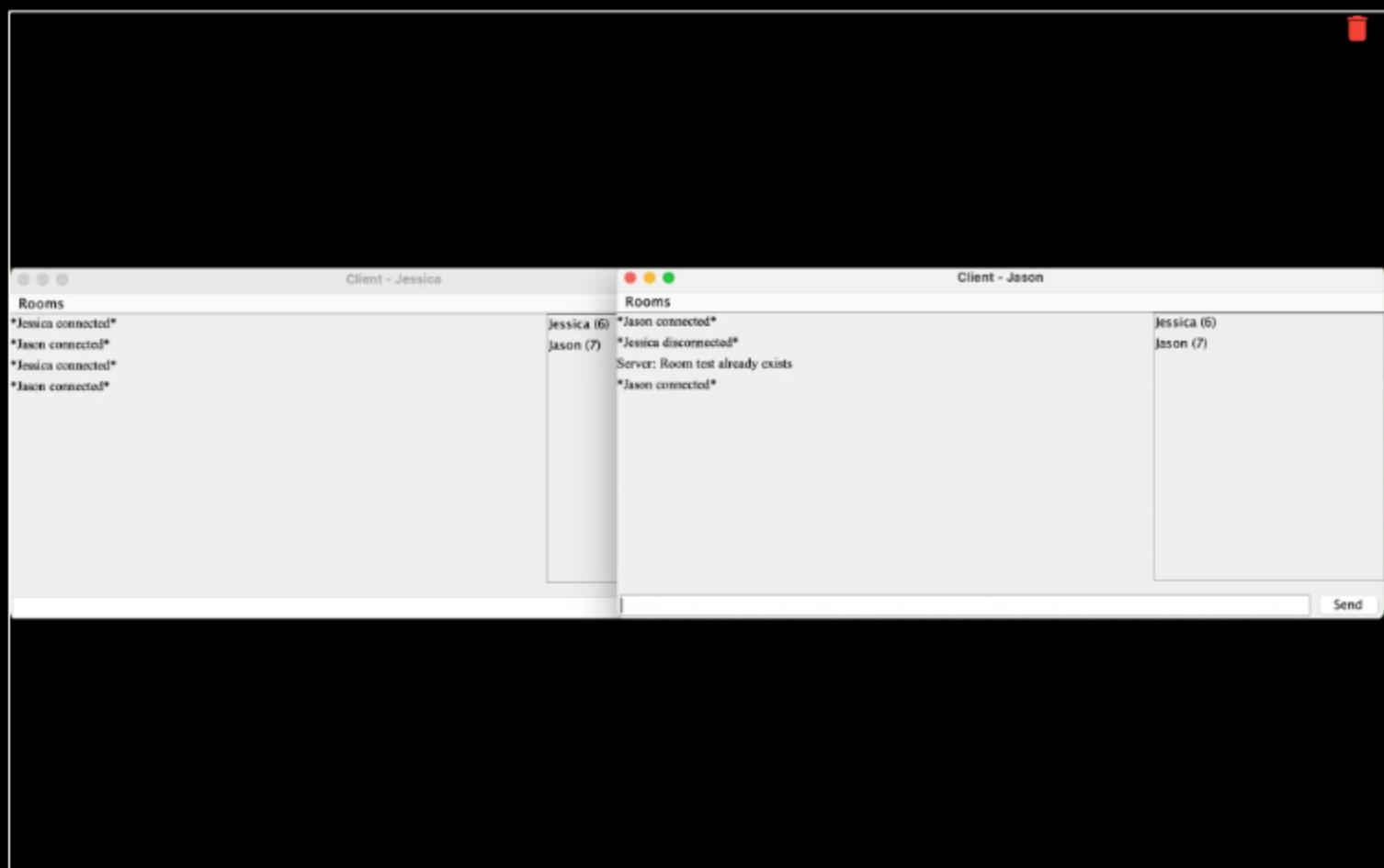
Checklist

*The checkboxes are for your own tracking

#	Points	Details
<input checked="" type="checkbox"/> #1	1	Flip output in a different format than normal messages
<input checked="" type="checkbox"/> #2	1	Roll # output in a different format than normal messages
<input checked="" type="checkbox"/> #3	1	Roll #d# output in a different format than normal messages
<input checked="" type="checkbox"/> #4	1	Clearly caption screenshots

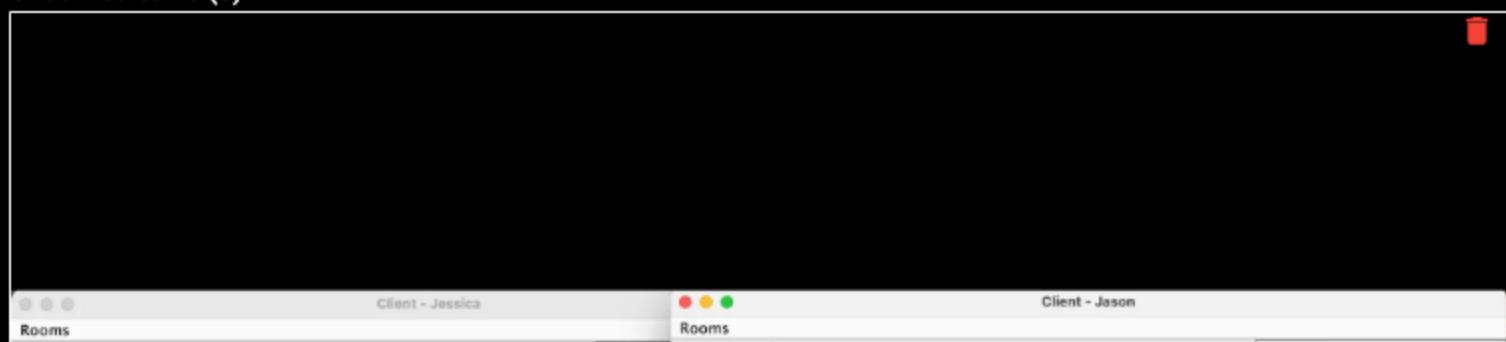
Task Screenshots:

Gallery Style: Large View

[Small](#)[Medium](#)[Large](#)

Connection

Checklist Items (0)



Jessica connected
Jason connected
Jessica: Jessica flipped a coin and got heads

Jason: Jason flipped a coin and got heads

Server: Room1 test already exists
Jason connected
Jessica: Jessica flipped a coin and got heads

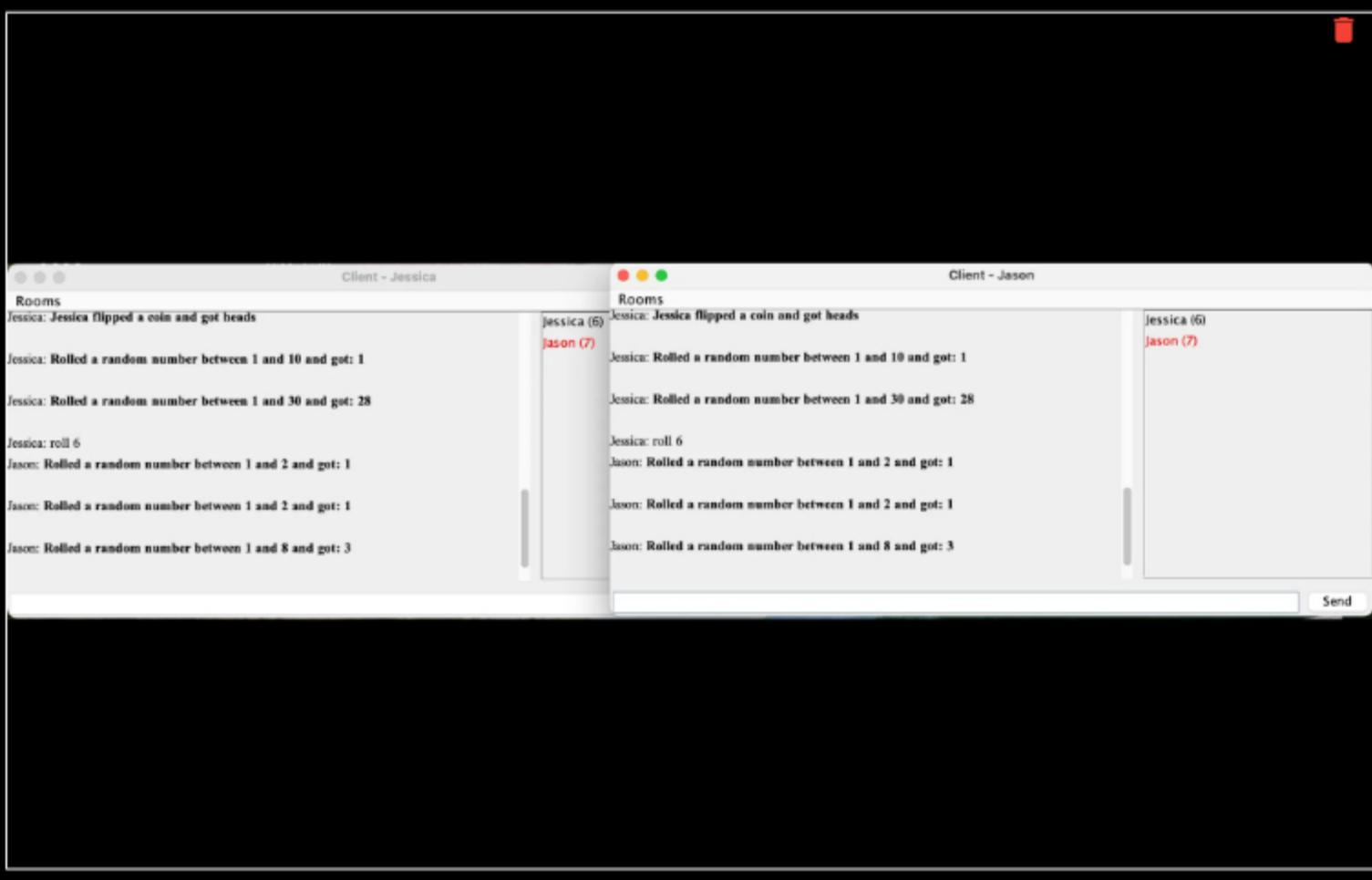
Jason: Jason flipped a coin and got heads

