

Ali Geniş - 21901793

Berk Saltuk Yılmaz - 21903419

CS421-1

Programming Assignment 1

Experiments done in macOS with VSCode. We tried a simple scenario where Star Wars fan encounters with an normal person during online text editor. In our scenario firstly as you can see both users log in to the editor. Then first user which is Star Wars fan types “hello there”. Then the other user tries to type normal “hi” message but he is not up to date on versions so he could not. Then second user updates the program and now he can append “hi again” message. First users sees that and he got angry that the second user don’t know this epic scene. He uses write command to change specific line which contains “hi again”. He chooses the appropriate line number and writes “general kenobi”. Then the second user understand that he made a mistake and append some silly reference to the Star Wars. Then they both log out using “EXIT”. There were multiple version conflicts while that simultaneous dialog happening but they overcome that problem with using “UPDT - Update” menu option. You can see the whole action in the screenshot of the three command lines in the page below. The left most is the server, the middle one is the first user which is Star Wars fan, the rightmost one is the second user.

You can see in the server side there are some silly commands which is “WRTE asd” that weren’t send by a user. This command send by an our program in order to get the version number. Every time menu shows up we run that command to ensure that we use the correct version number while transforming our user input to the commands that server can understand.

PROBLEMS2OUTPUTDEBUG CONSOLETERMINALJUPYTER

aligenis@Ali-MacBook-Air-4 CS421_PA1_Fall2022 % python3 Server.py 127.0.0.1 60000

TextEditor Server : Waiting for connections...

Client connected.

TextEditor Server : Waiting for connections...

Command received: USER bilkentstu

Command received: PASS cs421f2022

Command received: WRTE asd

Client connected.

TextEditor Server : Waiting for connections...

Command received: USER bilkentstu

Command received: PASS cs421f2022

Command received: WRTE asd

Command received: APND 0 hello there

Command received: WRTE asd

Command received: APND 0 hi

Command received: WRTE asd

Command received: UPDT 1

Command received: WRTE asd

Command received: APND 1 hi again

Command received: WRTE asd

Command received: WRTE 1 1 general kenobi

Command received: WRTE asd

Command received: UPDT 2

Command received: WRTE asd

Command received: WRTE 2 1 general kenobi

Command received: WRTE asd

Command received: APND 3 this was the right answer

Command received: WRTE asd

Command received: APND 2 oh you are the chosen one

Command received: WRTE asd

Command received: UPDT 4

Command received: WRTE asd

Command received: APND 4 oh you are the choosen one

Command received: WRTE asd

Server shutdown. Please fix your code according to the response message and retry.

Command received:

Server shutdown. Please fix your code according to the response message and retry.

aligenis@Ali-MacBook-Air-4 CS421_PA1_Fall2022 % java TextEditor 127.0.0.1 60000

\$ Connected to the server at port 60000

\$ Enter your username:

bilkentstu

\$ Password for bilkentstu:

cs421f2022

\$ Authentication is completed.

Select an option:

WRTE - Write

APND - Append

UPDT - Update

EXIT

\$ Waiting for commands:

APND

Enter the text: hello there

\$ Append operation is successful.

Select an option:

WRTE - Write

APND - Append

UPDT - Update

EXIT

\$ Waiting for commands:

WRTE

Enter the line no: 1

Enter the text: general kenobi

\$ Version Conflict! The current version: 2 please run UPDT command.

Select an option:

WRTE - Write

APND - Append

UPDT - Update

EXIT

\$ Waiting for commands:

UPDT

\$ You are up to date.

Select an option:

WRTE - Write

APND - Append

UPDT - Update

EXIT

\$ Waiting for commands:

WRTE

Enter the line no: 1

Enter the text: general kenobi

\$ Write operation is successful.

Select an option:

WRTE - Write

APND - Append

UPDT - Update

EXIT

\$ Waiting for commands:

APND

Enter the text: this was the right answer

\$ Append operation is successful.

Select an option:

WRTE - Write

APND - Append

UPDT - Update

EXIT

\$ Waiting for commands:

EXIT

\$ Terminating...

aligenis@Ali-MacBook-Air-4 CS421_PA1_Fall2022 %

aligenis@Ali-MacBook-Air-4 CS421_PA1_Fall2022 % java TextEditor 127.0.0.1 60000

\$ Connected to the server at port 60000

\$ Enter your username:

bilkentstu

\$ Password for bilkentstu:

cs421f2022

\$ Authentication is completed.

Select an option:

WRTE - Write

APND - Append

UPDT - Update

EXIT

\$ Waiting for commands:

APND

Enter the text: hi

\$ Version Conflict! The current version: 1 please run UPDT command.

Select an option:

WRTE - Write

APND - Append

UPDT - Update

EXIT

\$ Waiting for commands:

UPDT

\$ You are up to date.

Select an option:

WRTE - Write

APND - Append

UPDT - Update

EXIT

\$ Waiting for commands:

APND

Enter the text: hi again

\$ Append operation is successful.

Select an option:

WRTE - Write

APND - Append

UPDT - Update

EXIT

\$ Waiting for commands:

UPDT

\$ You are up to date.

Select an option:

WRTE - Write

APND - Append

UPDT - Update

EXIT

\$ Waiting for commands:

APND

Enter the text: oh you are the chosen one

\$ Version Conflict! The current version: 4 please run UPDT command.

Select an option:

WRTE - Write

APND - Append

UPDT - Update

EXIT

\$ Waiting for commands:

UPDT

\$ You are up to date.

Select an option:

WRTE - Write

APND - Append

UPDT - Update

EXIT

\$ Waiting for commands:

APND

Enter the text: oh you are the choosen one

\$ Append operation is successful.

Select an option:

WRTE - Write

APND - Append

UPDT - Update

EXIT

\$ Waiting for commands:

EXIT

\$ Terminating...

aligenis@Ali-MacBook-Air-4 CS421_PA1_Fall2022 %

Python...

zsh CS4...

zsh CS4...

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