**Memo: README**

I built the project using IntelliJ so I’m not sure whether it works in Eclipse.

Diagram

Description automatically generated

The project has the three-tiered data system structure as I mentioned on the updated final project proposal. To use the database, I’ve already included the latest version of Sqlite JDBC Driver inside the project zip file and added to the project. I’ve also had some data stored in the database (which can be observed using terminal), which are the memos I created when building the project.

Before starting using the memo, please open **CreateDB.java** inside package Database and change the path (originally /Users/siyaguo/Desktop/MemoDatabase/ at line 10) of database to a local path on your computer where you would like to store the database. The database is named as “editedContents.db" as you can see at line 23. Then please open **CreateTable.java** inside package Database and change the url ("jdbc:sqlite:/Users/siyaguo/Desktop/MemoDatabase/editedContents.db")

at line 10 as well. The table in the database is named as “memos " as you can see at line 30. Please also change the url in **Connect.java** inside package Database as well.

After basic setup, you can use the application with following steps.

First, run the MultiThreadServer to ensure it’s listening for incoming connections.

Then you can run either EditingUI.java or MemoDisplayUI.java, which are clients. (However, these two GUI are dependent so it’s best to avoid compiling using “javac”.)

On MemoDisplayUI (this JFrame has name “All Memos”), if the server isn’t running, the textarea would display a warning message. Otherwise, it would display all the memos titles previously stored in the database. To select an existed specific memo, type the title of this memo into the textbox and press Enter, then click the “Open” button to open this memo. If the typed title doesn’t match any in the database, the application would quit automatically. You can also choose to create a new memo or exit the application from the “File” menu on top left corner.

On EditingUI (this JFrame has name “Memo”), several functions could be implemented.

To save the memo into database, both title and content need to be saved. For the title part, please type the title into the textbox and hit Enter, then press “Confirm” button. For the content part, you could choose to use “Save” from the “File” menu or use cmd + S if you’re a MAC user. The client would send output stream containing these data to the client. Only if both parts are saved can this server insert this piece of new data into the table in the database. When current memo is saved, MemoDisplayUI would pop up automatically, displaying updated list of all memos.

From “File” menu, you can create another new memo, open the GUI displaying all memos, save current menu and exit the application.

From “Edit” menu, some basic functions of text editing can be implemented. Note that undo / redo works best when you try to cut / copy / paste / delete selected text in the textarea. If undo typing without doing so, the whole textarea would be erased. But generally these functions work fine.

From “Font” menu, you can change the style of the overall contents of the current memo.

Thank you for taking your precious time to read the instructions and run my application, please contact me if you have trouble running the project on your computer.