Send

Flip

Checklist Items (1)

#1 Flip output in a different format than normal messages



Roll

Checklist Items (1)

#3 Roll #d# output in a different format than normal messages

Task #2 - Points: 1

COLLAPSE

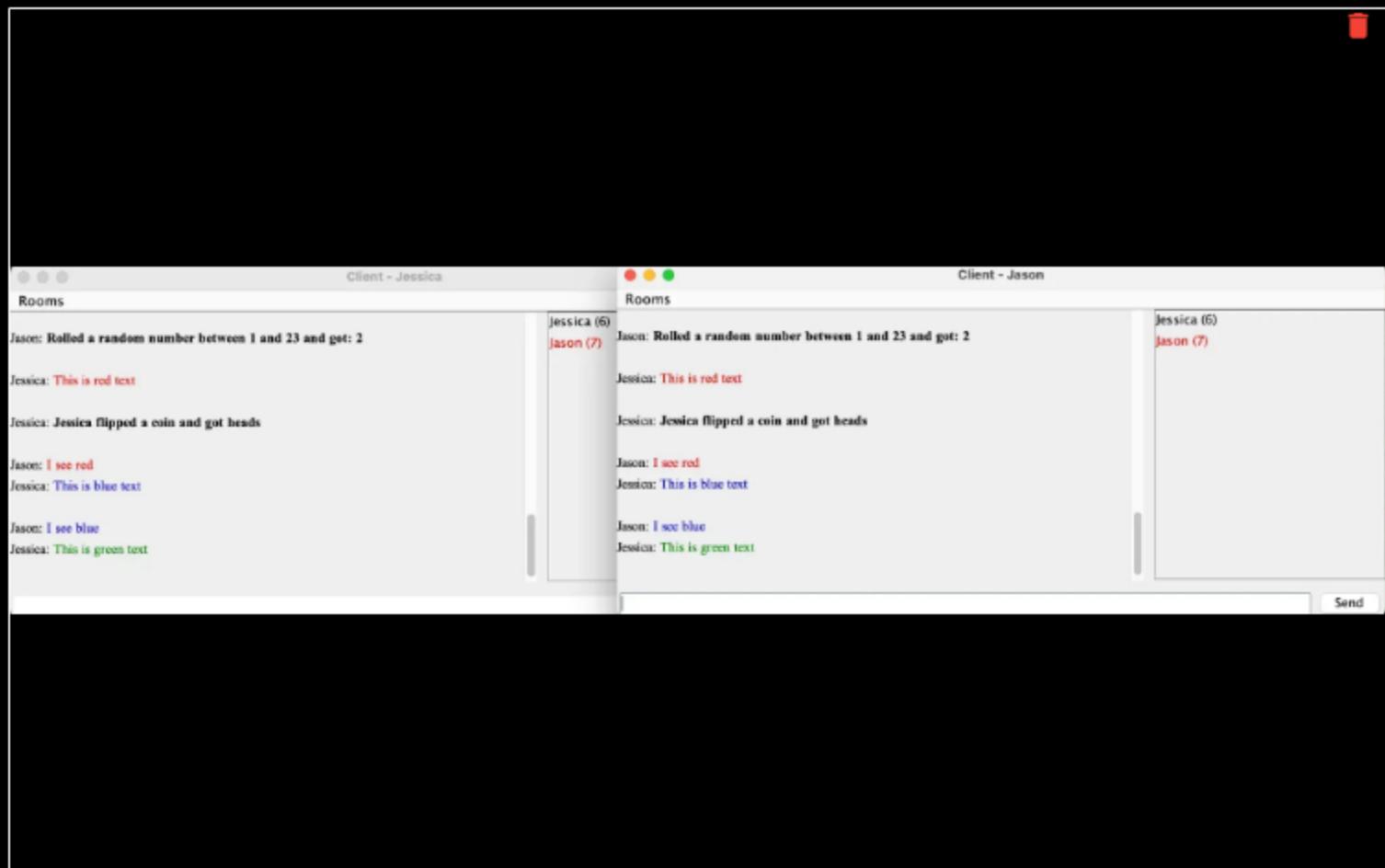
Checklist

*The checkboxes are for your own tracking

#	Points	Details
<input checked="" type="checkbox"/> #1	1	Custom text formatting for bold working (Part of the message should appear bold)
<input checked="" type="checkbox"/> #2	1	Custom text formatting for italic working (Part of the message should appear italic)
<input checked="" type="checkbox"/> #3	1	Custom text formatting for underline working (Part of the message should appear underline)
<input checked="" type="checkbox"/> #4	1	Custom text formatting for red working (Part of the message should appear red)
<input checked="" type="checkbox"/> #5	1	Custom text formatting for blue working (Part of the message should appear blue)
<input checked="" type="checkbox"/> #6	1	Custom text formatting for green working (Part of the message should appear green)
<input checked="" type="checkbox"/> #7	1	Custom text formatting for combined bold, italic, underline, and a color working (Part of the message should have all 4 formats applied at once)
<input checked="" type="checkbox"/> #8	1	Clearly caption screenshots

Task Screenshots:

