

public class MusicOrganizer

Create String 2D array called library

Public MusicOrganizer ()

- Make variable (albums) that stores how many spaces there are (will help find how many albums their are)
- Try catch (read into text file ("musiclibrary.txt"))
  - Create variable line
  - While nextLine() not null
    - Check to see if line is empty using .isEmpty
      - If is then albums
- Initialize 2D array with library[albums][7];
- Try catch again into text file
  - Create String line, int row, int col;
    - While row < library.length
      - Check to see if row is !null
        - If not then
          - String details = line.split(": ") (This will allow us to gather the information without storing the pre details
          - Store details into library[row][col]
          - Col++
        - else
          - Row++
          - Col = 0
      - If null break

Boolean printToConsole ()

- For loop until i reaches albums.length
  - Print library[i][0], Print library[i][1], Print library[i][2], Print library[i][3], Print library[i][4], Print library[i][5], Print library[i][6]
- Return true

Boolean printToNewFile(String file, String text (you will see why later))

- First check to see if the text contains "Could Not Find"
  - If does return false
- Try catch write into file given in parameter
  - If text does not equal "" (you will see why later)
    - writer.write(text);
    - Return true
  - For loop through the library array
    - writer.write() than writer.newLine() each at [i][0], [i][1], etc.
    - Check to see if i is not equal to library.length - 1
      - If not then writer.newLine() twice
      - This is so their is spacing in between albums, but if it is the last album no spacing
- Return true

Boolean addNewAlbum (take in all needed details, ex. Artist, album, peak, etc.)

- For loop through library
  - Check to library[i][0] equals artist && library[i][1] equals album
    - If does return false
- Create temp2DArray with row size one bigger [library.length + 1][7]
- For loop through library array
  - Set each element into temp array from library array
    - Temp[i][0] = library[i][0], etc.
- Set library array to tempArray meaning last row is null
  - Set [library.length - 1][0], [library.length - 1][1], etc to given parameters
- Try catch writer into musiclibrary.txt
  - newLine()
  - .write("Artist: " + artist);
  - .write("Album: " + album);
  - Etc
  - Close writer
  - Return true

String updateReview(String album, String review)

- Make boolean wentIn = false; this will show if the album given exists
  - Loop through library array to see if [i][1] equals album given
    - If does then replace review with review given
    - Make wentIn true
- Check to see if went in
  - If not then return "did not find album";
- Return changed album name

String findArtist(String artist, String album)

- Make String text variable
- Check to see if album equals "" - you will see why later
- If does then
  - Loop through library array
    - If library[i][0] equals artist
      - Text += "Artist: " + library[i][0] + \n
      - Text += "Album: " + library[i][1] + \n
      - Etc
- If does not then
  - Loop through library array
    - If library [i][0] equals artist and library[i][1] equals album
    - Text += "Artist: " + library[i][0] + \n
    - Text += "Album: " + library[i][1] + \n
    - Etc
    - Return text
- Check to see the length of text equals 0
  - Return "no album found"
- Return .substring(0, text.length - 2)

## Main

- Make MusicOrganizer class
- Boolean object stay = true
- scanner object made
- While (stay)
  - Print what the user would like to do
    - Show options
  - Get input
  - If 0
    - Stay = false
  - If 1
    - Print musicOrganizer.printToConsole()
  - If 2
    - Ask what the file name should be
    - Call musicOrganizer.printToNewFile(userInput, "") (this means that all the text albums should be printed out))
  - If 3
    - Ask for all details of album
    - Get the input
    - Eg. What artist?album name?, etc.
    - Call .addNewAlbum(all gathered input here)
    - If return false then tell user that album already exists
    - Else success
  - If 4
    - Ask for name of the artist
      - Ask for specific or all albums with the artist
      - If specific
        - Ask for name of album
        - Ask if they would like to print to console or file
        - If console
          - Print (call .findArtist(input given, input given)
        - If file
          - Ask for file name
          - Call .printToNewFile(fileName, call .findArtist(given info)
          - If .print return false say could not find else success
      - If not specific
        - Ask if they would like to print to console or file
        - If console
          - Print (call .findArtist(input given,"" means all of the albums)
        - If file
          - Ask for file name
          - Call .printToNewFile(fileName, call .findArtist(given info)
          - If .print return false say could not find else success
  - If 5
    - Ask what album to review
    - Ask what review of album is

- Print .updateReview
- else
  - Print not a choice
- Call .printToNewFile("musiclibrary.txt", "") (this means that all the changes the user makes goes into the album)

#### Colors

- Quit -White
- Print - Green
- Different File - Magenta
- New Album - Blue
- Artist - Cyan
- Review - Yellow

#### Test

- Before each test make new initialized object
- First test is to see if .printToConsole() return true
- Second is to see if .printToNewFile() returns false as second parameter states that "Could Not find album Pink Tape"
- Third is to see if .addNewAlbum that is already in the library returns false
- Fourth is to see if .updateReview returns "Did not find album" as parameters are "UtopiaS", "Very Good Album"
- Fifth is to see if Artist was correctly found and proper text returned