

*When analysing the descriptions, please remember the very simple rule: nouns should be regarded as classes (or their attributes), while verbs stand for class methods. This can be misleading sometimes, but in general is very useful.*

1. Create a car model. A car is characterised by its make and model. It has also many other attributes, e.g., its colour. It has an engine (required) with its basic parameters and a set of accessories (optional). A driver can accelerate, brake and turn.
2. In the warehouse there are various products, each identified with its unique marketing name. A product is described with its unit price, unit weight or an expiry date (for short-term products). The warehouse stores data of its suppliers: a name, an address, a phone number. Customers contact the warehouse to make their orders. A single order can refer to many products. In the warehouse there are available lorries of various load capacity.
3. Baseball team consists of 25 players and the manager. Typically, each player plays at a certain position (eg, pitcher or catcher), but some of the players are more useful and can occur at many positions.
4. Main window of the library application has a title bar and three panels: one for category selection books, one for selecting a particular position in a given category third to display a summary. Each panel has a scroll bar.
5. Temperature control device has three separate thermostats. Two of them are standard thermostats that must be set manually. The third can also be set using the clock.
6. Container, stores the items (elements). We have two simple types of elements: point and line. The line has exactly two points. The point has two coordinates (x and y). An item can also be a group of simple elements (dots or lines). Of course, this group of elements also must be kept by the container.
7. Every semester students can attend no more than 9 courses. Any subject (except for foreign language courses) consists of both a lecture and tutorials. In a semester students belong to a given group identified with its unique number. The group cannot count more than 15 persons. Lecturers teach classes of subjects assigned to them, no more than 3 for each. If a lecturer

gives a lecture, he or she usually is responsible for the corresponding tutorial/laboratory, too. A lecturer can happen not to teach any subject, however. The office is responsible for preparing reports, which can be viewed by any manager.

8. A football team consists of at least 11 players, including at least 10 field players and 1-3 goalkeepers. One of the players is the skipper. The team is supervised by a trainer, a doctor and a psychologist. The trainer is responsible for selecting 11 players of the primary squad for Any scheduled match. Of course, the squad must consist of at least 1 goalkeeper. The doctor and the psychologist take care of the players, each of them can be responsible for no more than 3 of them, however.
9. A word processor enables processing documents. Document's contents consist of various elements: characters, white spaces, images and paragraphs. A paragraph contains other elements (characters and white spaces). Paragraphs are grouped in columns. A column can be divided into sub-columns.