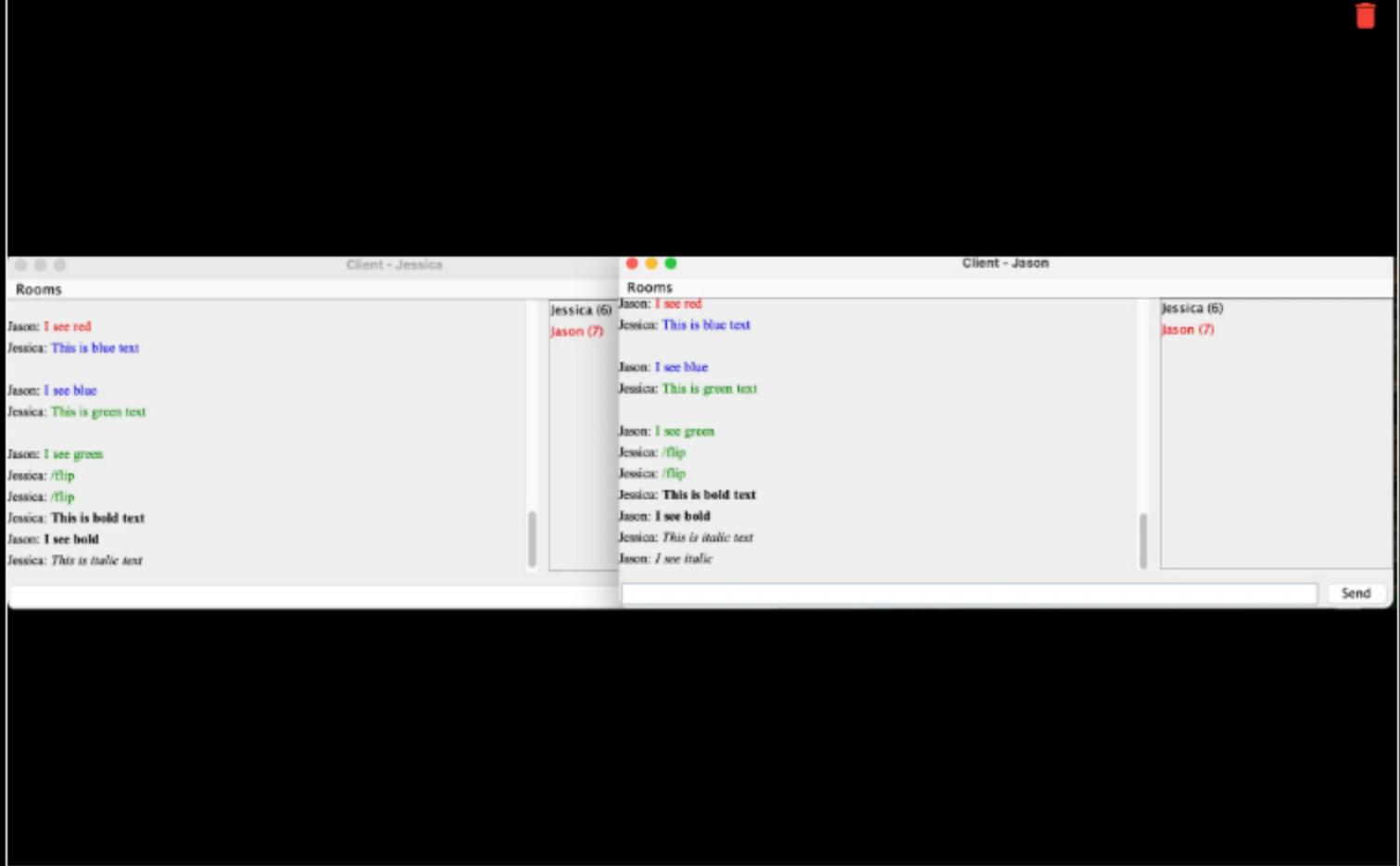
Gallery Style: Large View

[Small](#)[Medium](#)[Large](#)

Custom text formatting for red, blue, green

Checklist Items (1)

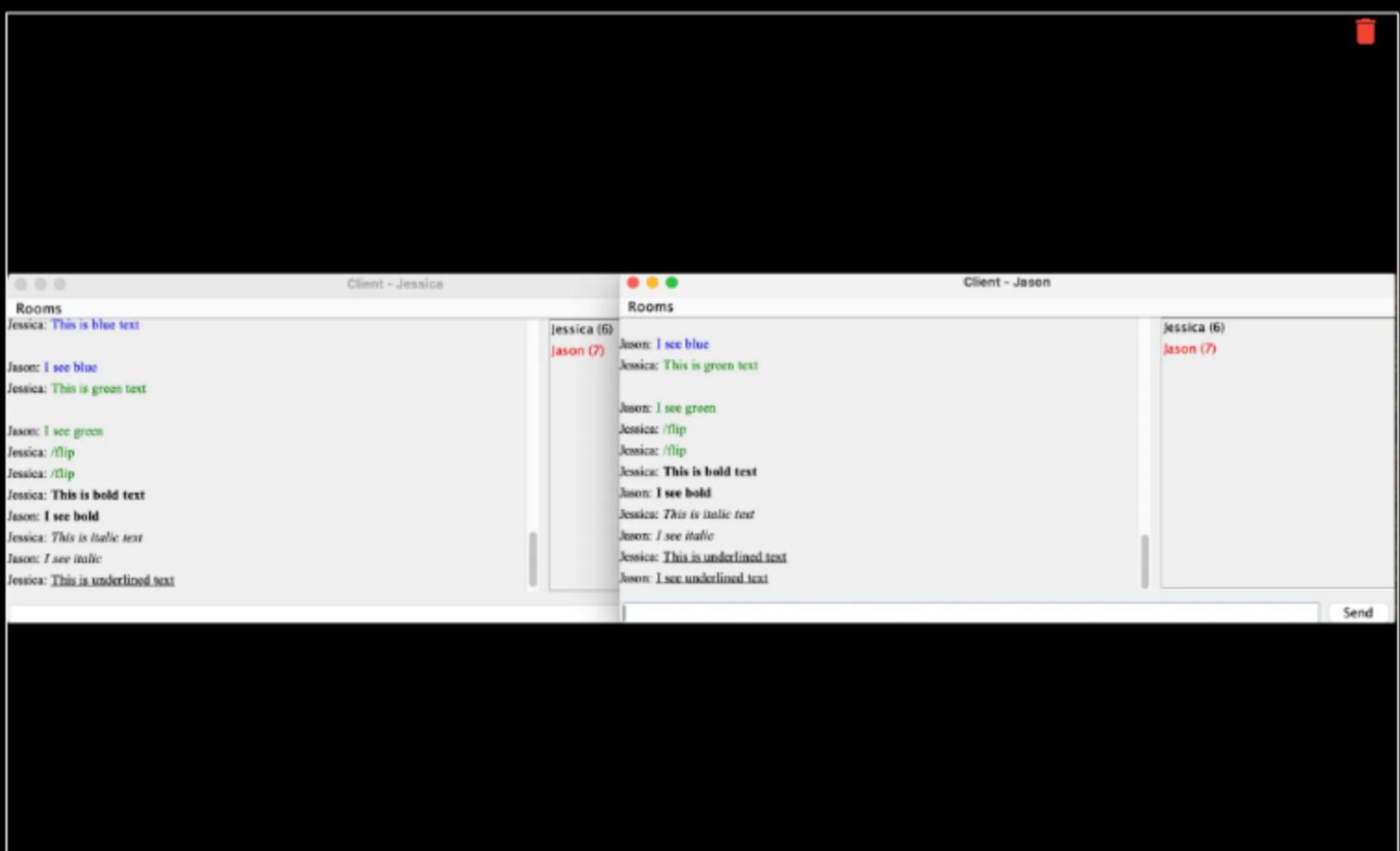
#4 Custom text formatting for red working (Part of the message should appear red)



Bold & Italic working

Checklist Items (1)

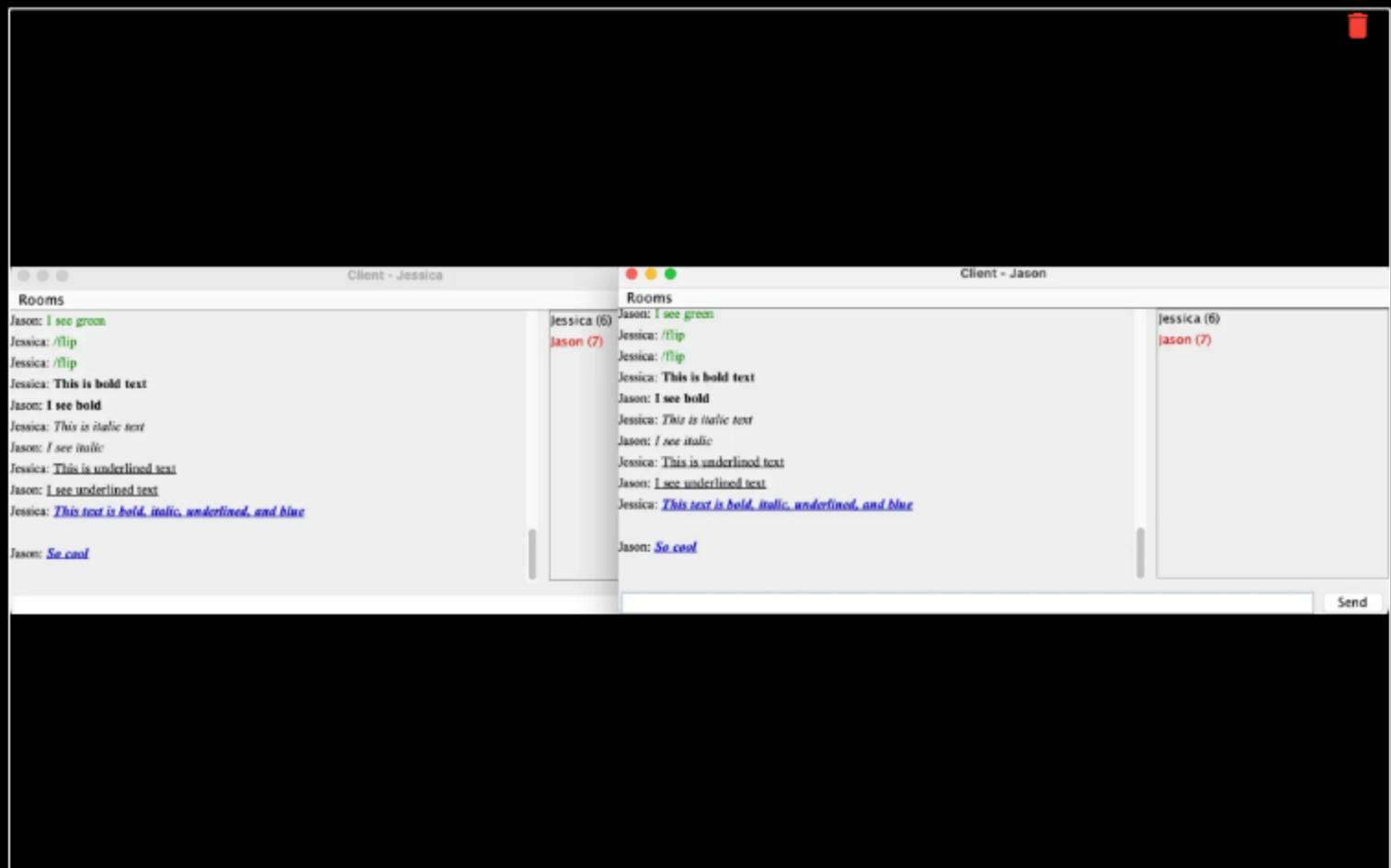
#1 Custom text formatting for bold working (Part of the message should appear bold)



