Project Report

Database schema
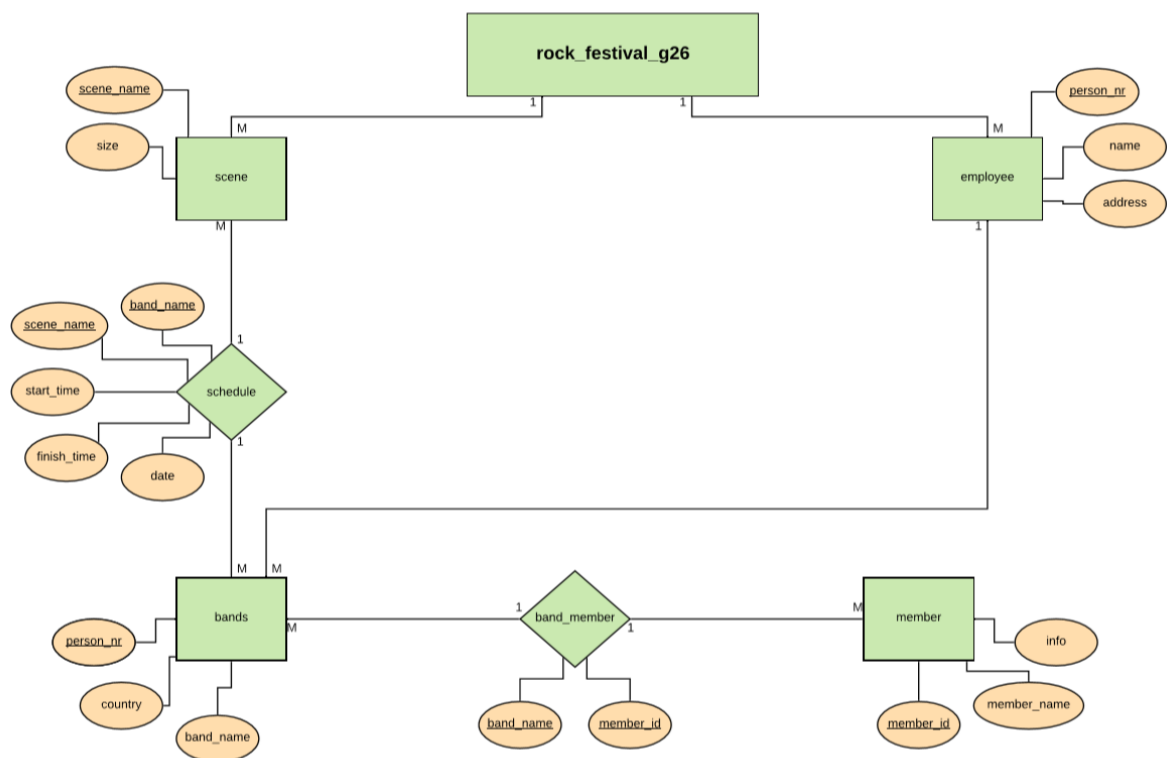
ER-diagram:

Table for bands

A table that consists of band names, scenes, start- and finish time for the gigs and a date for when they play their consert.

band_name	scene_name	start_time	finish_time	date
Abba	Konserthuset	16:00	17:30	Thursday 2019-10-18
U2	Folkets park	18:00	19:00	Thursday 2019-10-18
Metallica	Stortorget	19:30	20:00	Thursday 2019-10-18
The rolling stones	Malmö live	16:00	17:30	Friday 2019-10-19
Metallica	Swedbank Stadion	18:00	19:30	Friday 2019-10-19
Abba	Opera	20:00	22:00	Friday 2019-10-19
Abba	Mallorca Scene	19:00	21:00	Sat 2019-10-20
Drake	Konserthuset	22:00	00:00	Sat 2019-10-20
Stones	Folkets park	19:00	20:30	Sat 2019-10-20
Abba	Stortorget	22:30	01:00	Sat 2019-10-20
Abba	Stortorget	22:30	01:00	Sat 2019-10-20
The rolling stones	Mallorca Scene	20:30	22:00	Thursday 2019-10-18
The rolling stones	Stortorget	22:30	01:00	Sat 2019-10-20
The rolling stones	Stortorget	22:30	01:00	Sat 2019-10-20
Metallica	Folkets park	19:00	21:30	Sat 2019-10-20

Table for the scenes

Shows the scenes and the sizes of the scenes

scene_name	size
Mallorca Scene	Large
Swedbank Stadion	Large
Konserthuset	Large
Opera	Large
Malmö live	Large
Folkets park	Medium
Stortorget	Large
Lilla torg	Small
Gustav Adolfs Torg	Medium

