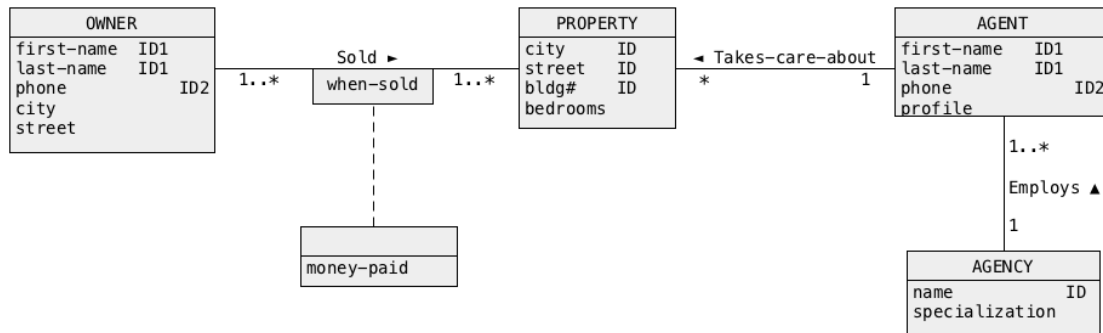


Task 2 (4 marks)

An objective of this task is to denormalize a conceptual schema to speed up processing of a given class of applications.

Consider the following conceptual schema:



(1) Perform simplification of the conceptual schema above and migration of identifiers to implement the associations. Re-draw a simplified conceptual schema with migrated identifiers.

(2) We would like to improve the performance of the following class of applications:

Find the specializations of real estate agencies (attribute specialization in a class AGENCY) that employ the agents who took care about selling n bedrooms real estate properties (attribute bedrooms in a class PROPERTY) owned by the owners from a given city (attribute city in a class OWNER).

A sample application that belongs to a class described above is the following.

Find the specializations of real estate agencies that employ the agents who took care about selling 5 bedrooms real estate properties owned by the owners from Sydney.

Find a denormalization of the simplified conceptual schema that improves the performance of the class of applications described above. Re-draw a simplified conceptual schema after the denormalizations.

You can use UMLet to create a simplified and denormalized conceptual schemas. A link to UMLet UMLet 14.3 with CSIT115-815Palette (zipped) is available at CSC1317 site on Moodle in Resources section.

The original conceptual schema is provided in a file `task2.uxf`.

Deliverables

A file `solution2.pdf` with a drawing of the simplified conceptual schema and a drawing of the denormalized conceptual schema expressed in a notation of simplified UML

object classes. You can use UMLet to draw a transformed conceptual schema. A scanned copy of a neat hand drawing is also acceptable.