Underline working

Checklist Items (1)

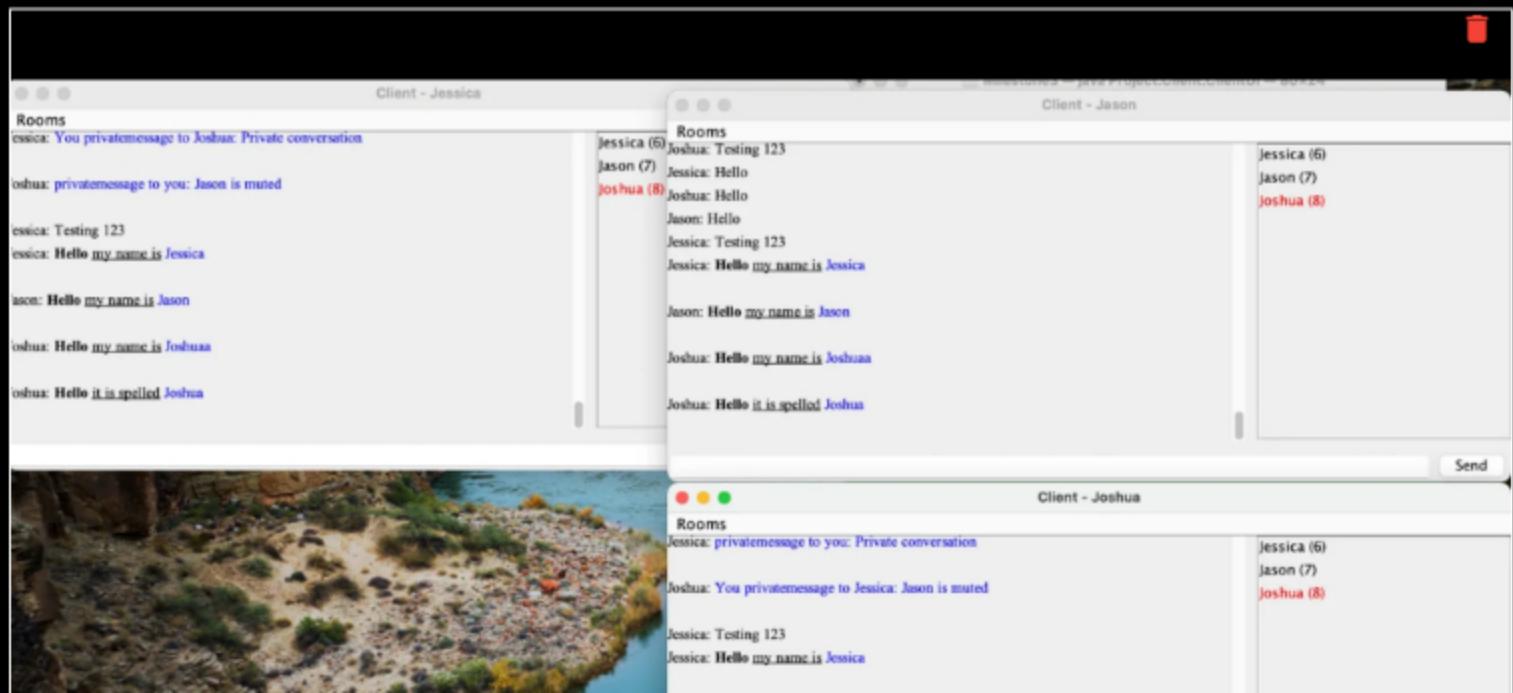
#3 Custom text formatting for underline working (Part of the message should appear underline)

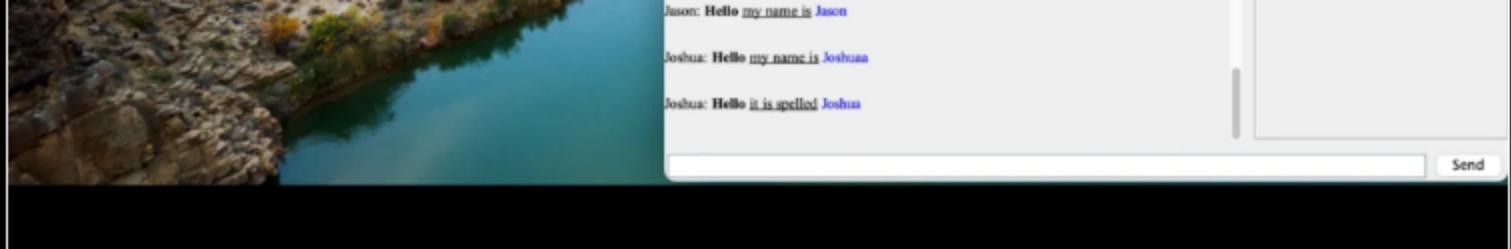


^~!_This text is bold, italic, underlined, and blue!_~^

Checklist Items (1)

#7 Custom text formatting for combined bold, italic, underline, and a color working (Part of the message should have all 4 formats applied at once)





Custom text formatting for combined bold, italic, underline, and a color working

Checklist Items (1)

#7 Custom text formatting for combined bold, italic, underline, and a color working (Part of the message should have all 4 formats applied at once)

Task #3 - Points: 1

Text: Screenshot of the code solving the formatting display

Checklist

*The checkboxes are for your own tracking

#	Points	Details
<input checked="" type="checkbox"/> #1	1	Show each relevant file this was done in (may be one or more)
<input checked="" type="checkbox"/> #2	1	Include ucid and date comment
<input checked="" type="checkbox"/> #3	1	Clearly caption screenshots

Task Screenshots:

Gallery Style: Large View

Small Medium Large

Project > Server > J Room.java > Room > sendMessage(ServerThread, String)

```
10  public class Room implements AutoCloseable {
11      protected synchronized void sendMessage(ServerThread sender, String message) {
341          //-- #319=341 LT (message.contains("_"))
342          //UCID: jeo29
343          //Date: April 13, 2024
344
345          if (message.contains(s:"%")){
346              String[] tEffects = message.split(regex:"");
347              message = "";
348              int count = 0;
349              int count2 = 0;
350              int indexcount = 0;
351              for (int i = 0; i < tEffects.length; i++){
352                  if (tEffects[i].equals(anObject:"%")){
353                      count++;
354                      count2++;
355                      if (count == 1){
356                          indexcount = i;
357                          tEffects[i] = "<font color=\"red\">" + message.substring(indexcount, message.length());
358                      }
359                      if (count == 2){
360                          tEffects[i] = "</font>";
361                          count = 0;
362                      }
363                  } <- #352-363 if (tEffects[i].equals("%"))
364              } <- #351-364 for (int i = 0; i < tEffects.length; i++)
365              if (count2%2 == 1){
366                  tEffects[indexcount] = "%";
367              }
368              for(String i: tEffects){
369                  message+= i;
370              }
371          }
372      }
373  }
```

```
369 }  
370 } <- #345-371 if (message.contains("%"))
```

Red

Checklist Items (1)

#1 Show each relevant file this was done in (may be one or more)

```
Project > Server > Room.java > Room > sendMessage(ServerThread, String)  
10  public class Room implements AutoCloseable {  
243  protected synchronized void sendMessage(ServerThread sender, String message) {  
373  //UCID: jeo29  
374  //Date: April 13, 2024  
375  
376  if (message.contains(s:"*")){  
377  String[] tEffects = message.split(regex:"");  
378  message = "";  
379  int count = 0;  
380  int count2 = 0;  
381  int indexcount = 0;  
382  for (int i = 0; i < tEffects.length; i++){  
383  if (tEffects[i].equals(anObject:"*")){  
384  count++;  
385  count2++;  
386  if (count == 1){  
387  indexcount = i;  
388  tEffects[i] = "<font color=\"green\">";  
389  }  
390  if (count == 2){  
391  tEffects[i] = "</font>";  
392  count = 0;  
393  }  
394  } <- #383-394 if (tEffects[i].equals("*"))  
395 } <- #382-395 for (int i = 0; i < tEffects.length; i++)  
396  if (count2%2 == 1){  
397  tEffects[indexcount] = "*";  
398  }  
399  for(String i: tEffects){  
400  message+= i;  
401  }  
402 } <- #376-402 if (message.contains("%"))
```

