Requirements Specification

My Object Oriented Programming project is a music player.

Overview of how this project works

* The user must press the load files button and select an mp3 file from the computer
* The user must do this for each file they want to play
* These files will each be added to the playlist
* The user must then press the play/> button, which then plays the songs in order
* To go forward one song the user must press the next/>> button and similarly to go back they must press the back/<< button
* To stop the current song the user must press the stop/|| button

The MusicPlayer.fxml handles creating all elements of the GUI. It positions these elements according to an x and y axis, gives them a height and width, an ID and JavaFX CSS styling.

The MusicPlayer class has a start and main method. The start method gets the MusicPlayer.fxml file and loads the elements within. It is also in charge of setting a title, width and height of the window and displays the GUI according to the fxml. The main method launches the application.

The MusicPlayerController class creates several variables and defines the GUI elements such as buttons so that we can use them in the code later. The onClickLoader methodkeeps track of the counter variable and passes the variable into the setPlaylist metod in the Playlist class. It then increments the counter by 1. It also sets the text for the TextArea with the return value of the fillTextArea method from the WriteMusicFile class. The onClickPlay method stores the playlist returned from the getPlaylist method from the Playlist class. It also creates a new media playe, begins playing, sends the array of songs played to the writeToFile method in the WriteMusicFiles class and moving the slider along with the media player. The onClickNext increments the playlist index by 1 in order to play the next song and contains another slider method. The onClickBack decrements the playlist index to get the previous song and contains another slider method. The onMouse method sets musicTime to the value of the current slider position after the slider has been dragged. The onClickStop stops the media player.

The Playlist class contains two methods. The setPlaylist method takes in the counter mentioned above and lets the user choose an mp3 file from the file chooser and adds it to the array at the index given by the counter. The getPlaylist returns the arraylist when called.

The WriteMusicFiles class contains two methods. The writeToFile method takes in the list of songs played and writes them to the playlistHistory.txt file. The fillTextArea method reads in the playlistHistory.txt and adds each new line into a variable which is returned when calledsss













