4장 Requirement Analysis
추가자료

Functional Requirements (FR) vs Non Functional Requirements (NFR)

Functional

  - Input, Output, Behavior (+ User + SW/HW/External I/F)

   * SW/HW/External I/F 는 NFR로도 분류함

Nonfunctional

  - 얼마나 잘(efficiently) 기능을 제공하느냐? "에 대한 요구

Non-Functional Requirements

"어떤 것들이 NFR 인가?
- 성능 및 품질 (~ility)
- 법적, 도덕적, 표준 준수
  개발방법, 운영방법,
  Exceptions (error-handling. 예: 뱅킹시스템에서 잘못된 예금 이체 시)
  등

NRF ➜Constraints on technology, resources or techniques OR
  Constraints on the design and development of the system ➜ limiting
solutions to implement FR.

ex) Consider a requirement 'all products in the suite require SAML-based
single sign-on'.
        single sign-on is a functional requirement
        the selection of SAML (Security Assertion Markup Language) is a
constraint

System architecture에 영향을 준다

한 개 NRF를 위해 여러 개의 functional requirements로 표현될 수 있다.

FR에 비해, 파악하기 어렵다.

*functional requirements, NRF 도 아닌 것을 SRS 에 기재하기도 함 (예: 이전계획, 교육계획 ← transition requirement 라고 함. 일종의 NFR로도 볼 수 있음)

NFR 명세에서, 추상적인 표현은 피한다

예) usability requirements:
  The system should be easy to use by medical staff and should be organized in such a way that user errors are minimized. ➔
 너무 추상적임

==➔ (아래같이 표현해야 함)

Medical staff shall be able to use all the system functions after four hours of training. After this training, the average number of errors made by experienced users shall not exceed two per hour of system use.

Metrics for specifying NRF

Property	Measure
Speed	Processed transactions/second User/event response time Screen refresh time
Size	Mbytes Number of ROM chips
Ease of use	Training time Number of help frames
Reliability	Mean time to failure Probability of unavailability Rate of failure occurrence Availability
Robustness	Time to restart after failure Percentage of events causing failure Probability of data corruption on failure
Portability	Percentage of target dependent statements Number of target systems