Green

Checklist Items (1)

#1 Show each relevant file this was done in (may be one or more)

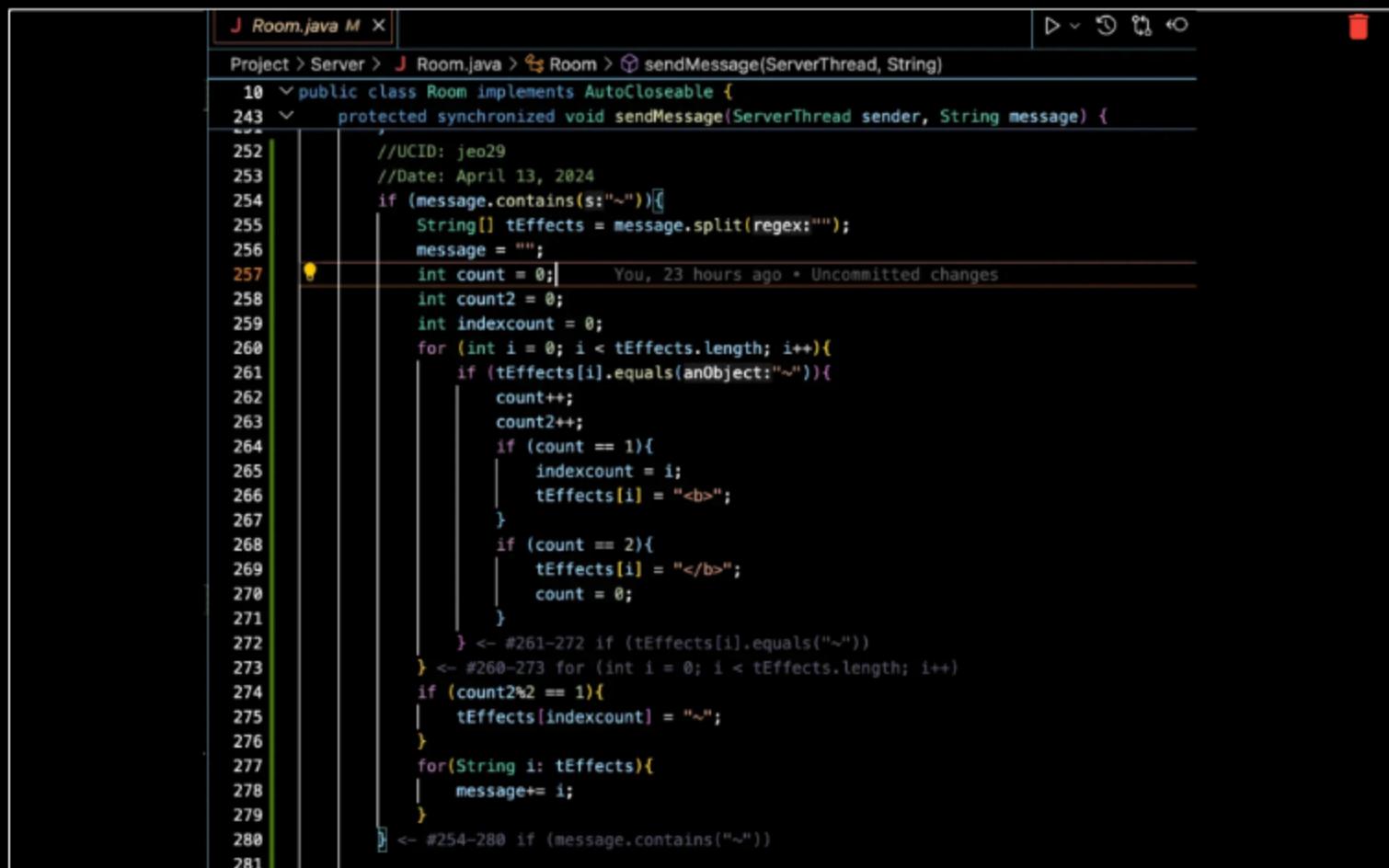
```
403 //UCID: jeo29  
404 //Date: April 13, 2024  
405  
406  
407  if (message.contains(s:"^")){  
408  String[] tEffects = message.split(regex:"");  
409  message = "";  
410  int count = 0;  
411  int count2 = 0;  
412  int indexcount = 0;  
413  for (int i = 0; i < tEffects.length; i++){  
414  if (tEffects[i].equals(anObject:"^")){  
415  count++;  
416  count2++;  
417  if (count == 1){  
418  indexcount = i;  
419  tEffects[i] = "<font color=\"blue\">";  
420  }  
421  if (count == 2){  
422  tEffects[i] = "</font>";  
423  count = 0;  
424  }
```

```
424
425     } <- #414-425 if (tEffects[i].equals("~"))
426     } <- #413-426 for (int i = 0; i < tEffects.length; i++)
427     if (count2%2 == 1){
428         tEffects[indexcount] = "~";
429     }
430     for(String i: tEffects){
431         message+= i;
432     }
433 } <- #407-433 if (message.contains("~"))
```

Blue

Checklist Items (1)

#1 Show each relevant file this was done in (may be one or more)

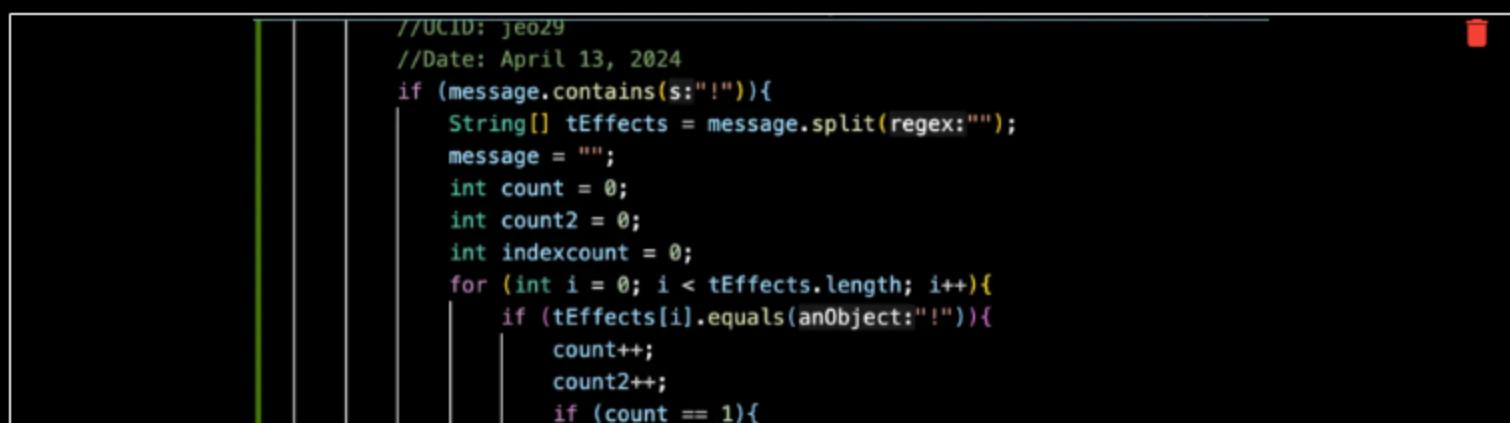


```
J Room.java M X
Project > Server > J Room.java > Room > sendMessag...
10 public class Room implements AutoCloseable {
243     protected synchronized void sendMessage(ServerThread sender, String message) {
252     }
253     //UCID: jeo29
254     //Date: April 13, 2024
255     if (message.contains(s:"^")){
256         String[] tEffects = message.split(regex:"^");
257         message = "";
258         int count = 0; You, 23 hours ago * Uncommitted changes
259         int count2 = 0;
260         int indexcount = 0;
261         for (int i = 0; i < tEffects.length; i++){
262             if (tEffects[i].equals(anObject:"^")){
263                 count++;
264                 count2++;
265                 if (count == 1){
266                     indexcount = i;
267                     tEffects[i] = "<b>";
268                 }
269                 if (count == 2){
270                     tEffects[i] = "</b>";
271                     count = 0;
272                 }
273             } <- #261-272 if (tEffects[i].equals("^"))
274             } <- #260-273 for (int i = 0; i < tEffects.length; i++)
275             if (count2%2 == 1){
276                 tEffects[indexcount] = "~";
277             }
278             for(String i: tEffects){
279                 message+= i;
280             }
281 } <- #254-280 if (message.contains("~"))
```

Bold

Checklist Items (1)

#3 Clearly caption screenshots



```
//UCID: jeo29
//Date: April 13, 2024
if (message.contains(s:"!")){
    String[] tEffects = message.split(regex:"!");
    message = "";
    int count = 0;
    int count2 = 0;
    int indexcount = 0;
    for (int i = 0; i < tEffects.length; i++){
        if (tEffects[i].equals(anObject:"!")){
            count++;
            count2++;
            if (count == 1){
```

```

        indexcount = i;
        tEffects[i] = "<i>";
    }
    if (count == 2){
        tEffects[i] = "</i>";
        count = 0;
    }
} <- #291-302 if (tEffects[i].equals("!"))
} <- #290-303 for (int i = 0; i < tEffects.length; i++)
if (count2%2 == 1){
    tEffects[indexcount] = "!";
}
for(String i: tEffects){
    message+= i;
}
} <- #284-310 if (message.contains("!"))

