

# Submission Worksheet

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<https://learn.ethereallab.app/assignment/IT114-451-M2024/it114-milestone-2-chatroom-2024-m24/grade/sa2796>

IT114-451-M2024 - [IT114] Milestone 2 Chatroom 2024 (M24)

## Submissions:

Submission Selection

1 Submission [active] 6/29/2024 11:14:17 AM


## Instructions

^ COLLAPSE ^

1. Implement the Milestone 2 features from the project's proposal document:  
<https://docs.google.com/document/d/1ONmvEvel97GTFPGfVwwQC96xSsobbSbk56145XizQG4/view>
2. Make sure you add your ucid/date as code comments where code changes are done
3. All code changes should reach the Milestone2 branch
4. Create a pull request from Milestone2 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: Milestone2

Tasks: 8 Points: 10.00

 Payloads (2 pts.)

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Task #1 - Points: 1

Text: Base Payload Class

### **i** Details:

All code screenshots must have ucid/date visible.

#### #1) Show screenshot of the



#### **Caption (required)** ✓

*Describe/highlight  
what's being shown*

Displaying screenshot of  
the Payload.java with  
UCID and Date

#### **Explanation (required)**



*Briefly explain the  
purpose of each  
property and  
serialization*

**PREVIEW RESPONSE**

The properties in  
Payload.java are "private  
PayloadType  
payloadType;", "private  
long clientId;", "private  
String message;". The  
purpose for the first  
property is it holds the  
types of variables which  
can be connect,  
disconnect, etc. The  
purpose of the second  
property is so it can hold  
a unique identifier for  
the client. The purpose  
for the third property is  
so it can hold the  
message of the payload  
an is a bridge for

#### #2) Show screenshot examples



#### **Caption (required)** ✓

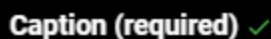
*Describe/highlight  
what's being shown*

Displaying screenshot  
examples of the  
terminal output for base  
Payload objects

As for the serialization, it allows, "Payload" objects to be converted to byte stream and is passed on to a network.

### Text: RollPayload Class

**All code screenshots must have ucid/date visible.**

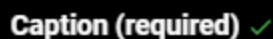


### Displaying screenshot of the RollPayload.java

**Briefly explain the purpose of each property**

rollResult's purpose is it is a private integer field that stores the result of a roll operation. It holds the value that client could send/recieve in payload.

### RollPayload()'s purpose is it



### Displaying screenshot examples of the terminal output for base RollPayload objects

initializes payload type to "ROLL" using the method  
`setPayloadType(PayloadType.ROLL);`

`getRollResult()`: The public method returns the current value of `rollResult`.

`setRollResult(int rollResult)`: This public method sets value of roll result to the provided integer.

## Client Commands (4 pts.)

^COLLAPSE ^

### Task #1 - Points: 1

Text: Roll Command

#### Details:

All code screenshots must have `ucid/date` visible.  
Any output screenshots must have at least 3 connected clients able to see the output.  
All commands must show who triggered it, what they did (specifically) and what the outcome was.

#1) Show the client side code



**Caption (required)** ✓

*Describe/highlight what's being shown*  
Displaying the client side code for `handling /`

**Explanation (required)**



*Briefly explain the logic*

**PREVIEW RESPONSE**

Essentially, the code goes if the text begins

#2) Show the output of a few



**Caption (required)** ✓

*Describe/highlight what's being shown*  
Displaying output of a few examples of `/roll #` (related payload output should be visible)

#3) Show the client side code



**Caption (required)** ✓

*Describe/highlight what's being shown*  
Displaying the client side code for `handling (related payload output should be visible)`

**Explanation (required)**



*Briefly explain the logic*

**PREVIEW RESPONSE**

#4) Show the output of a few



**Caption (required)** ✓

*Describe/highlight what's being shown*  
Displaying the output of a few examples of `/roll #d#`

sees if the text begins with /roll and if it doesn't have "d" it goes to one die and parses numSides. As for handling errors, the code utilizes try-catch to handle NumberFormatException which makes sure only numbers are processed. In the event the input is invalid, an error message is printed.

The code sees if the text begins with /roll and if it has "d" it splits the string to get numDice and numSides. The first part being parsed is numDice while the second part being parsed is numSides.

#### #5) Show the ServerThread



#### Caption (required) ✓

*Describe/highlight what's being shown*  
Displaying the ServerThread code receiving the RollPayload

#### Explanation (required) ✓

*Briefly explain the logic*

PREVIEW RESPONSE

Switch statement sees the type of the payload using "payload.getPayloadType())" "case ROLL" handles the RollPayload types. The method sees if payload is instance of RollPayload to make sure the correct type is processed. Then, the payload is cast to RollPayload and...

#### #6) Show the Room code that



#### Caption (required) ✓

*Describe/highlight what's being shown*  
Displaying the Room code that processes both Rolls and sends the response

#### Explanation (required) ✓

*Briefly explain the logic*

PREVIEW RESPONSE

For handling the roll, it extracts numDice and numSides from RollPayload and generates a random roll and appends every result to the message. It then calls "sendMessage" to showcase the result to the clients in the room.

For the sendMessage method, it makes sure...

RollPayload which has a log message printed to show that RollPayload has been recieved from client.

