

Human IT NFR catalog

NFR's (Non Functional Requirements) have been used throughout the industry for a long time. Wikipedia defines a Non Functional Requirement (NFR) as

"In systems engineering and requirements engineering, a **non-functional requirement** is a requirement that specifies criteria that can be used to judge the operation of a system, rather than specific behaviors. They are contrasted with functional requirements that define specific behavior or functions."

One-liners used to define NFR's are often;

- Anything about a system that is not what it does.
- Not what the software will do but how it will do it.
- Quality attributes of a system.

From a practical standpoint working with NFR requirements in software design projects produces several challenges;

- Ownership of NFR's can be complex or overlapping, often the realization of the requirements means that several different competence areas should be involved. For example, a security requirement can have an impact both on the usability and performance of a solution.
- The responsibility of the NFR's during project execution can be spread on several roles in the project.
The Solution architect (SA) and the Business Analyst (BA) are often roles in larger projects that jointly should formulate the NFR's they in turn need additional input from Business and Project Management.
- NFR's can be difficult to formulate so they are measurable and testable. Especially usability requirements can be hard to formulate in an objective way so that the fulfillment can be measured and tested against.
- NFR's are common across several projects/domains.
In many cases the fulfillment of NFR's are depending on architectural platforms and infrastructure that is common across several application domains/solutions.
- Allocation of the implementation cost.
The cost for the fulfillment of NFR's could in some instances be spread

between several existing projects and potentially on future projects, this can make it hard to allocate the correct cost for a single project.

- Formulate NFR's can be a time consuming and demanding task. Both in agile and more traditional development focus is often on the functional requirements that will give an easy understandable benefit. This can lead to that the Non Functional Requirements will be an add-on late in the project.

Through participating in various projects in different industries Human IT have a long experience in formulating Non Functional requirements and manage them throughout the project/product lifecycle. An extensive catalog of requirements have been established. Various industry standards (i.e. ISO 25000, ISO27001) and experience from customer projects has been the input when building the catalog.

We believe that Human IT's collection of requirements will;

- Give a kick-start to the NFR work and produce significant savings in project effort.
- Give a categorization to the different types of NFR's, this will facilitate a structured approach to decide the NFR's that should be prioritized based on the projects objective.

However no generic collection can ensure that **all** the requirements specific to your project are included, but it will give a starting point and raise the relevant questions. Human IT has a structured approach/method to help you find additional NFR's specific to your project and environment.

Below an example of some requirements stored in the Human IT requirements catalog.

Requirement Id	Group	Category	Requirement
NRF-USA-004	Usability	Branding	It should be possible to configure the application(logotypes, color schemes etc) so it reflect XXX corporate design
NRF-USA-007	Usability	Localisation	It should be possible to localise the system with regards to currency, date format and metrics
NRF-USA-014	Usability	Localisation	The user of the system should at any time be able to change the preferred language of the system.
NRF-PER-009	Performance	Transaction	Going back to a previous page should not take more than X secs
NRF-PER-015	Performance	Scalability	The system should be scalable to support X more users,transaction without any changes in the application
NRF-USA-016	Usability	Common	The system should display a tooltip when hovering over a field
NRF-SEC-002	Security	Common	The system should support role based access
NRF-SEC-003	Security	Common	The system should support that one user can have multiple roles
NRF-SEC-009	Security	General	The system should be able to automatic log off a user that has not been active for xxx minutes
NRF-SUP-009	Supportability	Common	The system should be installable and runnable without access to any development tools
NRF-SUP-011	Supportability	Audit & Control	Logfiles should be in human readable form and require no special tool to inspect.

Please contact richard.skog@humanit.se or visit <http://nfr.humanit.se/> for more information.