```

Italics

Checklist Items (1)

#2 Include ucid and date comment

```

511
312     //UCID: jeo29
313     //Date: April 13, 2024
314
315     if (message.contains(s:"_")){
316         String[] tEffects = message.split(regex:"");
317         message = "";
318         int count = 0;
319         int count2 = 0;
320         int indexcount = 0;
321         for (int i = 0; i < tEffects.length; i++){
322             if (tEffects[i].equals(anObject:"_")){
323                 count++;
324                 count2++;
325                 if (count == 1){
326                     indexcount = i;
327                     tEffects[i] = "<u>";
328                 }
329                 if (count == 2){
330                     tEffects[i] = "</u>";
331                     count = 0;
332                 }
333             } <- #322-333 if (tEffects[i].equals("_"))
334 } <- #321-334 for (int i = 0; i < tEffects.length; i++)
335     if (count2%2 == 1){
336         tEffects[indexcount] = "_";
337     }
338     for(String i: tEffects){
339         message+= i;
340     }
341 } <- #315-341 if (message.contains("_"))

```

Underline

Checklist Items (1)

#2 Include ucid and date comment

Task #4 - Points: 1

Text: Explain how the formatting was made to be visible/rendered in the UI



● Details:

Note each scenario

Response:

The formatting was made to be visible/rendered in the UI by including special characters. The code checks for specific characters (~, !, _, %, *, ^) and replaces them with corresponding HTML tags needed to assist with the formatting process. This is so that the UI is able to identify/pull these special character needed to function properly with its special style bold, italic, underline, or colored text.

● Private Message with @ (2 pts.)

[^COLLAPSE ^](#)

Task #1 - Points: 1

Text: Screenshots demoing private message

Checklist

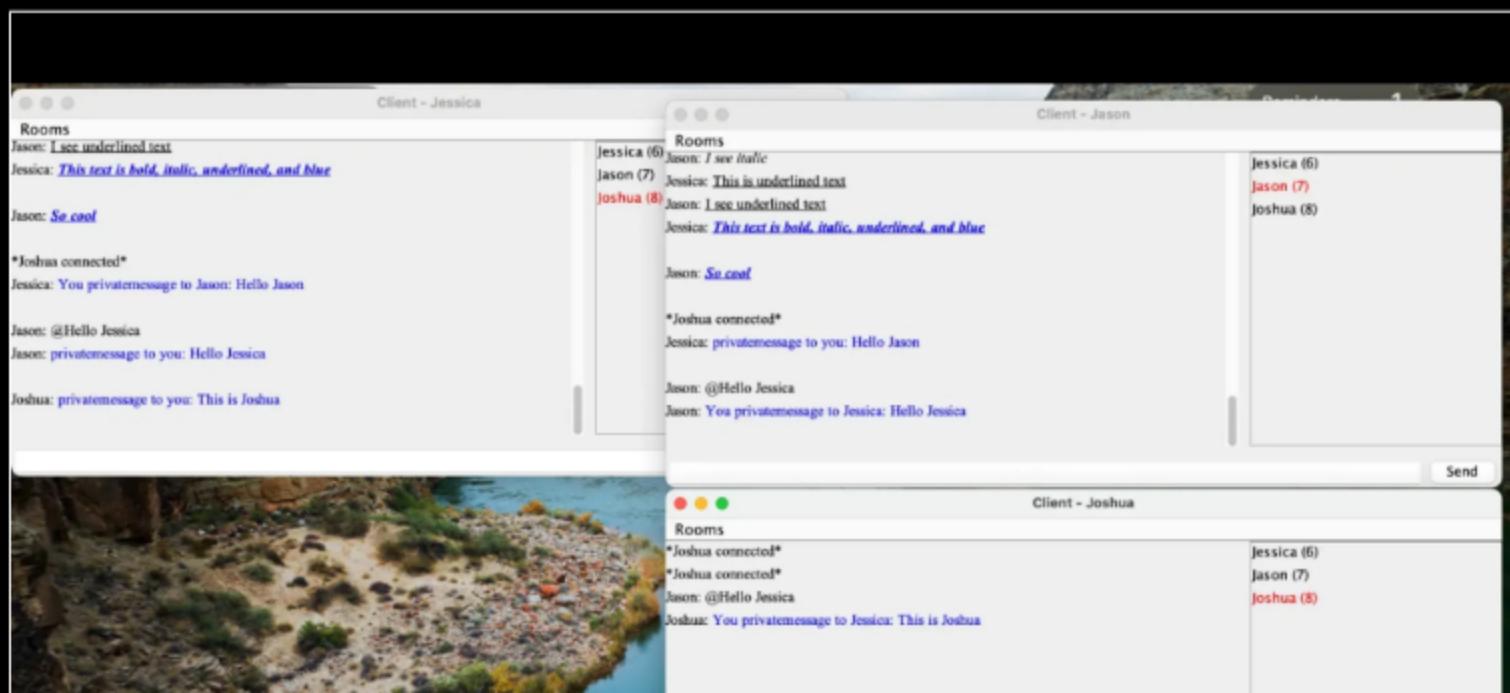
*The checkboxes are for your own tracking

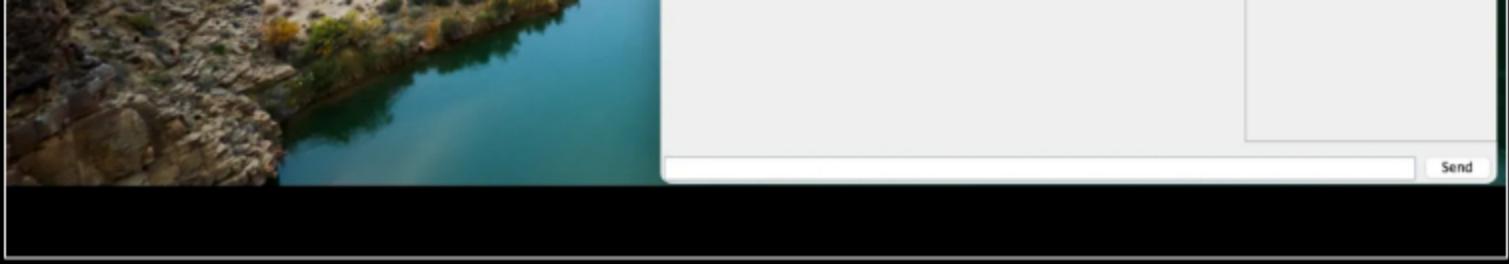
#	Points	Details
<input checked="" type="checkbox"/> #1	1	Should have 3 clients in the same room
<input checked="" type="checkbox"/> #2	1	Demo a private message where only the sender and target see the message
<input checked="" type="checkbox"/> #3	1	Clearly caption screenshots

Task Screenshots:

Gallery Style: Large View

Small Medium Large





3 clients in the same room Private message where only the sender and target see the message

Checklist Items (1)

#2 Demo a private message where only the sender and target see the message

Task #2 - Points: 1

Text: Screenshots of the related code

Checklist

*The checkboxes are for your own tracking

#	Points	Details
<input checked="" type="checkbox"/> #1	1	Show what code processes and handles the private message
<input checked="" type="checkbox"/> #2	1	The message should only be sent to the receiver and the target
<input checked="" type="checkbox"/> #3	1	The client should be targeting the username and the server side should be fetching the correct recipient
<input checked="" type="checkbox"/> #4	1	Include ucid and date comment
<input checked="" type="checkbox"/> #5	1	Clearly caption screenshots

Task Screenshots:

Gallery Style: Large View

Small Medium Large

```
435 //UCID: jeo29
436 //Date: April 13, 2024
437 if (message.contains(s:@"")){
438     String[] words = message.split(regex:"\\s+");
439     for(String word : words){
440         if (word.startsWith(prefix:@"")){
441             String privatemessageName = word.substring(beginIndex:1);
442             ServerThread targetUser = findUser(privatemessageName);
443
444             if (targetUser != null){
445                 String senderMessage = "<font color=\"blue\">You privatemessage to " + targetUser.getName();
446                 String receiverMessage = "<font color=\"blue\">privatemessage to you: " + message;
447                 targetUser.sendMessage(sender.getClientId(), receiverMessage);
448                 sender.sendMessage(sender.getClientId(), senderMessage);
449                 return;
450             } <- #444-450 if (targetUser != null)
451         }
452     } <- #439-452 for(String word : words)
453 } <- #437-453 if (message.contains("@"))
454 long from = sender == null ? Constants.DEFAULT_CLIENT_ID : sender.getClientId();
455 Iterator<ServerThread> iter = clients.iterator();
456 while (iter.hasNext()) {
457     ServerThread client = iter.next();
458     if(client.isMuted(sender.getClientName())){
```

```
459     |         continue;
460     |
461     boolean messageSent = client.sendMessage(from, message);
462     if (!messageSent) {
463     |         handleDisconnect(iter, client);
464     }
465 }
```

code processes and handles the private message

Checklist Items (1)

