# Information Storage and Management I

## Relational Database Management System with MySQL

Lab Week 2: Basic SQL (Zero Marks)

## Background:

The database 'my\_rent\_company' represents the information gathered by a property letting and sales company. It contains the following tables:

- Branch: Represents the branches our company has.
- Staff: Represents the staff our company has.
- Private\_owner: Represents the landlords of the properties managed by our company.
- Property\_for\_rent: Represents the properties managed by our company.
- Client: Represent the clients our company has.
- Viewing: Represents the appointments made with the clients

The following diagram represents the fields each table contains. Whereas fields in green colour represent the primary key of each table, fields in yellow colour represent a foreign key (if it exists).

Table BRANCH: Represents the branches our company has.

branchNo	street	city	postcode

Table STAFF: Represents the staff our company has.

staffNo	fname	Iname	position	gender	birthday	salary	branchNo

Table PRIVATE\_OWNER: Represents the landlords of the properties managed by our company.

ownerNo	ownerNo fname Inam		Address	telNo

Table PROPERTY\_FOR\_RENT: Represents the properties managed by our company.

propertyNo	street	city	postcode	type	rooms	rent	ownerNo	staffNo	branchNo

Table CLIENT: Represent the clients our company has.

clientNo	fname	Iname	telNo	pref_type	max_rent

Table VIEWING: Represents the appointments made with the clients.

clientNo	propertyNo	view_date	comment	

#### Interactive Session:

The file **setup\_database.sql** provides a script to create the database, each table, insert some entries on each table and commit the changes to disk. Open MySQL and run the script to start working with the database.

### **Exercise:**

The goal of the lab is to program the following SQL queries:

- 1. Find how many members of the staff hold each working position.
- 2. Find how many flats are available to rent in each city.
- 3. Find how many properties are assigned to each branch.
- 4. Find the staff member assigned to properties located in Glasgow.
- 5. Find the properties viewed by the client Mary Tregear.
- 6. Find the owner of Glasgow properties of type house.
- 7. Find the cities with more than two properties.
- 8. Find the branches with more than one assistant staff.

Create the script file 'name.sql' with your SQL code for the proposed queries.