# **Data Analyst SQL Questions**

#### Overview:

We are interested in understanding the relationships of musicians, instruments, and venues from the provided database.

#### Requirements:

For Windows, download and install sqlite (<a href="http://www.sqlitetutorial.net/download-install-sqlite/">http://www.sqlitetutorial.net/download-install-sqlite/</a>) and follow the tutorial. You will be able to download sqlite and an interface to write queries.

Sqlite is already included in Mac OS X. After unzipping the project folder, navigate to musicians example.db file and open in a terminal via the command:

```
sqlite3 musicians example.db
```

Optionally, a GUI interface can be found here: (<a href="http://sqlitebrowser.org/">http://sqlitebrowser.org/</a>).

### **Expectations**:

We expect that you will be able to load in the database and query the data to answer the included questions.

We expect well-formatted SQL queries with their respective outputs. Be prepared to answer additional questions about how you approached each problem.

The musicians\_example.db contains 10 tables as described in the entity-relationship diagram contained in the file musicians\_example\_db.png.

#### Deliverables:

Well-formatted code in a text document or .sql file, and a separate file with the output of each individual query.

## **Project Questions**

- 1. Give the organiser's name of the concert in the Assembly Rooms after the first of Feb, 1997.
- 2. List the different instruments played by the musicians and the number of musicians who play the instrument.
- 3. List the names of musicians who have conducted concerts in USA together with the towns and dates of these concerts.
- 4. How many concerts have featured at least one composition by Andy Jones? List concert date, venue and the composition's title.
- 5. List the names, dates of birth and the instrument played of living musicians who play a instrument which Theo Mengel also plays.
- 6. List the names of musicians who both conduct and compose and live in England.
- 7. List the bands that have played music composed by Sue Little and the titles of the composition in each case.
- 8. List the name and town of birth of any performer born in the same city as James First.
- 9. Give a list of musicians associated with Glasgow. Include the name of the musician and the nature of the association.
- 10. Jeff Dawn plays in a band with someone who plays in a band with Sue Little. Who is it and what are the bands?