#1 Show what code processes and handles the private message

```
252 //UCID: jeo29
253 //Date: April 13, 2024
254 if (message.contains(s:"~")){
255     String[] tEffects = message.split(regex:"");
256     message = "";
257     int count = 0;
258     int count2 = 0;
259     int indexcount = 0;
260     for (int i = 0; i < tEffects.length; i++){
261         if (tEffects[i].equals(anObject:"~")){
262             count++;
263             count2++;
264             if (count == 1){
265                 indexcount = i;
266                 tEffects[i] = "<b>";
267             }
268             if (count == 2){
269                 tEffects[i] = "</b>";
270             }
271         }
272 }
```

The message should only be sent to the receiver and the target

Checklist Items (1)

#2 The message should only be sent to the receiver and the target

```
435 //UCID: jeo29
436 //Date: April 13, 2024
437 if (message.contains(s:@"")){
438     String[] words = message.split(regex:"\\s+");
439     for(String word : words){
440         if (word.startsWith(prefix:@"")){
441             String privatemessageName = word.substring(beginIndex:1);
442             ServerThread targetUser = findUser(privatemessageName);
443
444             if (targetUser != null){
445                 String senderMessage = "<font color=\"blue\">You privatemessage to " + targ
446                 String receiverMessage = "<font color=\"blue\">privatemessage to you: " + m
447             }
448         }
449     }
450 }
```

```

447         targetUser.sendMessage(sender.getClientId(), receiverMessage);
448         sender.sendMessage(sender.getClientId(), senderMessage);
449         return;
450     } <- #444-450 if (targetUser != null)
451     } <- #440-451 if (word.startsWith("@"))
452     } <- #439-452 for(String word : words)
453     } <- #437-453 if (message.contains("@"))
454     long from = sender == null ? Constants.DEFAULT_CLIENT_ID : sender.getClientId();
455     Iterator<ServerThread> iter = clients.iterator();
456     while (iter.hasNext()) {
457         ServerThread client = iter.next();
458         if(client.isMuted(sender.getClientName()))[<

```

The client should be targeting the username and the server side should be fetching the correct recipient

Checklist Items (1)

#3 The client should be targeting the username and the server side should be fetching the correct recipient

Task #3 - Points: 1

Text: Explain how private message works related to the code above

Checklist

*The checkboxes are for your own tracking

#	Points	Details
<input checked="" type="checkbox"/> #1	1	Include how the sender and receiver are handled
<input checked="" type="checkbox"/> #2	1	Include how the username is used to get the proper id

Response:

The sender and the receiver are handled by targeting the user by its username. Example @**(insert username)** then retrieving the persons username that followed after the @ then handling the message being sent to them privately.

Mute/Unmute Users (3 pts.)

^COLLAPSE ^

Task #1 - Points: 1

Text: Screenshots demoing feature working

Checklist

*The checkboxes are for your own tracking

#	Points	Details
<input checked="" type="checkbox"/> #1	1	Should have 3 clients in the same room
<input checked="" type="checkbox"/> #2	1	Demo mute preventing messages between the muter and the target
<input checked="" type="checkbox"/> #3	1	Demo mute also being accounted for with private messages
<input checked="" type="checkbox"/> #4	1	Demo unmute allowing the messages again from the target to the unmuter

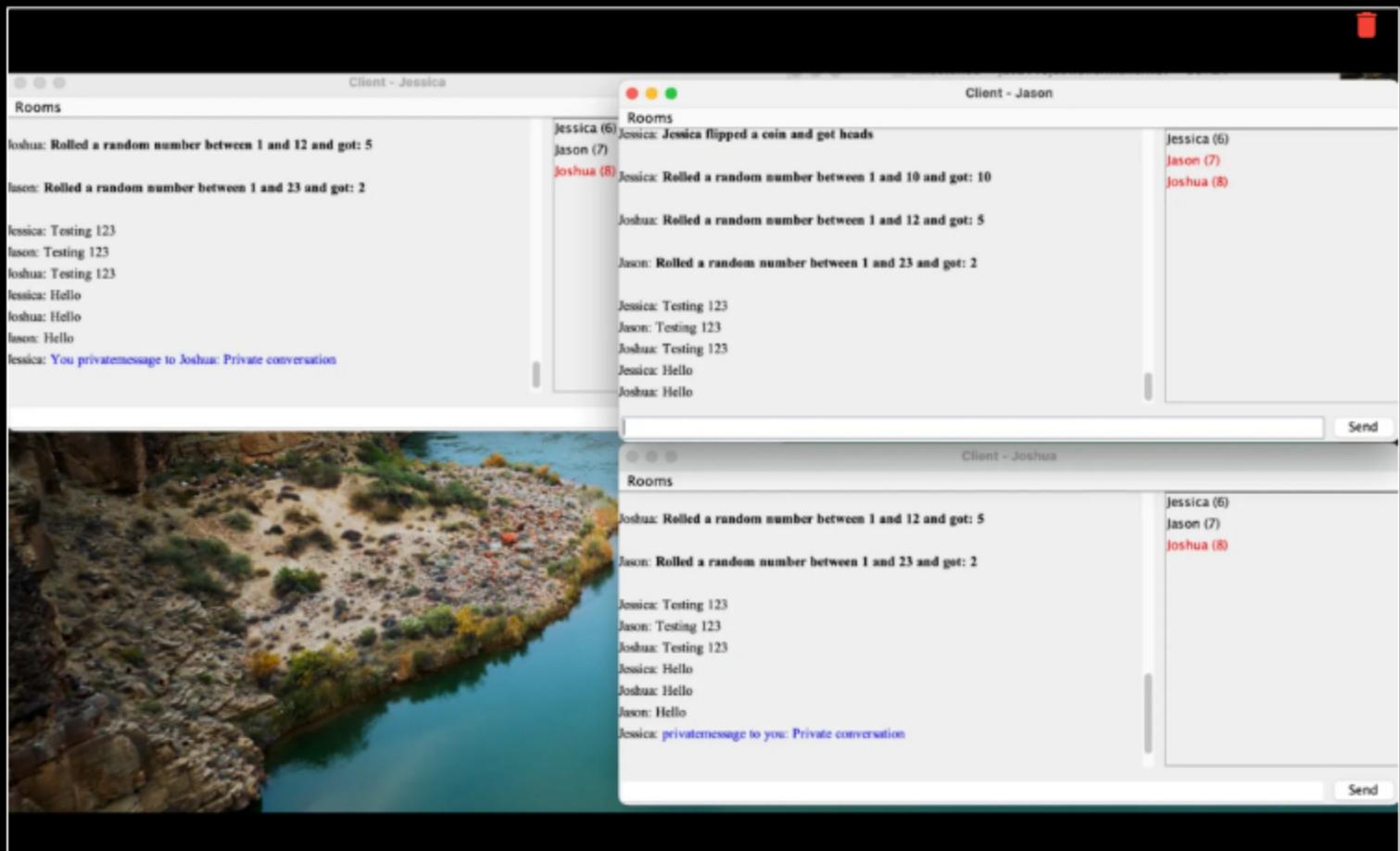
Task Screenshots:

