

B561 Assignment 1

Due date: Monday, September 17, 2007

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Entity Relationship Diagrams

1. Model the entities and relationships described below in an ER-diagram¹.

House Every house has a unique address, living space (in square feet), and a value (in \$). It has at least one room, which has a unique number within the house. Every room has a floorspace (in square feet). A room has windows and doors. Both windows and doors have a unique number for the specific room. A room can have windows but must have at least one door. Windows are made of a certain type of glass, and for every door we want to model what it is made of (wood, glass, etc), as well.

Every building has at least one landlord, and can have many tenants. A landlord must own at least one house. However, a house does not need to have tenants. For every tenant it is recorded how much rent she has to pay for the house she lives in (for simplicity, every tenant pays rent). A tenant can live in one or more houses. Tenants and landlords are persons. Persons have a unique id number, age, marital status, and income.

2. Exercise 2.2 in the text book.

¹Note that there are several tools for drawing ER-diagrams, for example dia: <http://www.gnome.org/projects/dia/>.

3. Translate the following ER diagram into a relational schema.

Hospital

