Programmed the database in Java using JDBC:

Brief explanation on how to compile and run the code in NetBeans on Windows Platform:

1. Download the zip file , extract the file to get the Report, sql file and the zipped Netbeans project called PlayList.
2. Extract the PlayList project from the zip file PlayList.zip
3. Open NetBeans, Go to file> Open Project> Go to the directory where the PlayList project is extracted.
4. Once the project is opened, Click on Run to compile and run the project
5. Go to the output window to check the result
6. Wait for the project to print out all the values as it drops the tables,and insert the values.
7. Soon a section of question will appear and will wait for user input
8. The input command line should be numeric from 1 to 10 one at a time for each respective 10 queries and when the user wants to exit the application, the input command should be "exit".

Some key aspects on how the database was connected and made to work in Netbeans

How the project looks on Netbeans:

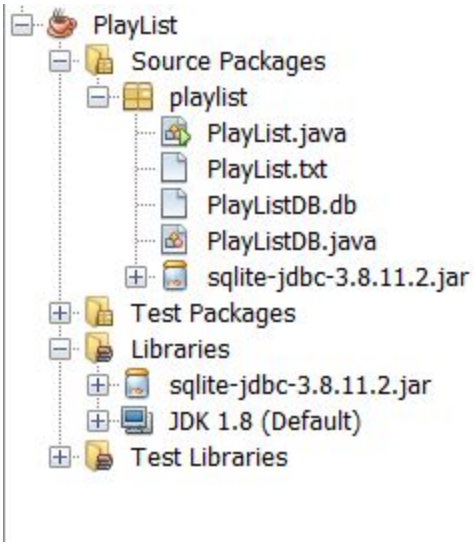

Figure 1: PlayList Project

1. Initially the sqlite-jdbc-3.8.11.2.jar was downloaded and added to the folder with director src/playlist.

2. The jar file was needed to be added to the classpath of the project. Right click on the Playlist project > properties>libraries> Add JAR/Folder. After this the dialog box is supposed to look like below:

