ASSIGNMENT 8 20 Points CIS 255

1. In **Chapter 17**, do the following exercises:
   Self-Review Exercises 17.1-17.5
   In **Chapter 19**, do the following exercises:
   Self-Review Exercises 19.1-19.4

The above listed exercises are NOT to be handed in.

For all programming assignments, your name MUST appear in each file: First, in the comments at the top of your code; and **second**, in your output. For example, in the window's title bar you can say "Programmed by Your Full Name". Failure to do this will result in the loss of 2 points.

At the top of every file this semester you MUST place the following:

```
// Your Full Name
// Your Email @my.smccd.edu
// CIS 255 HJ
// Class Name
// Class Description
// Assignment #
// Date
```

- **Create Javadoc comments for the MP3 class and generate the Javadoc files.**

- **Create a UML class diagram for the MP3 class.**

- **Enable the buttons in the MP3Manager class. In the actionPerformed method, check which button is the event's source and call a method to perform that task. The actionPerformed method should be very short.**

- **The first button is used to add (append) a record to a text file containing MP3 records. When an MP3 is added to the file, all text fields should be cleared and the new record entered should be displayed by itself in the text area: If a field is missing inform the user. Add AT LEAST SIX MP3 records. The data must be written to the text file using a ":" as a separator:**
  The Clash:Know Your Rights:Combat Rock:219

- **The second button displays all MP3 records from the file sorted by artist name. Store the MP3s in an ArrayList. The MP3 records should be displayed in sorted order by artist name using a sort method that is modified to work with MP3 objects. You should use the String compareTo method to compare the MP3 artist names for sorting. You should call the MP3 class toString method to display the MP3 records.**
  The Clash | Know Your Rights | Combat Rock | 3:39

- **The third button will find and display a record if the user enters the song name. If the song cannot be found then inform the user, displaying the message in the textarea.**

- **The delete button will delete a record from the file based on the song name. Read the file data into an ArrayList of type MP3. If the record to delete is found, do not place it in the ArrayList. After the records have been read in, close the file. If the song to be deleted was found, use a Yes/No dialog box to confirm the delete. If the user confirms the delete operation, reopen the file in write mode and write the records back into the file. If the user decides not to delete the song, discard the ArrayList. If the record was not found, inform the user (using the textarea) and discard the ArrayList. Do not show the Yes/No dialog box if the song was not found.**

  Note that it is possible to have duplicate songs by different artists. You can stop at the first matching song found.

- **Use must use exception handling for all file I/O and for any other possible exceptions.**

- **You should NOT leave the data file open. Open it ONLY when you need to access the data and close it immediately when you are finished.**

You will submit all .java and .class files (8 files total - including ONE inner class file and the text file of MP3 data). Be sure to test your program thoroughly.

SUBMIT: All files must be compressed into a single zipped file named assign8.zip and uploaded to WebAccess. Find the week that the assignment is due and click on the assignment upload link. Make sure that I receive ALL FILES as I am not able to grade incomplete assignments. You must submit a printout of all files and the UML class diagram. All assignments are due at 5:00 PM on the due date.

An easy way to zip in Windows is to right-click on your file and then choose Send To-> Compressed (zipped) Folder

On a Mac follow these instructions to zip your files:
http://www.macinstruct.com/node/159

Upload the assign8.zip file to the upload link in WebAccess by the due date/time.
http://smccd.mrooms.net


MP3 Manager Your Name
Artist Name
Song Title
Album Name
Track Length (in seconds)
Add MP3
Display MP3s
Find MP3
Delete MP3
Bad Brains, Roll On, Build a Nation, 2:25
Erma Franklin, Piece of My Heart, Golden Classics, 2:15
Nick Drake, Saturday Sun, Five Leaves Left, 4:00
Son de la Frontera, Tanguillos de la Frontera, Cal, 5:05
Taj Mahal, Diving Duck Blues, Taj Mahal, 4:10
The Clash, White Riot, The Clash, 3:44