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CSC 33200 – Extra Credit proposal

A real-time shared music player between two users. Both users have the same permissions in terms of skipping to the next song or going back to the previous song. Total two processes will be used.

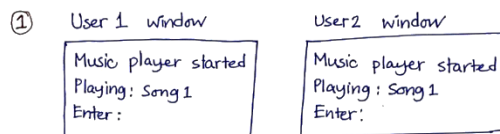
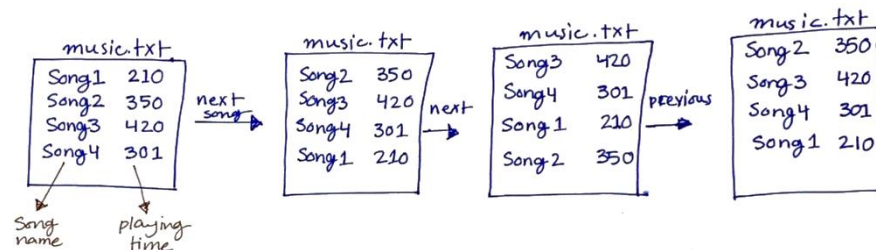
How the Music player works:

- It consists of 15 songs.
- Users can perform only two jobs:
 - o Skipping to the next song
 - o Going back to the previous song
- If a song is finished playing and none of the users entered any commands to change songs, then it will be automatically changed to the next song.
- Whenever there is a change of songs in the music_player, the information is updated to both users at the same time.

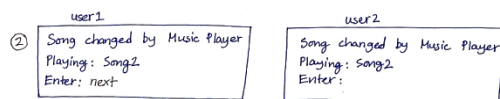
I will create a **server.c** file for the media player and a **client.c** file for the users. The same file will be used for both users. To create two users two terminals will be used. Each user will send messages to server using terminal, in case he has a command to run (skip to the next song or go back to the previous song). The server also will be able to handle race conditions.

For simplicity, all playlist data will be stored in a text file “**playlist.txt**” (shared data).

A rough sketch of how the **music.txt** file can be used:



case-1: both players listened to the whole song. So after 210 secs the next song will be started (changed by music_player)



case-2: while listening to Song2, user1 changed to the next song. It will update the info screen for both users in the next step.



case-3: while listening to Song3, user2 changed to the previous song. It will update the info screen for both users in the next step.



case-4: while listening to Song2, no users have entered any commands.