Functional and Non-Functional Requirements

The purpose of the function and non-functional requirements is to begin breaking down a project into objectives and to ascertain the scope of those objectives. This tool lets analysts describe the purpose of a project in a way that the rest of the development team will also understand and can implement.

Functional requirements are objectives that relate directly to the purpose or ability of the project. For example, a functional requirement of an ATM machine would be that it must validate the user and respond to the user’s requests, such as checking bank balance. This would be a specific instruction the project should do and so would be a functional requirement.

A non-functional requirement can also be a constraint or a specific boundary, unlike functional requirements. This means that a non-functional requirement of an ATM machine would be something along the lines of “must be able to run on Intel Processors” or “must connect to the bank network in under 1 second”. A non-functional requirement would act as a condition to the functional requirement. This means that although both are vital and in a completed project both would have to be 100% finish, the functional requirements are more important and are bound to be much more numerous than non-functional requirements.

Exercise 2:

Functional Requirements:

System needs to monitor & display temperature in all cold store units

System needs to detect any adverse change in temperature

At selected intervals, system needs to write the temperature data onto a database

System should periodically archive database files onto magnetic tape

Non-Functional Requirements:

System has only 1Mb of memory available

System needs to be compatible with a VAX VMS OS.