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CSCI 290

Task 1

For task 1, I added several sections to the songs class to store and manage song data. I first started by adding three private instance variables, which are artist, title, and lyrics, near the top of the class. These lines help the song file to hold data while keeping it protected from easy access. I then added the constructor which takes the three values as parameters and assigns them to the variables. This makes it possible to create Song objects when reading sond data from the file.

After I added getter methods such as getArtist() and others. These methods will return the values of the private lines so other classes can use the song information. We also implements toString() method which formats the song output like this: ARTIST, “TITLE”. Lastly, I added compareTo() method to compare songs in alphabetical order by artist first and then by title. I added comments on my file to highlight which task was worked on ///task 1 //task2 etc. So far no bug :)

Output:
total songs: 7
Brian Dill, "Ode to Bobby B"
Mildred Hill and Patty Hill, "Happy Birthday To You"
Mildred Hill and Patty Hill, "Happy Birthday To You"
Professor B, "Debugger Love"
Professor B, "Small Steps"
unknown, "Pop Goes The Weasel"
unknown, "Rockabye Baby"

Task 2

For Task 2, I fully finished songcllection file by adding lines to read song data from the shortsong text file and store it in an array of song objects. Inside the constructor, I used Scanner with quotation as delimiters to extract the artist, title and lyrics for each song. After all songs were read, the ArrayList is converted into Song[] array and sorted using Arrays.sort() that relies on compareTO() method used in the song class.

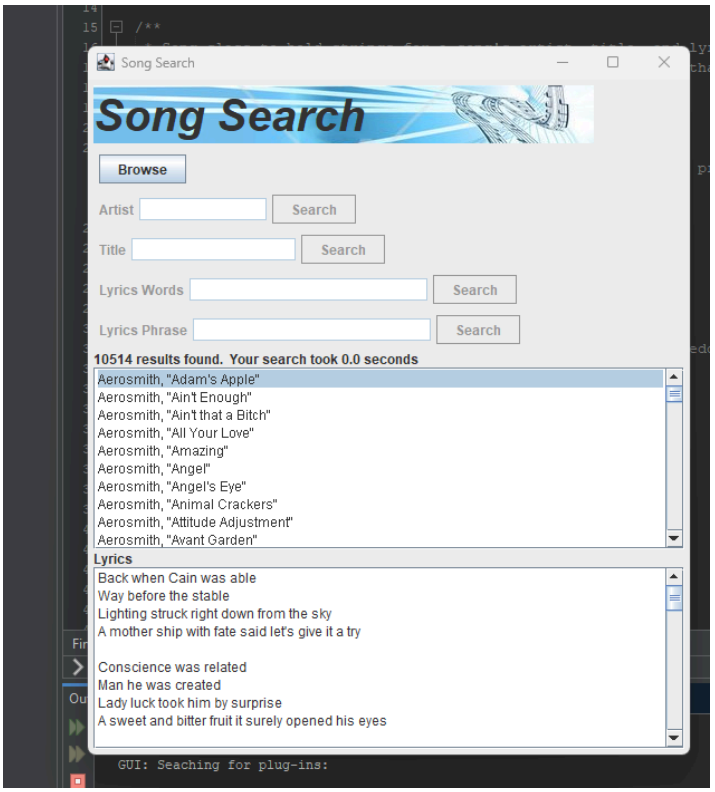
While testing, I ran into a couple of small issues where the output displayed NoSuchElement error or zero songs returned. I believe this was happening because the scammer tried to read past the end of the text file, and a simple if statement inside the loop checks for a token to

exist before calling next(), which solved it. The GUI successfully displays song information, confirming that the code integrates correctly with the provided interface.

3 **Output**:

total songs: 10514
Aerosmith, "Adam's Apple"
Aerosmith, "Ain't Enough"
Aerosmith, "Ain't that a Bitch"
Aerosmith, "All Your Love"
Aerosmith, "Amazing"
Aerosmith, "Angel"
Aerosmith, "Angel's Eye"
Aerosmith, "Animal Crackers"
Aerosmith, "Attitude Adjustment"
Aerosmith, "Avant Garden"
BUILD SUCCESSFUL (total time: 0 seconds)

4.



5. Code tested and no bugs found!