Gallery Style: Large View

Small

Medium

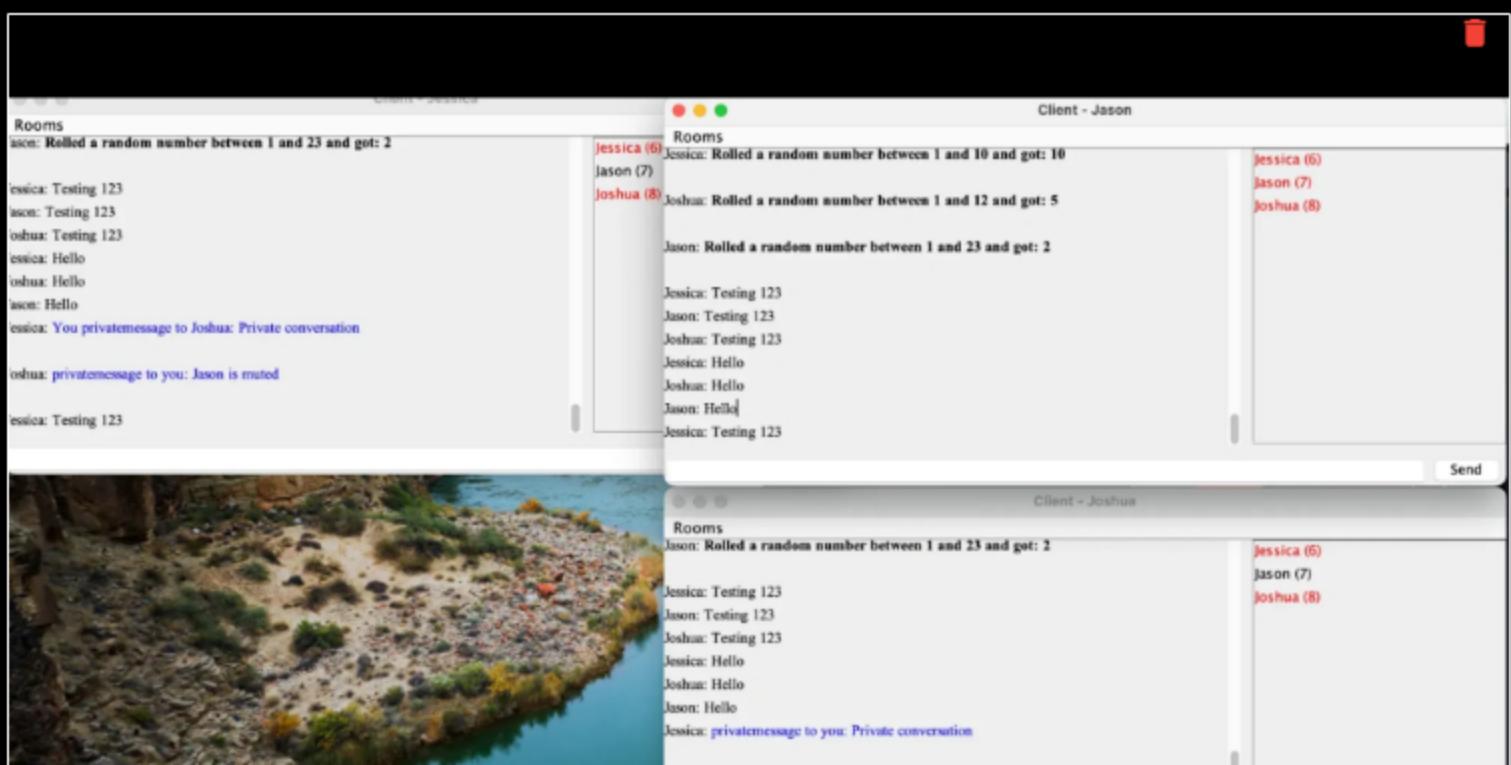
Large

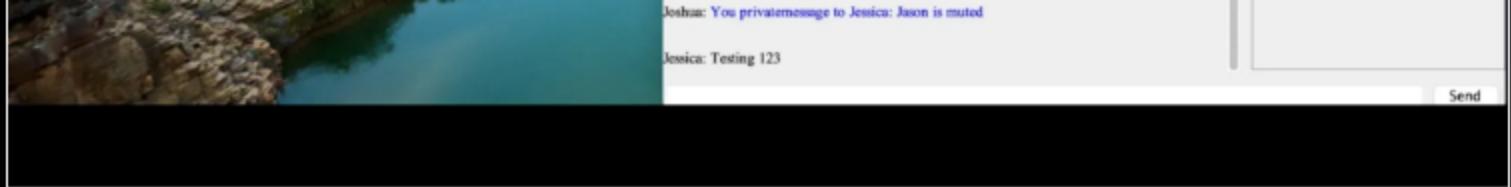


Demo mute

Checklist Items (1)

#2 Demo mute preventing messages between the muter and the target





Demo unMute

Checklist Items (1)

#4 Demo unmute allowing the messages again from the target to the unmuter

Task #2 - Points: 1

Text: Screenshots of the related code

Checklist

*The checkboxes are for your own tracking

#	Points	Details
<input checked="" type="checkbox"/> #1	1	ServerThread should have a list of who they muted
<input checked="" type="checkbox"/> #2	1	ServerThread should expose and add, remove, and is muted check to room
<input checked="" type="checkbox"/> #3	1	Room should handle the mute list when receiving the appropriate payloads
<input checked="" type="checkbox"/> #4	1	Room should check the mute list during send message and private messages
<input checked="" type="checkbox"/> #5	1	Include ucid and date comment
<input checked="" type="checkbox"/> #6	1	Clearly caption screenshots

Task Screenshots:

Gallery Style: Large View

Small Medium Large

```
//UCID: jeo29
//DATE: April 13, 2024
public boolean sendMuteUser(String name){
    Payload p = new Payload();
    p.setPayloadType(PayloadType.MUTE);
    p.setClientName(name);
    return send(p);
} <- #33-38 public boolean sendMuteUser(String name)
public boolean sendUnmuteUser(String name){
    Payload p = new Payload();
    p.setPayloadType(PayloadType.UNMUTE);
    p.setClientName(name);
    return send(p);
} <- #39-44 public boolean sendUnmuteUser(String name)
public boolean isMuted(String name){
    for(String i: muteList){
        if(i.equals(name)){
            return true;
        }
    } <- #46-50 for(String i: muteList)
    return false;
} <- #45-52 public boolean isMuted(String name)
```

```
public void setClientId(long id) {
    myId = id;
}
```

sendMuteUser

Checklist Items (1)

- #1 ServerThread should have a list of who they muted

```
/* #39-44 public boolean sendMuteUser(String name)
public boolean isMuted(String name){
    for(String i: muteList){
        if(i.equals(name)){
            return true;
        }
    } /* #46-50 for(String i: muteList)
    return false;
```

isMuted

Checklist Items (1)

- #1 ServerThread should have a list of who they muted

```
//UCID: jeo29
//DATE: April 13, 2024
case MUTE:
    muteList.add(p.getClientName());
    sendMuteUser(p.getClientName());
    break;
case UNMUTE:
    muteList.remove(p.getClientName());
```

```
    sendUnmuteUser(p.getClientName());
}
break;
default:
    break;
```

Mute/Unmute

Checklist Items (1)

#1 ServerThread should have a list of who they muted

Task #3 - Points: 1

Text: Explain how the mute and unmute logic works in relation to the code

Checklist

*The checkboxes are for your own tracking

#	Points	Details
<input checked="" type="checkbox"/> #1	1	Explain how your mute list is handled
<input checked="" type="checkbox"/> #2	1	Explain how it's handled/processed in send message and private message

Response:

The mute list is handled by three methods in the ServerThread.

- isMuted
- sendUnMuteUser
- sendMuteUser

It is handled/processed in send message and private message.

- The sendMuteUser method adds a client's name to the server-side mute list and sends a payload to the client to inform them that they have been muted.
- The sendUnmuteUser method removes a client's name from the mute list and sends a payload to the client to inform them that they have been unmuted.
- Mute/Unmute Process
- isMuted method checks if the client in the Chatroom is on the mute list, if they are it will respond true, if not of course the opposite will occur, which is false.
- isMuted if the sender is muted by the recipient the message also won't send.

● Misc (1 pt.)

▲COLLAPSE▲

● Task #1 - Points: 1

Text: Add the pull request link for the branch

● Details:

Note: the link should end with /pull/#

URL #1

<https://github.com/jessicaodoom/jeo29-IT114-002/pull/18>

● Task #2 - Points: 1

Text: Talk about any issues or learnings during this assignment

Response:

My first issue of several was that I was not transferring the files properly. I was missing a few files. This was making it difficult for me to be able to even properly continue. I went ahead and deleted all the files and then re-downloaded the zip. I also then was having trouble in which I had to rename the folders from lowercase to uppercase and vice versa to continue with the layout I had already started. Fixing package names and imports is key. Overall, asking questions to professor and messaging him throughout was helpful.

● Task #3 - Points: 1

Text: WakaTime Screenshot

● Details:

Grab a snippet showing the approximate time involved that clearly shows your repository. The duration isn't considered for grading, but there should be some time involved.

Task Screenshots:

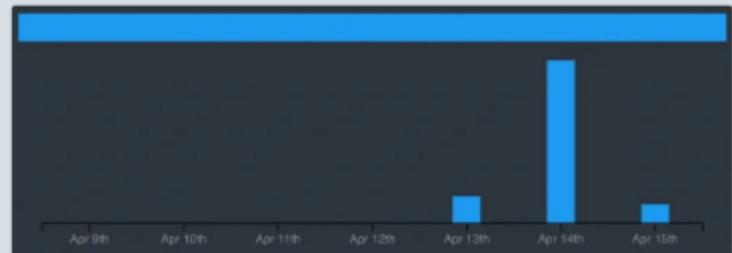
Gallery Style: Large View

Small

Medium

Large

6 hrs 17 mins over the Last 7 Days. [△](#)



WakaTime

End of Assignment