

# *Mörtfors Festival*

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Database Technology  
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## Database Schema

### Database: mScheduler

#### Table: BAND

PK: bandId

FK: workId

<b>bandId</b>	<b>workId</b>	<b>bandName</b>	<b>origin</b>
integer	integer	text	text

#### Table: MEMBERS

PK: (bandId, musId)

FK: bandId, musId

<b>bandId</b>	<b>MusId</b>
integer	integer

#### Table: MUSICIAN

PK: musId

FK: none

<b>musId</b>	<b>info</b>	<b>musicianName</b>
integer	text	text

#### Table: PERFORMANCE

PK: none

FK: bandId, sceneId

<b>sceneId</b>	<b>startTime</b>	<b>endTime</b>	<b>bandId</b>
integer	text	text	integer

Table: SCENE

PK: sceneId

FK: none

<b>sceneId</b>	<b>sceneName</b>
integer	text

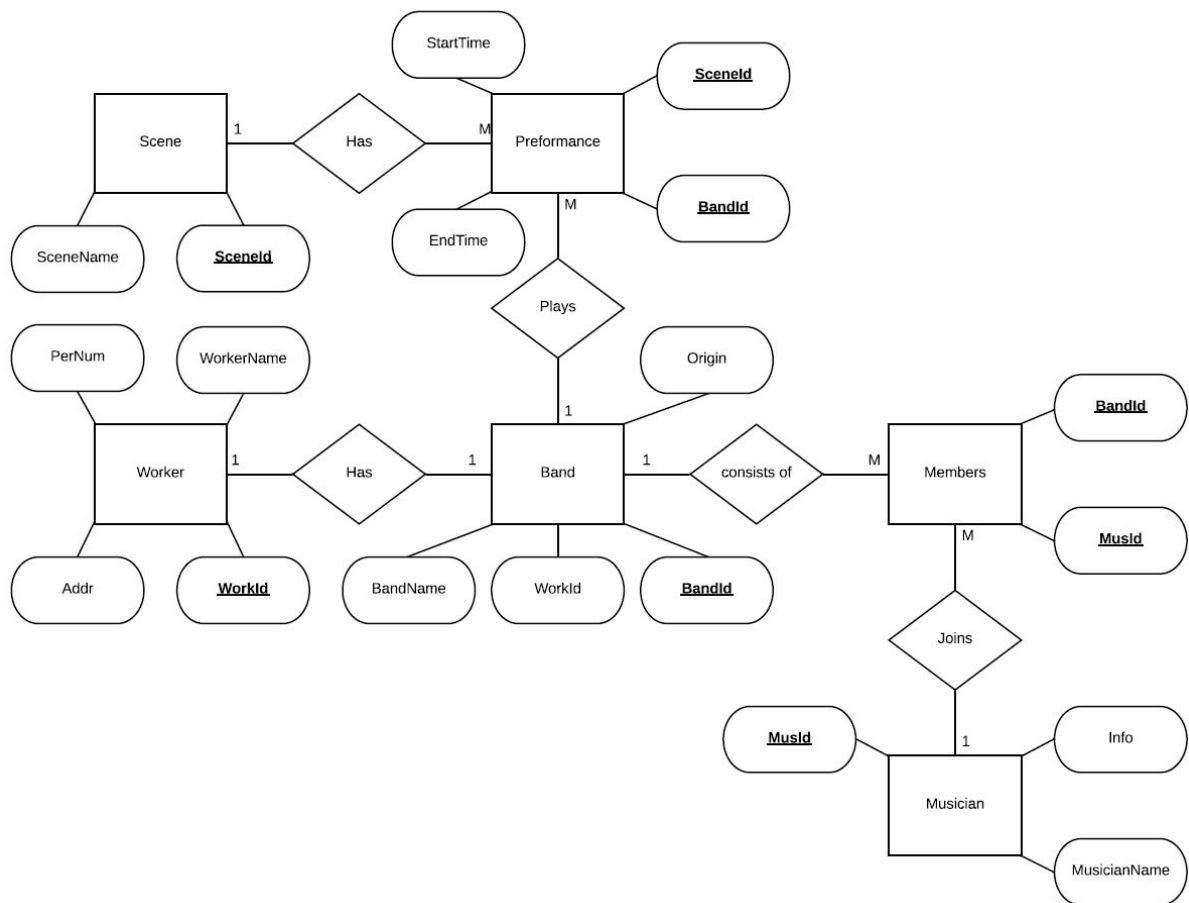
Table: WORKER

PK: workId

FK: none

<b>workId</b>	<b>workName</b>	<b>perNum</b>	<b>addr</b>
integer	text	integer	text

## Entity Relationship Diagram



## Application Tools

To create the database application for Mörtfors Festival we used a combination of:

- Java - Programming language
- PostgreSQL - Database
- Eclipse - Integrated Development Environment
- WindowBuilder - GUI designer

Please note that it is not necessary for any of your administrative staff to have any knowledge of any of the above tools in order to use the database application.

## **Application Components**

The application has been built in a single package, database. Object classes have been constructed for the six tables that make up the database. These classes serve the simple purpose of getting and setting various variables to be used by the other components. There are two GUIs, one for the festival administration (AdminGui) and one for the festival attendants (VisitorGui). The GUI classes use the DatabaseController, GetInfo and SetInfo classes to reach and insert information.

## **User Instructions**

### **Administrators:**

1. Open the class named AdminGui
2. You can now choose to add new information to you database.
  - a. Under the heading Band you can add a new band
    - i. Here you should enter the name of the band and the country the band originates from in plain text. You shall then assign the band an ID number of your choice, keep in mind that the band's ID cannot be the same as another band's ID. Finally you may assign a worker to the band. Here you can choose from a drop down menu of workers that you already have in your database.
  - b. Under the heading Worker you can add a new worker
    - i. If you have hired a new employee to help you during the festival, this is where you will go to add them to your database. Here you assign an ID number for a worker, once again this must be different than any other currently existing ID, as this is how you will identify your workers in the future. Enter the personal number for the worker, their name and their address.
  - c. Under the heading Performance you can add a new performance
    - i. Here you can book bands to perform on a stage of your choice at any given time. You pick a stage from a drop down menu of your existing stages, and then pick a band from a similar drop down menu. Finally you set a start and end time for the performance, please do this in the format "hh:mm" (example 15:30).
  - d. Under the heading Musician you can add new musicians
    - i. This is where you can enter information about musicians that will be performing at your festival. Enter the name of the musician, an ID number and a short bit of information about them, such as the instrument they play.
  - e. Under the heading Member you can add new members
    - i. Here you can assign musicians that you have added to your database to existing bands. You can choose a band from a drop down menu, as well as a musicians name from another drop down

- menu. This is how you know which musicians are a part of which band, in case you have one musician part of more than one band.
3. Under each heading in the AdminGui you will see a button, click the respective button in order to save the information you have expressed in the respective fields.
  4. Have an organized festival!

### **Festival Goers**

1. G'day! In order to know the performance schedules of different stages, please pick a stage from the drop down menu under the title "Scenes". Once you have chosen a stage name, the respective stages schedule should appear on your right. Here you can see a list of the bands playing, as well as their start and end times.
2. If you are interested in finding out more information about the bands that will be performing at the festival, you can use the bottom section of the application. Under "Bands" you can pick out a band from the drop down menu, and to your right you will be pleased to see all the information about them you could possibly desire. Here you will be able to see the country the band is from, what stage(s) they will be playing at and the members of the band. The members of the band can be found in the drop down menu, and after choosing a member you will be granted with a small piece of information about said member.
3. Rock on!