



# Academy of Computer Science and Software Engineering

Informatics 2A: Database Design

Practical Assignment: P04 (Due: 10 March @ 10:00)

## Assignment

Gregory Adam owns multiple theatres across South Africa. As a lover of the performing arts, who would like to see the arts sector blossom, he has asked you to help him to develop a database for theatre management. The following information has been provided to you.

The data that must be stored for each theatre include the theatre's name, city and the capacity (i.e. how many people can be seated in the theatre). Each theatre has many artists working at the theatre and each artist works at only one theatre.

There are three different types of artists that Gregory wishes to keep track of, namely, Musicians, Dancers and Actors. The attributes that all artists have in common are: Name and Surname. Each artist must be either a Musician, Dancer or Actor but cannot be any of them at once.

Musicians have the instrument and genre in which they specialise. Dancers have a specific style they major in and the database should also keep track of their height. The database should, furthermore, keep track of each actor's hair colour and their number of years of acting experience.

Gregory would like to support musicians by helping to keep track of the albums that they produce.

One musician can have many albums and an album may have multiple musicians collaborating on it. Each collaboration on an album should have a date.

The data that needs to be stored for an album includes: Title, number of tracks and the price of the album.

### Instructions

- All questions regarding the assignment must be emailed to the lecturer.
- You must create an ERD diagram. Your submission must be as a **PDF** file.
- Your submission must be zipped (only .zip accepted) and named with your student number followed with an underscore and the practical number P01 as follows.
  - E.g., 220112345\_P04.zip
- No Late submissions will be accepted.
- No email submission will be allowed.
- Failure to follow these instructions will result in a zero being awarded for this practical.

### Marksheet

Draw an Extended Entity Relationship model to model the storage of the information provided above.	30
Bonus	
Total	30