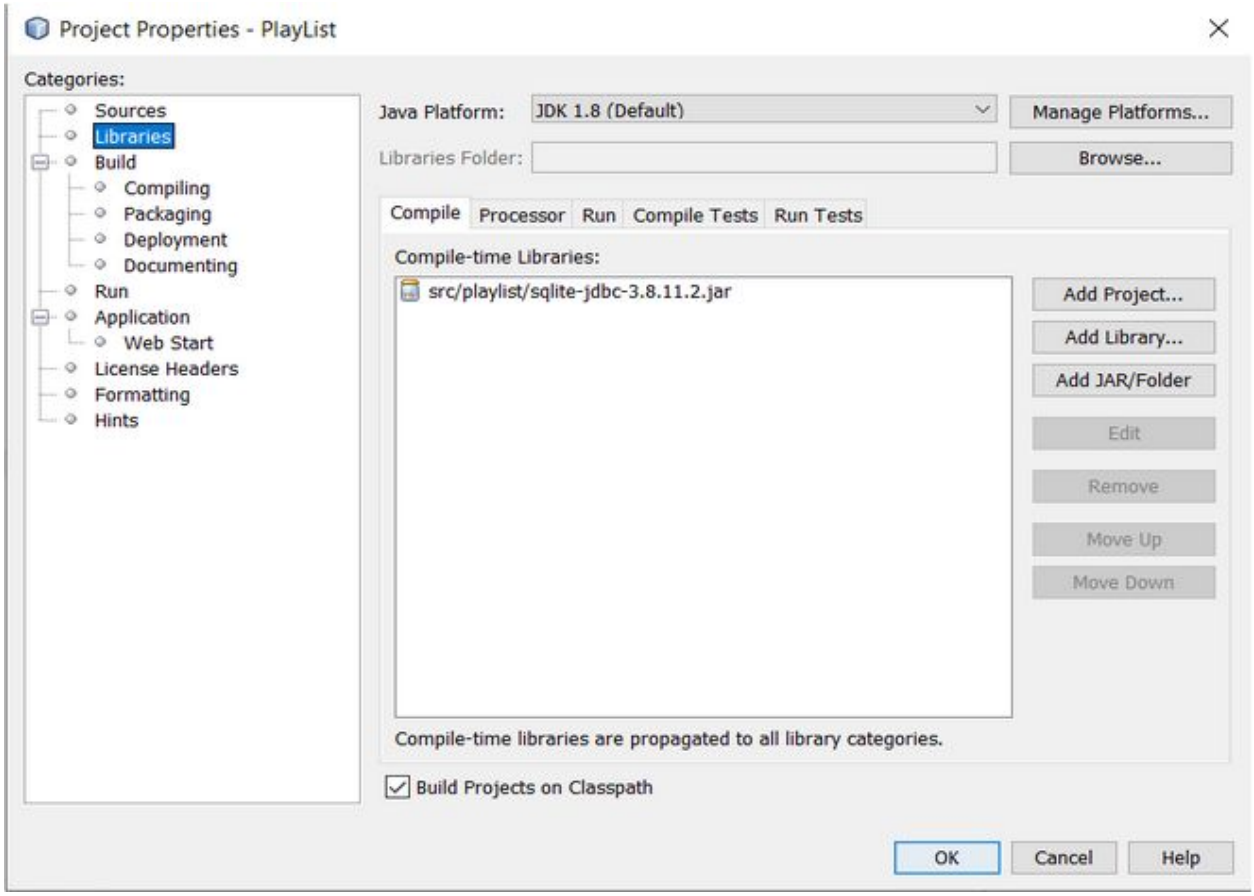

Figure 2: Project Properties after adding the jar file to the project classpath

3. In case the above case did not work , the classpath was added through terminal using the following command: java.exe -classpath C:/Users/arpitasikder/Documents/coe848/sqlite3/PlayList/src/playlist/sqlite-jdbc-3.8.11.2.jar:.PlayListDB.db

Brief explanation on the files present in the project

1. PlayListDB.java : This is the database java file that contains the functions for drop, insert and extract queries.
2. PlayListDB.db: This is the database from lab 4 which is connected using the Driver Manager JDBC
3. PlayList.java: This is the main run file of the project that runs all the functions and gives user the instructions and ask them for command line user input
4. PlayList.txt: This is the file from where the values are inserted to the PlayListDB database. The file is read inside InsertValues() function.

Screenshots of questions:

Instructions:

```
1  - Which songs have the highest playtime?
2  - Which genre of album has the highest rating?
3  - Which company owns more than 2 number of albums?
4  - Which albums have the number of songs greater than 2?
5  - Find the songs names which have more than 2 people working on it?
6  - List all the people who are guitarists?
7  - Which Album has people of age less than 20 working in them?
8  - List all the albums with price above 50?
9  - Which Genre of Album is released more than once?
10 - List all the People with age less than 30?
exit - EXIT
```

Question 1

```
Please Select an Option:
1
Icy Roads
Faith
```

Question 2

```
Please Select an Option:
2
Opera
Jazz
```

Question 3

```
Please Select an Option:
3
Def Jam Recordings
```

Question 4

```
Please Select an Option:
4
Turn to Clear View
```

Question 5

```
Please Select an Option:
5
Into the Red
```

Question 6

```
Please Select an Option:
6
Aleksa
Harold
```

Question 7

```
Please Select an Option:
7
Assume Form
i,i
Assume Form
Hiding Places
```

Question 8

```
Please Select an Option:
8
Hiding Places
```

Question 9

```
Please Select an Option:
9
Alternative
Latin
Rock
```

Question 10

```
Please Select an Option:
10
John
Mary
Huffman
Harold
Caddy
Olivia
```

Exit

```
Please Select an Option:
exit
BUILD SUCCESSFUL (total time: 43 seconds)
```