



# Academy of Computer Science and Software Engineering

Informatics 2A: Database Design

Practical Assignment: P05 (Due: 17 April @ 06:00)

## Assignment

The CEO of the local racetrack has asked you to help him design a database for the system they are developing to keep track of the drivers and the spectators. The CEO said that the system focuses on two (2) types of users. One user being the driver and the other being the spectator. The database will also keep track of the various races that take place at the venue. These are the business rules the CEO currently has for the system:

- The information for each Race is tracked.
  - Race name
  - Date of the race
  - Prize pool of the race
  - Organisers Name
- A Driver can compete in multiple races. The following information is required for a driver:
  - Name
  - Surname
  - Email
  - Driver License Code
- In order to view the race, the spectators have to be registered with the system. The following is required:
  - Name
  - Surname
  - Email
- The position for each driver needs to be tracked for each race.
- For each race the spectators are also tracked so that in the future a loyalty system can be put in place. So, the database needs to track which spectators attended which races.

The CEO added a comment that a user can be a driver and a spectator in the system, but they can't be a spectator for the races they participate in.

### Instructions

- 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 P05 as follows.
  - E.g., 220112345\_P05zip
- 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 Entity Relationship model to model the storage of the information provided above.	25
Bonus	
Total	25