List of Model Classes: HCS Group

1. **LoginServer**: This class is just the initial login connecting to the server for the collaborative editing tool.
2. **ConnectToServer**: In this class, this is where we actually connect to the server. This is the incoming server command to obtain connectivity.
3. **LoginWindow**: This is a class for logging in and creating a new user. This class also has the functionality to retrieve a forgotten password and also shows the profile of a user. LoginWindow has an aggregation to user, but can exist independently.
4. **User**: This is the class where a user’s profile exists. This contains a username, password, and all documents associated with the user’s account. It interacts with Document, ChatServer and LoginWindow.
5. **Text Editor**: This class is all the different functions that allow the user to manipulate and change style of texts. Some features include, bold, italic, select all, color, font type, size, etc. This interacts with Document and the revisions interact with the documents.
6. **Document**: This is a class that interacts with the user and creates an initial document under their profile allowing the user to edit using text editor and let revisions exist.
7. **RevisionList**: This is a list of the revisions made by a given user. This can be updated by the way we choose to do so whether it be a timer based or physical editing by bold, italics, etc.
8. **Revisions**: This class records the revisions made. These are the things that are changed by a user and labeled as to who did these revisions.
9. **MainText**: This class is the area/layout that document is edited. Basically the white space we see in the middle of the GUI.
10. **ChatServer**: This class is a server that is private for the chat only, may be in a separate pop up, but we are still seeing whether we want to build it into the original GUI. This may be a bit challenging, so we may have to have it be built into a separate window where a user can login.
11. **ToolBar**: This class interacts with the text editor and has the features built into this toolbar of bold, italics, size, type of font, etc.
12. **GUIBuilder**: This is the class where the initial GUI is set up and inherits the traits of what the text editor may do and much more.
13. **RevisionElement**: This is the part of the document that has been edited (content).
14. **RevisionAtTime**: This is the revision done at real time and updated with a username as well as the real time of when it was edited and it inherits the RevisionElement to see what has been edited.
15. **MainWindow**: This is the main window for the entire program that is connected to the GUI that has functionality to edit, etc.
16. **ChatClient**: This is the class that has the client that operates the users interactions between the chats.
17. **ChatPanel**: This is the chat panel that has the functions to talk to different users and give input through a text box and send messages.
18. **MenuBar**: This is the main bar at the top of the GUI that has the “File”, “Edit”, and “About” buttons that are the main parts of the outside MenuBar. The file contains things like save, save as, import and export. The edit has the ideas of copy, cut, paste, and select all. The about section has our group name as well as our names.
19. **AddMessage**: This is where you write the texts that you choose to display to other users that are editing the same document. This is where we hope to send the messages that would let messages go through the chat client and chat panel.
20. **DisconnectChat**: This is the class that lets you disconnect the chat server and leave that area.
21. **<<Command>>**: This is an abstract class that is one of the main components of the connectivity.
22. **UpdateChatClient**: This is the class that updates the chat area and shows what users are saying and displays in the chat panel.