Finally, the method calls "currentRoom.handleRoll(th rollPayload)" and the hanedRoll method is the one in charge of the logic of processing the roll and showcasing the result to all the clients in the room.

method, it makes sure the message iterates to all clients in room and attempts to send the message to every client. It removes clients from room if message fails to send

## Task #2 - Points: 1

Text: Flip Command

#1) Show the client side code



**Caption (required)** ✓

*Describe/highlight what's being shown*  
Displaying the client side code for handling /

**Explanation (required)**



*Briefly explain the logic*

**PREVIEW RESPONSE**

FlipPayload is created when /flip is detected and the constructor "new FlipPayload()" initializes the payload and sets it to "FLIP" type.

The payload is sent to the server using the

#2) Show the output of a few



**Caption (required)** ✓

*Describe/highlight what's being shown*  
Displaying the output of a few examples of /flip (related payload output should be visible)

the server using the  
send method and the  
method serializes  
payload which sends it  
to the server.

The client gets a printed  
confirmation message  
that shows that  
FlipPayload is sent

```
"System.out.println(TextFX.colorize("Sending  
FlipPayload",  
Color.GREEN));"
```

### Text Formatting (3 pts.)

^COLLAPSE ^

### Task #1 - Points: 1

Text: Text Formatting

#### Details:

All code screenshots must have ucid/date visible.

Any output screenshots must have at least 3 connected clients able to see the output.

Note: Having the user type out html tags is not valid for this feature, instead treat it like WhatsApp, Discord, Markdown, etc

Note: Each text trigger must wrap the text that you want to affect

Note: Slash commands are not an accepted solution, the text must be transformed

Note: You do not need to use the same symbols in the below example, it's just an example, also, the below example doesn't show the "correct" output for colors, I'm leaving the proper conversion up to research on your own.

See proposal for an example.

#### #1) Show the code related to



#### Caption (required) ✓

*Describe/highlight  
what's being shown*  
Displaying the code  
processing special  
characters for bold,

#### #2) Show examples of each:



#### Caption (required) ✓

*Describe/highlight  
what's being shown*  
Displaying examples of  
bold, italic, underline,  
colors (red, green, blue)

italic, underline, colors, and converting them to other characters

and combination of bold, italic, underline and a color

#### Explanation (required)



*Briefly explain how it works and the choices of the placeholder characters and the result characters*

 PREVIEW RESPONSE

Essentially, "processTextEffects" method converts special characters into HTML tags for formatting text.

Asteriks are used for Bold and Italics and is intuitive for users.

Underscores are used for Underlines and is chosen for being simple and distinct from astericks.

Hash is used for colors as it is a simple way to specify colors without utilizing other placeholders.

The method uses expressions to find specific patterns and replace them with HTML tags



Misc (1 pt.)

^COLLAPSE ^



^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/SHUAIB2796/sa2796-IT114-451/pull/10>

^COLLAPSE ^

Task #2 - Points: 1

Text: Talk about any issues or learnings during this assignment

Response:

During this assignment I had trouble with getting the /roll command to work but with the assistance from Lucas I was able to get it to function and run properly. Other than that, I think I did pretty good overall with the /flip and TextFx parts.

^COLLAPSE ^

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

## On VSCODE WakaTime

### Files


1 hr 38 mins	Room.java
1 hr 31 mins	Client.java
54 mins	ServerThread.java
44 mins	Payload.java
20 mins	RollPayload.java
10 mins	PayloadType.java
8 mins	FlipPayload.java
6 mins	TextFX.java
4 mins	BaseServerThread.java
20 secs	ClientData.java
19 secs	ConnectionPayload.java
9 secs	Server.java

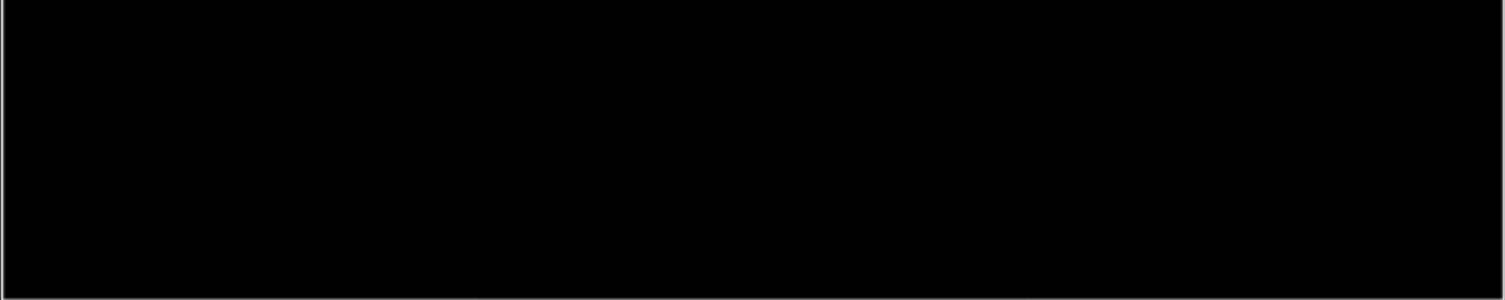
### Branches

5 hrs 38 mins	Milestone2
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## Milestone 2 time and individual file times

Projects • sa2796-IT114-451

**5 hrs 38 mins** over the Last 7 Days in sa2796-IT114-451 under all branches. 



Overall time

End of Assignment