Table for band members

A table that consists of member id and member name for the artists in the band. It also consists of info about the members for the visitors.

```
member_id |     member_name     |                       info
----------+---------------------+------------------------------------------------
        1 | Agnetha Fältskog    |
        2 | Anni-frid Lyngstad  | Performs solo and in the band Abba
        3 | Benny Andersson     |
        4 | Björn Ulvaeus       |
        5 | Bono                |
        6 | The Edge            |
        7 | Adam Clayton        |
        8 | Larry Mullen jr     | Performs during first act
        9 | James Hetfield      |
       10 | Lars Ulrich         |
       11 | Kirk Hammett        |
       12 | Robert Trujilo      | Only in for the second half
       13 | Mick Jagger         | Information about performance coming shortly
       14 | Keith Richards      |
       15 | Row Wood            |
       16 | Charlie Watts       | Also doing an appearance with the Eagles
       17 | Don Henley          |
       18 | Joe Walsh           |
       19 | Timothy B Schmitt   |
```

Table for workers

A table for the workers at the festival with personal number, name and an address.

```
 person_nr   |      name        |      address
-------------+------------------+--------------------
910318-2334 | Amanda Eriksson  | Amiralsgatan 1
940127-9289 | Elena Tayar      | företagsvägen 29
901018-4556 | Ramy Behnam      | Kronetorpsvägen 14
880226-7283 | Jonas Drewling   | Slöjdvägen 26
```

Table for the bands

A table about the bands with band names, country of origin and personal number.

```
     band_name          | country |   person_nr
------------------------+---------+--------------
 Abba                   | Sweden  | 910318-2334
 U2                     | Ireland | 901018-4556
 Metallica              | USA     | 880226-7283
 The rolling stones     | England | 880226-7283
 The eagles             | USA     | 940127-9289
 Drake                  | USA     | 910318-2334
 Stones                 | Sweden  | 880226-7283
 the eagles             | england | 940127-9289
```

Linking table for the bands and the members

A table with the band names(primary key in the table band) and member id (primary key in the table members). Its for linking the two tables bands and members to avoid a many-to-many relation between the tables.

```
       band_name       | member_id
-----------------------+-----------
 Abba                  |         1
 Abba                  |         2
 Abba                  |         3
 Abba                  |         4
 U2                    |         5
 U2                    |         6
 U2                    |         7
 U2                    |         8
 Metallica             |         9
 Metallica             |        10
 Metallica             |        11
 Metallica             |        12
 The rolling stones    |        13
 The rolling stones    |        14
 The rolling stones    |        15
 The rolling stones    |        16
 The eagles            |        17
 The eagles            |        18
 The eagles            |        19
(19 rows)
```

Components when building application

- Java

  Java were used to write the user interfaces.

- Intellij

  IDE for Java

- Postgresql-application

  A DBMS, database management system, that were used as a software tool for working with
  databases. This system provided functions such as update, store and troubleshoot data in a
  database.

- Command prompt

To avoid having to use time consuming interfaces, we chose to work directly from the command prompt when creating our database, our tables and to fill the tables.

- Postgresql-jar: postgresql-42.2.8

A JDBC, Java database Connectivity, is an API for Java that defines how we got to access our database. Through this database we were provided with methods such as getConnection, to connect our application with the database.

How to use the application

Start of with opening the project databasteknik in intellij.

To look at data:

1. Open the visitorUser and run the application

2. Fill in the band names in the textfield and press the search button. Now you will see information about the bands

3. Fill in the names of the members of the bands and press search button. Now you will see information about the member.

To book bands and to assign contact person to bands:

1. Open officeUser and run the application

2. Fill in a band in the textbox underneath the label Bands to the left

3. Fill in a country in the textbox underneath the label country.

4. Fill in person number in the textbox underneath the label person number.

5. Press the button book and you have booked a band an assigned a contact person to the band.

To book a band into schedule:

1. Open officeUser and run the application

2. Fill in a band in the textbox underneath the label Bands to the right.

3. Fill in a scene in the textbox underneath the label scene.

4. Fill in start time in the textbox underneath the label start.

5. Fill in finish time in the textbox underneath the label finish.

6. Fill in date in the textbox underneath the label date.

7. Press the button book and you have booked a band an assigned a contact person to the band.

How to use the database

1. Enter command prompt
2. Login to our database via psql -U m10p2724 -d m10p2724 -h pgserver.mah.se
3. Enter the password: ogn810b8.
4. Type \c rock_festival_g26. You are now logged in to our database