NATIONAL UNIVERSITY OF COMPUTER AND EMERGING SCIENCES

Lab Exercise 04

For

CL2005- Database Systems Lab

Instructor: Samia Aziz
Email: samia.aziz@nu.edu.pk

Lab Task 1 – Draw an EER Diagram

Each case handled by the firm has a unique case number; a date opened, date closed, and judgment description are also kept on each case. A case is brought by one or more victims, and the same victims may be involved in many cases. A victim has the requested judgement characteristic. A case is against one or more defendants, and the same defendant may be involved in many cases. A victim or defendant may be a person or an organization. Over time, the same person or organization may be a defendant or a victim in some cases. In either situation, such legal entities are identified by an entity number, and other attributes include name and net worth.

Lab Task 2 – Draw an EER Diagram

TomKat Entertainment is a chain of theatres owned by former husband and wife actors/entertainers who, for some reason, can't get a job performing anymore. The owners want a database to track what is playing or has been played on each screen in each theatre of their chain at different times of the day. A theatre (identified by a Theatre ID and described by a theatre name and location) contains one or more screens for viewing various movies. Within each theatre, each screen is identified by its number and described by the seating capacity for viewing the screen. Movies are scheduled to be showing in time slots each day. Each screen can have different time slots on different days (i.e., not all screens in the same theatre have movies starting at the same time, and even on different days, the same movie may play at different times on the same screen). For each time slot, the owners also want to know the end time of the time slot (assume all slots end on the same day the slot begins), attendance during that time slot, and the price charged for attendance in that time slot. Each movie (which can be either a trailer, feature, or commercial) is identified by a Movie ID and further described by its title, duration, and type (i.e., trailer, feature, or commercial). In each time slot, one or more movies are shown. The owners want to also keep track of in what sequence the movies are shown (e.g., in a time slot there might be two trailers, followed by two commercials, followed by a feature film, and closed with another commercial).

Lab Task 3 – Draw an EER Diagram

We wish to create a database for a company that runs training courses. For this, we must store data about trainees and instructors. For each course participant (about 5,000 in all), identified by a code, we want to store her social security number, surname, age, sex, place of birth, employer's name, address, and telephone number, previous employers (and periods employed), the courses attended (there are about 200 courses), and the final assessment for each course. We also need to represent the seminars that each participant is attending at present and, for each day, the places and times at which the classes are held. Each course has a code and a title, and any course can be given any number of times. Each time a particular course is given, we will call it an 'edition' of the course. For each edition, we represent the start date, the end date, and the number of participants. If a trainee is self-employed, we need to know her area of expertise, and, if appropriate, her title. For somebody who works for a company, we store the level and position held. For each instructor (about 300), we will show the surname, age, place of birth, the edition of the course taught, those taught in the past, and the courses that the tutor is qualified to teach. All the instructors' telephone numbers are also stored. An instructor can be permanently employed by the training company or freelance.

- **Submission Guidelines**

1. File names = = **.vsdx** named as **"FXX_XXXX"** (Replace the 'X' with your roll no.).
2. Submit the files on **Google Classroom** before the deadline.
3. **No** submissions will be **accepted after the deadline**.

GOOD LUCK