#### Submission Worksheet

**CLICK TO GRADE** 

https://learn.ethereallab.app/assignment/IT114-450-M2024/it114-milestone-2-chatroom-2024-m24/grade/vk686

IT114-450-M2024 - [IT114] Milestone 2 Chatroom 2024 (M24)

#### Submissions:

Submission Selection

1 Submission [active] 7/8/2024 11:31:25 PM

Instructions

^ COLLAPSE ^

- Implement the Milestone 2 features from the project's proposal document: https://docs.google.com/document/d/10NmvEvel97GTFPGfVwwQC96xSsobbSbk56145XizQG4/view
- Make sure you add your ucid/date as code comments where code changes are done
- 3. All code changes should reach the Milestone2 branch
- 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.
- 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
- Complete the pull request that was opened earlier
- Upload the same output PDF to Canvas

Branch name: Milestone2

Tasks: 8 Points: 10.00

Payloads (2 pts.)



Task #1 - Points: 1

Text: Base Payload Class



All code screenshots must have ucid/date visible.

### #1) Show screenshot of the Payload.java







#### Caption (required) <

Describe/highlight what's being shown
Showing screenshot of the Payload.java

#### Explanation (required) ~

Briefly explain the purpose of each property and serialization

#### PREVIEW RESPONSE

When a client wants to send a message to the server, it creates a Payload object with the corresponding payloadType, clientId and message. This object is then serialized into a stream of bytes and sent over the network to the server. The server deserializes the byte stream back into a Payload object, reads the properties, and processes the message accordingly.

# #2) Show screenshot examples of the terminal output for





#### Caption (required) <

Describe/highlight what's being shown
Showing screenshot examples of the terminal output for base Payload objects



Task #2 - Points: 1
Text: RollPayload Class

#### Details:

All code screenshots must have ucid/date visible.

# #1) Show screenshot of the RollPayload.java





#### Caption (required) 🗸

Describe/highlight what's being shown
Showing screenshot of the RollPayload.java

#### Explanation (required) <

Briefly explain the purpose of each property

#### PREVIEW RESPONSE

The RollPayload class is intended for storing all the information about a dice roll order, such as the number of dice, the sides of each die, and the roll's outcome. It extends common properties to the Payload class, such as payloadType and clientId, which help identify and process the payload in the context of a network.

## #2) Show screenshot examples of the terminal output for



- Ross[lubby]: sending message to lubby recipients: )
17/00/2005 22:22:36 [Revige.Liberuer-Serverthread] (000):
- Serverthread(A()): Received from my client: RellEmplosd[RXL] Client in [m] RellEmplosd[RXL] Client in [

#### Caption (required) <

Describe/highlight what's being shown Showing screenshot examples of the terminal output for base RollPayload objects

Client Commands (4 pts.)



Task #1 - Points: 1
Text: Roll Command

#### ①Details:

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 for handling /roll #





#### Caption (required) <

Describe/highlight what's being shown

Showing the client side code for handling /roll #

#### Explanation (required) ~

Briefly explain the logic

PREVIEW RESPONSE

The sendRoll method processes the /roll command and creates a RollPayload object to send to the server.

It supports two formats: /roll # for rolling a single dice with specified sides and /roll #d# for rolling multiple dice.

## #2) Show the output of a few examples of /roll # (related payload





#### Caption (required) ~

Describe/highlight what's being shown

Showing the output of a few examples of /roll #

### #3) Show the client side code for handling /roll #d# (related





#### Caption (required) <

Describe/highlight what's being shown

Showing the client side code for handling /roll #d#

#### Explanation (required) ~

Briefly explain the logic

PREVIEW RESPONSE

The sendRoll method processes the /roll command and creates a RollPayload object to send to the server.

It supports two formats: /roll # for rolling a single dice with specified sides and /roll #d# for rolling multiple dice.

#### #4) Show the output of a few examples of /roll #d#



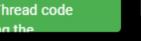


#### Caption (required) <

Describe/highlight what's being shown

Showing the output of a few examples of /roll #d#

### #5) Show the ServerThread code



0



#### Caption (required) <

Describe/highlight what's being shown

Showing the ServerThread code receiving the RollPayload

#### Explanation (required) <

#6) Show the Room code that processes both Polls and sends





#### Caption (required) <

Describe/highlight what's being shown

Showing the Room code that processes both Rolls and sends Briefly explain the logic

PREVIEW RESPONSE

handleRollPayload(RollPayload rollPayload)

This method processes the roll command from the client. It retrieves the number of dice and sides per die from the RollPayload. It calls the rollDice method to simulate rolling the dice and sets the result in the RollPayload. Depending on the number of dice, it formats a result message and sends it to the current room.

the response

Explanation (required) < Briefly explain the logic

PREVIEW RESPONSE

These methods ensure that the roll and flip commands from the clients are processed on the server side, and the results are sent back to all clients in the room.



Task #2 - Points: 1 **Text: Flip Command** 

#### #1) Show the client side code for handling /flip



(related navload



#### Caption (required) <



Describe/highlight what's being shown

Showing the client side code for handling /flip

#### Explanation (required) <

Briefly explain the logic



The sendFlip method sends a flip command to the server.

### #2) Show the output of a few examples of /flip



#### Caption (required) <

Describe/highlight what's being shown Showing the output of a few examples of /flip



#### 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 processing the special characters





#### Caption (required) <

Describe/highlight what's being shown

Show the code related to processing the special characters for bold, italic, underline, and colors, and converting them to other

#### Explanation (required) <

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

#### PREVIEW RESPONSE

The TextFX.java class is a utility class responsible for formatting text. It contains methods to convert placeholder characters into HTML-like tags that represent bold, italic, underline, and colors.

# #2) Show examples of each: bold, italic,





#### Caption (required) 🗸

Describe/highlight what's being shown

Show examples of each feature



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/VK686NJ/vk686-IT114-450/pull/11



Task #2 - Points: 1

Text: Talk about any issues or learnings during this assignment

#### Response:

One of the main challenges was managing the complexity of command processing within the chat server. The implementation of commands such as coin tosses, dice rolls, and text formatting required careful logic to ensure correct functionality. I also caused problems understanding the payload, how to send it back and forth, and what to send. I watched all the lectures to find out how it works.



Task #3 - Points: 1

Text: WakaTime Screenshot



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

Sma	all Medium	La	irge	
1 hr 35 mins 1 hr 12 mins 50 mins 90 mins 36 mins 32 mins 21 mins	Hes  Project/Client/Client.java  _ct/Server/Server/Inread.java  Project/Common/TextFX,java  Project/Common/Payload.java  Project/Common/RollPayload.java  _ect/Common/RollPayload.java  Project/Server/Server.java  Project/Server/Server.java	Bro 5 hrs 41 mins	Miestone2 Miestone2-Prep	•
13 mins 8 mins	server-0.log Project/sources.txt Project/ServerThread.java			



#### Detailed view

