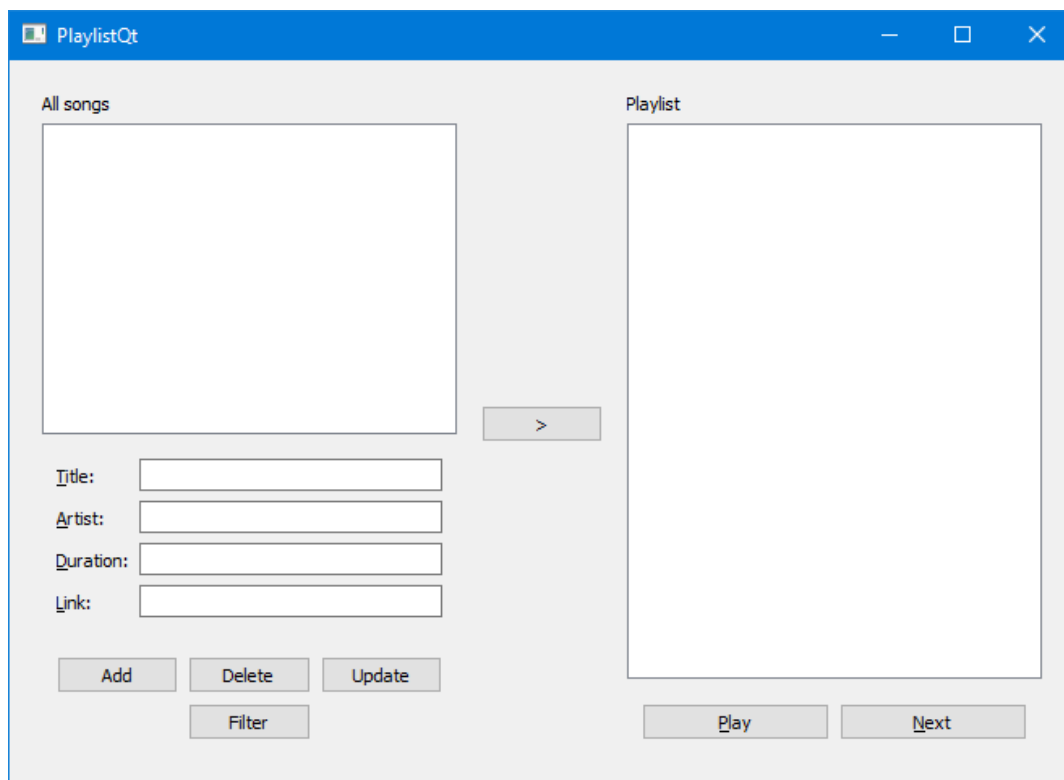


# LABORATORY 11-12

## REQUIREMENTS

- Create a graphical user interface (GUI) for the problem you have been working on (Labs 5,6,7,8), using Qt.
- For the first iteration, due in **Week 11**, you should implement at least the design of the interface and the list/table displaying the repository entities (administrator mode) should be populated.
- For the first iteration, the GUI *must be created and coded manually (no Qt Designer!)*.
- For the second iteration, due in **Week 12**, all the required functionalities should be available using the GUI. For this iteration, you may use Qt Designer, if you want to change the initial design of your GUI.
- The functionality of the application must be the same (including the one-by-one iteration of objects for the user mode).
- After delivering this entire assignment (both iterations), you must send an **.zip** archive containing your source code files (without any .obj or executable files) to the email address: [commit@scs.ubbcluj.ro](mailto:commit@scs.ubbcluj.ro).
- Please check the second page of this document for the bonus possibility.

Below you have a sample GUI for the problem we have been using during the seminar (songs and playlists):



## ADDITIONAL REQUIREMENTS - BONUS POSSIBILITY (0.2 P)

Create a graphic representation of the data in your application. You have an example below: a bar chart representing the number of songs for each artist. Your representations can be a bar chart, a pie chart or another type of chart. You can even use circles or rectangles or any other geometric shapes to “draw” your data. To receive the bonus, the requirements must be implemented correctly, **by week 12** and the application must function properly.

**Hint:** You can use QPainter (<http://doc.qt.io/qt-5.6/qpainter.html>), QGraphicsScene (<http://doc.qt.io/qt-5/graphicsview.html>) or a special widget designed for plotting and data visualisation – QCustomPlot (<http://www.qcustomplot.com/>).

