# Lab 6
# Entity Relationship (ER) Data Model

CSE 4308

DATABASE MANAGEMENT SYSTEMS LAB

OCTOBER 13, 2022

# 1 Lab Task

Bhalo Basha Chai (BBC) is a housing agent in Bangladesh that publishes advertisements of properties that can be rented. Previously they stored all their information on paper. Recently they have decided to use a database. They have come up with the following requirements:

- There are many branches of BBC throughout the country. Each branch is located in a street of a city and has a postcode.
- Every branch is maintained by many employees. Upon joining the company, they provide their first name, last name, gender, and date of birth. They are also appointed a position (like manager, salesperson, etc.) in a specific branch. Their salaries are recorded for tax purposes.
- Numerous clients rent houses from BBC. They register by going to a certain branch and providing their first name, last name, telephone number, email, preferred accommodation type, and the maximum amount of rent they can afford. At that time, s/he is also assigned a staff member who is their contact person. A client can register in multiple branches.
- BBC stores information about the property owners who actually own the houses. The owners register by providing their first name, last name, telephone number, email, and password.
- BBC has multiple houses for rent under them. These houses are denoted by street, city, postcode, type, number of available rooms, and rent. Each property is associated with one owner, one contact person who is also a staff member, and the branch the staff works in.
- Each client can visit properties multiple times, but not twice in a day. A client can make some comments about the property during their visit. The date of their visit is also documented.

Now, your task is to:

1. Draw an ER Diagram, without any data redundancy, specifying the cardinality explicitly. You may add additional attributes only if it is needed.
2. Convert the ER Diagram into DDL using standard SQL denoting the appropriate constraints.