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# Supervised Work 1

## Comprehension questions

1. What is Software? Provide some examples of Software.
2. Explain briefly the Software Crisis?
3. Answer with true or false and correct the false statements:
a) The size of the project influences the quality of the IT system development; however, its complexity has no impact.
b) Compatibility is the facility with which software can be combined with other software.
c) Software portability is its ease of learning, usage, data preparation, errors interpretation and recovering from user errors.
d) Integrity is the ability of software to safeguard its code and data against unauthorized access.
e) Extensibility is the ease with which software can adopt to specification changes.
f) Reusability is the capacity of software to be reused, either in in part or in whole.
4. What is a software engineer?
5. State two principles of software engineering and explain their impact on software quality.
6. How to choose the criteria for ensuring software quality?

**Exercise 1:**

**1. Consider the following statement:**

In a school, we want to manage the **reservation of** classrooms as well as **educational equipment** (laptops or video projectors). Only **teachers** are authorized to **make reservations** (**subject to availability of the room or equipment**). The **room schedule** can be **consulted** (viewed) by **everyone** (both teachers and students). However, **the time summary per teacher** (calculated from the room schedule) can only be consulted by teachers. Additionally, for each training session there is a **responsible teacher** who alone can **edit the** timetable summary for the entire training.
What are the functionalities (functional requirements) required to automate this system?

**2. Consider the following statement:**

A question-and-answer software designed for students to test their knowledge of mathematics, such that:

- A student can work on a topic only after authentication. Working on a topic includes answering questions. After completion, the student can, if he wishes, choose to print a report.
- A teacher can create a topic in one of two ways: either by downloading a text already written in a predefined format, or interactively.

What are the functionalities (functional requirements) needed for this system?

**Good luck**