

Exercise Sheet 1: Requirements Document

1 Description of Work

The aim of this exercise is to write a requirements document.

2 An Access Control System

Here is the informal description of an access control system. This description is quite poorly written (on purpose). The system consists of the following parts:

- A set of rooms.
- Rooms are connected by doors.
- Among the rooms, a special room called the “hallway”.
- The hallway is the only room connected to "outside".

The access control system should enforce that only authorized persons can enter a room. For this, each person is equipped with a magnetic card and each door is equipped with a device able to read cards.

3 Your Task

Your task consists in re-writing the previous (very poor) description given in section 2. In case you think that some details are missing in the previous description, you are free to add more.

As explained in the lecture, your new requirement document should consist in two embedded texts: the *reference* text and the *explanatory* text.

The reference text consists in a series of short labelled and numbered statements. You should propose some labels. A reference statement is either an *assumption* concerning the environment of the system or an explicit *property* that the system must fulfilled in order to be said to be *correct*. The reference text will form the final contract between the "client" and the "designers" of the future system.

The explanatory text is a free text situated in between the reference statements. It contains some additional information for someone encountering this problem for the first time.