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CS5800.01
14 April 2024

<u>Homework 6</u>

https://github.com/mvernon-cpp/CS5800-HW6

Printout of code is after screenshots.

```
"C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\
Registered user Amanda
Registered user Alice
Registered user Bob
Registered user Eve
Registered user John
Users can send messages to one or more other users through the chat server.
========================================================
Sending messages to users...
Amanda: Message received!
Alice: Message received!
Bob: Message received!
Eve: Message received!
John: Message received!
Sending messages to users...
Amanda: Message received!
Alice: Message received!
Bob: Message received!
Eve: Message received!
John: Message received!
Sending messages to users...
Alice: Message received!
Amanda: Message received!
Bob: Message received!
Eve: Message received!
John: Message received!
```

```
Users can block messages from specific users using the Mediator design pattern.
===========================================================
Blocked user Alice
Sending messages to users...
Eve: Message received!
Amanda: Message received!
Bob: Message received!
User is blocked from receiving messages.
John: Message received!
Sending messages to users...
Eve: Message received!
Amanda: Message received!
Bob: Message received!
User is blocked from receiving messages.
John: Message received!
```

```
Users can undo the last message they sent using the Memento design pattern.
===========================================================
********Save message memento********
Messages backed up successfully!


***************
message memento state
***************
<Eve>    [15:55:21]  I'm free both days.
<Eve>    [15:55:12]  I blocked them from the chat.
<Alice> [15:49:52]  I'm not available this weekend. Remove me please, thank you.
<Amanda>    [15:47:25]  Let's do something fun!
<Amanda>    [15:47:14]  Hey guys, anyone want to hangout this weekend?

<Eve>    [15:55:21]  I'm free both days.
<Eve>    [15:55:12]  I blocked them from the chat.
<Alice> [15:49:52]  I'm not available this weekend. Remove me please, thank you.
<Amanda>    [15:47:25]  Let's do something fun!
<Amanda>    [15:47:14]  Hey guys, anyone want to hangout this weekend?

Sending messages to users...
Eve: Message received!
Amanda: Message received!
Bob: Message received!
User is blocked from receiving messages.
John: Message received!
Last message undone!
```

```
***************
message memento state
***************
<Eve>   [15:55:25]  We should go bowling.
<Eve>   [15:55:21]  I'm free both days.
<Eve>   [15:55:12]  I blocked them from the chat.
<Alice> [15:49:52]  I'm not available this weekend. Remove me please, thank you.
<Amanda>    [15:47:25]  Let's do something fun!
<Amanda>    [15:47:14]  Hey guys, anyone want to hangout this weekend?


<Eve>   [15:55:25]  We should go bowling.
<Eve>   [15:55:21]  I'm free both days.
<Eve>   [15:55:12]  I blocked them from the chat.
<Alice> [15:49:52]  I'm not available this weekend. Remove me please, thank you.
<Amanda>    [15:47:25]  Let's do something fun!
<Amanda>    [15:47:14]  Hey guys, anyone want to hangout this weekend?


Sending messages to users...
Eve: Message received!
Amanda: Message received!
Bob: Message received!
User is blocked from receiving messages.
John: Message received!
```

```
Users can receive messages from other users and view the chat history for a specific user.
==============================================================

Getting entire chat history of user person5...
<Eve>   [15:55:25]  We should go roller skating.
<Eve>   [15:55:25]  We should go bowling.
<Eve>   [15:55:21]  I'm free both days.
<Eve>   [15:55:12]  I blocked them from the chat.
<Alice> [15:49:52]  I'm not available this weekend. Remove me please, thank you.
<Amanda>    [15:47:25]  Let's do something fun!
<Amanda>    [15:47:14]  Hey guys, anyone want to hangout this weekend?



Getting chat history of person5 from person1...
<Amanda>    [15:47:25]  Let's do something fun!
<Amanda>    [15:47:14]  Hey guys, anyone want to hangout this weekend?

Users can iterate through previous sent messages from a specified user.
==============================================================
<Amanda>    [15:47:25]  Let's do something fun!
<Amanda>    [15:47:14]  Hey guys, anyone want to hangout this weekend?


Process finished with exit code 0
```